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COMMISSION STAFF WORKING PAPER

IMPACT ASSESSMENT

Accompanying the document

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on Markets in financial instruments [Recast]

and the

Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on Markets in financial instruments

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1. INTRODUCTION

The issuance and trading of financial instruments is essential to ensure the availability of capital in the economy and to ensure capital is efficiently allocated. Financial instruments are

used by economic agents such as companies to raise funds, e.g. for growth and innovation, or investors to invest their financial surplus and seek financial returns. They are also used by entities to manage risks. Together with the services provided e.g. by banks, payment-service providers and clearing and settlement infrastructures, the market in financial instruments is a backbone of a modern economy and essential to feed economic growth and innovation.

Like any market, financial markets need rules to function. The EU rules governing the market in financial instruments are set out in . the Markets in Financial Instruments Directive (MiFID. Applied since November 2007 (3,5 years), it is a core pillar of EU financial market integration. Adopted in accordance with the "Lamfalussy" process[1], it consists of a framework Directive (Directive 2004/39/EC)[2], an Implementing Directive (Directive 2006/73/EC)[3] and an Implementing Regulation (Regulation No 1287/2006)[4]. This impact assessment focuses on the revision of the framework Directive 2004/39/EC while outlining when needed the possible changes in the implementing legislation which would follow at a later stage. Separate impact assessments will be carried out for subsequent changes to implementing legislation.

MiFID establishes a regulatory framework for the provision of investment services in financial instruments (such as brokerage, advice, dealing, portfolio management, underwriting etc.) by banks and investment firms and for the operation of regulated markets by market operators. It also establishes the powers and duties of national competent authorities in relation to these activities. Due to the level of risks generated by financial activities, the rules governing the market in financial instruments need to be robust, targeted and proportionate. In appropriate cases, they need to be precautionary. After the 2008 financial crisis, the G20 has clearly signalled that "less is more" is no longer a valid maxim in financial regulation, whether in relation to lending to consumers, securitisation and repackaging of risks by banks, or oversight of professional investors and trading of financial instruments including complex instruments. In particular:

- The financial crisis has woken the world to the issue of counterparty risk, notably with regards to over the counter (OTC) derivatives. The failure of a counterparty in a derivative transaction not only leave unhedged the counterparty but could also have systemic consequences for the whole financial system. This issue is being addressed in EMIR by introducing central counterparties to better manage this risk.

- The crisis also demonstrated that financial institutions are not always adequately capitalised to be able to face adverse circumstances. The Capital Requirements Directive seeks to legally underpin international agreements to ensure that the financial system as a whole is better capitalised to face future risks.

- There are also undesirable trading products or practices, which competent authorities have been unable to act against. This is partly due to insufficient transparency, and partly to a lack of legal tools to fight market abuse. The issue of transparency and the possibility of product bans is taken up in MiFID. The legal framework will be strengthened in the review of the Market Abuse Directive.

- While MiFID has sought to introduce competition between trading venues, such competition has been limited by lack of competition in the post trading infrastructure field. Clearing and settlement practices can limit investors' ability to choose between platforms. This issue will be addressed in MiFID, EMIR and the proposal on central securities depositories.

The overarching objective of MiFID has been to further the integration, competitiveness, and efficiency of EU financial markets. MiFID is predicated on a series of key principles: cross-border competition between investment firms and trading venues on a level-playing field, market transparency, non-discriminatory and equal treatment of market participants, diligent corporate governance and avoidance of conflicts of interest by intermediaries, and suitable as well as effective protection of investors. In concrete terms, it abolished the possibility for Member States to require all trading in financial instruments to take place on specific exchanges and enabled Europe-wide competition between traditional exchanges and alternative venues. It also granted banks and investment firms a strengthened "passport" for providing investment services across the EU subject to compliance with both organisational and reporting requirements as well as comprehensive rules designed to ensure investor protection.

The result after 3.5 years in force is more competition between venues in the trading of financial instruments, and more choice for investors in terms of service providers and available financial instruments, progress which has been compounded by technological advances. Overall, transaction costs have decreased and integration has increased[5].

However, some problems have surfaced. First, the more competitive landscape has given rise to new challenges. The benefits of open competition in trading financial instruments and accessing new markets have thus far mostly flowed to intermediaries, institutional investors (such as funds) and nimble traders with the technology necessary to exploit differences between markets, not fully to the issuers and end retail investors. The market fragmentation implied by competition has also made the trading environment more complex, especially in terms of collection of trade data. Second, regulation is always a few steps behind the market reality, and the detailed rules upholding the core precepts above need to be periodically bolstered. Market and technological developments have outpaced various provisions in MiFID. The common interest in a transparent level playing-field between trading venues and investment firms risks being undermined. Third, MiFID suffers from the misplaced assumption that professional investors know what is best for themselves and the market as a whole, so that there could be minimal oversight of complex wholesale markets. The financial crisis has exposed weaknesses in the regulation of instruments other than shares, traded mostly between professional investors. Eventually, rapid innovation and growing complexity in financial instruments underline the importance of up-to-date, high levels of investor protection. While largely vindicated amid the experience of the financial crisis, the comprehensive rules of MiFID nonetheless exhibit the need for targeted but ambitious improvements.

The implementation of MiFID coincides with the onset of the financial crisis and, as ever, rapid innovation in financial services. As a result, its effects are virtually impossible to assess in isolation from the latter. For example, institutional investors increasingly seek to escape pre-trade transparency and hide their trading intentions from the public. Is this due to uncertainty caused by the crisis, technical solutions presented by investment firms for managing their orders in private, or to fragmentation of trading between venues and a reduction in trade size hastened by MiFID-induced competition? Or do the available waivers from pre-trade transparency not properly address the splitting of large trades into small orders? Or is it due to all of the above? Would liquidity and resilience in non-equity markets have been better or worse amid the crisis with more comprehensive transparency rules under MiFID?

However MiFID underlying principles remain valid. Cross-border pan-EU competition is more conducive to efficient allocation than national markets. A fragmentation of liquidity is

not anathema to fair and efficient price discovery provided all markets play by the same rules and transparency is effective. Different investors need different degrees of protection. Investors should be able to be served by trustworthy market participants from across the Union. Investment firms and trading venues need to abide by strong organisational rules in order to avoid market disorder or excessive volatility in some asset-classes from undermining trust in all financial instruments – and in the ability of the economy to finance itself.

The review of MiFID needs to consider this backdrop. Wholesale repairs like those to parts of the financial system linked more directly to the crisis, e.g. bank capital or resolution, are not required. A comprehensive review of the underlying precepts and basic building blocks of MiFID is neither necessary nor appropriate only some years after it entered into force. Since experience amid the crisis and technological developments in recent years have neither entirely vindicated nor invalidated its basic precepts or provisions, an approach targeted at fixing visible flaws is proposed instead. Nonetheless this exercise will be broad in scope as it touches upon a diverse set of issues and will affect a broad range of stakeholders.

It has been decided to address all these issues through one single legislative initiative for three main reasons. First, MiFID is a comprehensive regulatory framework in which various provisions depend on one another. In tackling some of the challenges separately from others we could lose sight of the overall picture, and negatively affect the integrity and clarity of this regulatory framework. Second, a series of incremental reviews with multiple, overlapping procedures and objectives could put more strain on the resources of stakeholders and reduce their chances of contributing towards a balanced outcome. Finally, in view of rapid and ongoing technological developments, to adopt an approach for reviewing the functioning of certain markets, such as for example those in equities, under a different lens compared with markets in other instruments would not be efficient. Phenomena which may occur in one market today may emerge in others tomorrow, and our regulatory framework should be both comprehensive and flexible in this respect.

In conclusion, the revision of MiFID is an integral part of the reforms aimed at establishing a safer, sounder, more transparent and more responsible financial system working for the economy and society as a whole in the aftermath of the financial crisis.[6] It is also an essential vehicle for delivering on the G20[7] commitment to tackle less regulated and more opaque parts of the financial system, and improve the organisation, transparency and oversight of various market segments, especially in those instruments traded mostly over the counter (OTC)[8], complementing the legislative proposal on OTC derivatives, central counterparties and trade repositories[9].

Last, in line with proposals from the de Larosière group and ECOFIN,[10] the EU has committed to minimise, where appropriate, discretions available to Member States across EU financial services directives. This is a common thread across all areas covered by the review of MiFID and will contribute to establishing a single rulebook for EU financial markets, help further develop a level playing field for Member States and market participants, improve supervision and enforcement, reduce costs for market participants, and improve conditions of access and enhance global competitiveness of the EU financial industry[11].

2. PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

The proposal for a revision of MiFID and its impact assessment has been prepared in accordance with the Commission's better regulation principles. They take into consideration the views expressed in a public consultation from 8 December 2010 to 2 February 2011. They

also take account of input obtained through extensive meetings with a broad range of stakeholder groups since December 2009. Finally, the proposal takes into consideration the observations and analysis contained in the documents and technical advice published by the Committee of European Securities Regulators (CESR), now the European Securities and Markets Authority (ESMA).

2.1. Public consultation

Commission services have held several ad hoc and organised meetings with representatives of market participants, public authorities, and other stakeholders on issues included in the revision of MiFID. Six targeted roundtables were organised between December 2009 and January 2010[12]. A large and well-attended public hearing was held over two days on 20-21 September 2010[13]. A summary of this hearing can be found in Annex 12. Between 8 December 2010 and 2 February 2011 a public consultation was organised to which over 4200 contributions were received. The non-confidential contributions can be consulted on the Commission's website[14]. The outcome of the consultation has been summarised in Annex 13.

2.2. CESR (now ESMA) reports

CESR was granted an informal mandate on 2 March 2010. CESR published several reports on MiFID related issues during the course of 2010[15].

2.3. External studies

Two studies[16] have been commissioned from external consultants in order to prepare for the revision of the MiFID. The first one which was requested from PriceWaterhouseCoopers on 10 February 2010 and received on 13 July 2010, focused on data gathering on market activities and other MiFID related issues. The second, from Europe Economics mandated on the 21 July 2010 after an open call for tender, received on 23 June focused on a cost benefit analysis of the various policy options to be considered in the context of the revision of MiFID.

2.4. Steering Group

The Steering Group for this Impact Assessment was formed by representatives of a number of services of the European Commission, namely the Directorates General Internal Market and Services, Competition, Agriculture, Climate, Economic and Financial Affairs, Energy, Industry and Entrepreneurship, Health and Consumers, Justice, Trade, Taxation, Digital Agenda, Development, the Legal Service and the Secretariat General. This Group met 3 times, on 10 December 2010, 11 January 2011 and 14 February 2011. The contributions of the members of the Steering Group have been taken into account in the content and shape of this impact assessment[17].

2.5. Impact Assessment Board

DG MARKT services met the Impact Assessment Board on 18 May 2011. The Board analysed this Impact Assessment and delivered its opinion on 23 May[2011. During this meeting the members of the Board provided DG MARKT services with comments to improve the content of the Impact Assessment that led to some modifications of this final draft. These are:

- improved presentation of the initiative's overall context, as well as the different set of issues adressed in this initiative by clarifying the link with other international or EU

initiative (including a more precsise assessment of the differences and similarities with the US) and prioritising the different issues;

- improved analysis of the problems by further specifying the magnitude of the problems and the underlying problem drivers while clarifying why EU action is needed, such as G-20 commitments or precautionary concerns;

- improved presentation of the options by clarifying the content of some of the options, focusing on the key issues and regrouping some of the options;

- strenghtening our analysis of the options by better identifying the nature and giving an order of magnitude whenever possible of the benefits, by making sure that all options were assessed against a comprehensive baseline secnario, as well as by discussing more in detail the impact on Member States;

- better explaining why in some cases our preferred options might differ from stakeholders' views.

3. POLICY CONTEXT, PROBLEM DEFINITION, BASELINE SCENARIO AND SUBSIDIARITY

3.1. Background and context

MiFID applies to markets in financial instruments[18]. The financial markets covered by MiFID as well as how these markets work is briefly described here.

Actually, there are different financial instruments with different market features and different market participants. Financial instruments are usually split into three large categories, equities, debt instruments and derivatives. These instruments can be traded on organised markets which is mostly the case for equities or over the counter (OTC) which is the case for most of the debt instruments and derivatives. In terms of respective size, total turnover on equities markets amounted in 2010 in Europe to nearly €19.9 trillion[19] . International and domestic debt securities markets in terms of outstanding issued debt amounted in March 2011 and December 2010 to respectively $29 trillion and $67 trillion for all countries out of which the Euro area countries and the UK accounted for $16 trillion and $15 trillion[20] . OTC derivatives markets in terms of notional amount outstanding amounted to $601 trillion as of end of December 2010 [21].

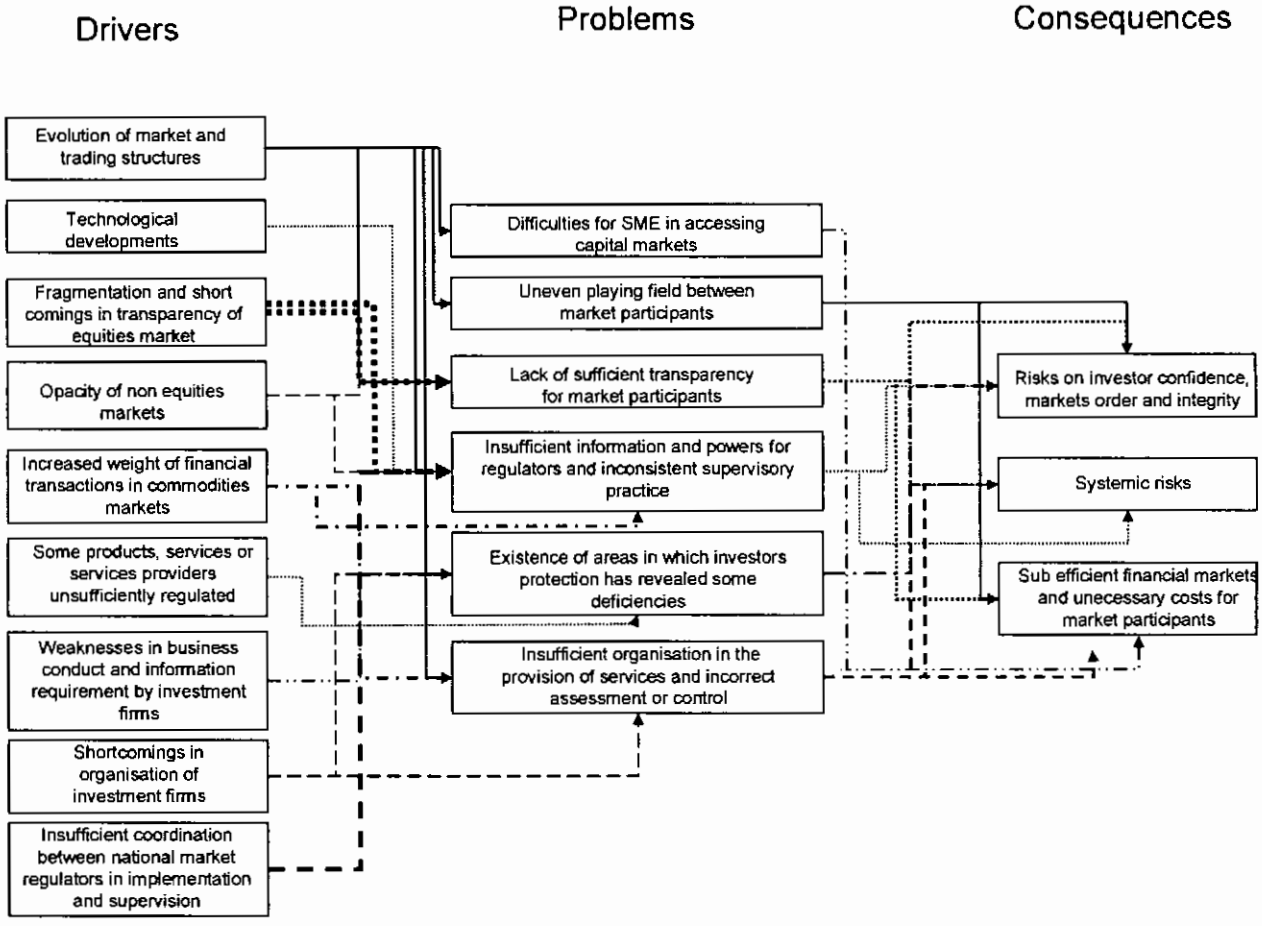
In addition to their respective size, the relevant financial markets are also different in terms of trading features. The nature of the instrument, the type of market participants and the organisation of trading vary according to the instrument. Equity and bonds are fungible instruments while most of the derivatives are not. As such, the level of activity on secondary market tends to be higher. But the secondary market is actually only really active for shares. For bonds, the combination of "buy and hold" investors, the fact that the instrument has a maturity date and the fact that there are multiple issues for each issuer largely contribute to very low activity on the secondary debt market. In addition, markets also differ in the way trading is organised. For equities, the larger share of the transactions take place on organised venues with multiple buyers and sellers meet. The meeting of these parties are often organised through a central order book system. For debt instruments and derivatives, trading tend to be more bilateral and a request for quote system in which counterparty asks counterparty for a price on a specific instrument, prevails. The diversity in the nature of the instrument and in the way it is being negotiated need to be taken into consideration when looking at MiFID in its globality.

3.2. Problem definition

The problems that the revision of MiFID is aiming to solve are multiple and can be grouped as follows:

- lack of a level playing field between markets and market participants has become exacerbated as new players and new trading techniques develop
- difficulties for SMEs to access financial markets
- lack of sufficient transparency of the financial markets for market participants
- the lack of sufficient information and powers for national regulators regarding financial markets and intermediaries, and inconsistent supervisory practice
- existence of areas in which investor protection has revealed deficiencies
- weaknesses in some areas of the organisation, processes, risk control and assessment of some market participants.

The problem tree included below provides an overview of the main drivers and consequences of these various problems.



The following sections provide a summary of the problems highlighted above; for a more detailed explanation and background in relation to these problems please see Annex 2.

3.3. Problem 1: Lack of level playing field between markets and market participants

The implementation of MiFID combined with the effect of technological advances has dramatically changed the structure of financial markets across Europe, notably in the equity space, and made the conduct of market participants evolve to reflect these developments. These changes have undoubtedly helped stimulate competition between trading venues but have also created some distortions of competition between market participants. There are five main reasons for this situation.

There is concern that despite providing comparable services to regulated markets, Multilateral Trading Facilities (MTFs) may in practice be subject to a less stringent supervisory regime while at the same time key concepts such as admission to trading[22] do not apply to them. Further, the fragmentation of trading across different venues could result in misconduct being missed due to the lack of coordinated monitoring between them.

New trading venues and market structures, such as broker crossing systems and derivative trading platforms, have emerged that carry out similar activities to MTFs or systematic internalisers[23] without being subject to the same regulatory requirements, both in terms of transparency and investor protection[24]. The fact finding carried out by CESR[25] found that

actual trading through broker crossing systems – which are not subject to any pre-trade transparency requirements - increased from an average of 0.7% of total EEA trading in 2008 to an average of 1.5% in the first quarter of 2010. This means that between 2008 and the 1st quarter of 2010 this % has tripled. Pre-trade transparency is key for the price formation process and dark trading (including both broker crossing networks and dark pools – i.e. platforms operated by a RM or a MTF and benefiting from pre-trade transparency waivers) is expected to increase in the near future following a similar path as in the United States where dark trading made up 13.27% of consolidated US equities trading volume at the end of 2010[26] and is expected to still grow further with estimates by the end of 2011 of 15%. Regarding derivatives markets, the US authorities have created, for derivatives, the new concept of Swap Execution Facilities (SEFs)[27] to bring such trading venues or structures within the scope of financial services regulation.

Rapid technological changes, and in particular the growth of automated trading and high frequency trading (HFT) that represents an increasing share of transactions, especially on equity markets, have led to concerns about possible new risks to the orderly functioning of markets, e.g. due to rogue algorithms or a sudden withdrawal of liquidity in adverse market conditions. The analysis of the May 6, 2010 flash crash[28] performed by US regulatory authorities has underlined the fact that even if HFT firms may not have been the cause of this crash, the way and the speed of their reaction has greatly amplified its effects. Further, not all HF traders are subject to authorisation and supervision under the MiFID as they can use an exemption set in the framework directive[29]. Even if the effect of this type of trading on the markets is still being investigated and discussed, some arguing that it is beneficial in terms of liquidity and spreads while others considering that markets have become more shallow, it is obvious that this type of activity deserves to be properly regulated simply in light of the size that it represents in terms of trading as of today, and the potential spill over effects their misbehaviour might have on the whole financial markets. The scale of HFT in Europe already accounts for a significant portion of equity trading in the EU, and is expected to grow further. According to CESR[30], HFT trading accounts from 13% to 40% of total share trading in the EU. As a comparison, HFT traders account for as much as 70% of all US equity trading volume[31].

The growth of over the counter (OTC) trading on equities has led to concerns among some national supervisors that it threatens the quality of price formation on exchanges and its representative nature, as a substantial part of the transactions are not being taken into account. Further, as far as derivatives are concerned, it has been agreed by the G20 to ensure that, where appropriate, trading in standardised OTC derivatives moves to exchanges or electronic trading platforms.[32]

3.4. Problem 2: Difficulties for SMEs to access financial markets

Small and medium-sized enterprises face greater difficulties and costs to raise capital from equity markets than larger issuers. These difficulties are related to the lack of visibility of SME markets, the lack of market liquidity for SME shares and the high costs of an initial public offering. Although some "SME markets", regulated as MTFs, have emerged at national level to try to address these difficulties by offering a tailored regulatory regime to SME issuers, different requirements apply and uncertainty in this regard may put off investors.The listing as well as the transparency requirements might differ from one SME platform to the other. Further, these SME markets are not interconnected as MiFID currently does not foresee that SME shares listed on one MTF can automatically be traded on another. Finally the costs of listing for an SME are disproportionate given the limited access to capital that it currently provides.

3.5. Problem 3: Lack of sufficient transparency for market participants

The key rationale for transparency is to provide investors with access to information about current trading opportunities, to facilitate price formation and assist firms to provide best execution to their clients. It is also intended to address the potential adverse effect of fragmentation of markets and liquidity by providing information that enables users to compare trading opportunities and results across trading venues. Post trade transparency is also used for portfolio valuation purposes. Transparency is crucial for market participants to be able to identify a more accurate market price and to make trading decisions about when and where to trade. However a number of concerns have emerged that the transparency regime set out in the MiFID is insufficient for market participants in both the equities and non equities markets.

With respect to equity markets, the growth of electronic trading has facilitated the generation of dark liquidity and the use of dark orders[33] which market participants rely upon to minimise market impact costs. However, an increased use of dark pools raises regulatory concerns as it may ultimately affect the quality of the price discovery mechanism on the "lit" markets[34]. In terms of overall EEA trading, dark pools (i.e. platforms operated by a RM or a MTF and benefiting from pre-trade transparency waivers) and broker crossing networks account for approximately 7%. If we add up the OTC trading share which usually estimated to be around 38%[3536], 45% of the EEA trading is "dark" or not subject to pre-trade transparency (see Annex 2.3.1). The issue at stake is to balance the interest of the wider market with the interest of individual parties by allowing for waivers from transparency in specific circumstances[37].

Market participants require information about trading activity that is reliable, timely and available at a reasonable cost. They have expressed concerns about time delays in the publication[38] of trade reports in the equities markets. Many supervisors as well as market participants seem to agree that the maximum permitted delays for publishing trade details should be reduced[39]. This would help to make post trade information available sooner to the market.

The pre and post trade transparency requirements currently only apply to shares admitted to trading on a regulated market. A number of instruments that are similar to shares[40] are therefore outside the scope of MiFID transparency requirements. Since the requirements only apply to shares admitted to trading on a regulated market, there is also a potential difference in the level of transparency for shares that are only admitted to trading on a MTF or another organised trading facility.

For non-equity markets, transparency requirements are not covered by the MiFID and are only regulated at national level; these are not always considered sufficient[41]. Efforts by trade associations of investment banks to make these markets transparent have not been successful. Especially during the financial crisis, market participants have faced difficulties in accessing price information and valuing their positions in different instruments, especially the bonds markets. Access to information on these markets is uneven and often depends on the size and type of investors and market context. On the other hand, the issue is made more complex by the fact that non equity markets are currently mostly dealers' market i.e. markets in which market makers are playing a key role. In these markets, the level of activity on the secondary market is much lower than on equity markets. Transactions are very often done on a bilateral basis in which a counterparty asks a dealer for a price on a specific instrument. In quoting the price for the specific instrument, the dealer is taking a position and putting its own capital at risk. If there is too much trade transparency, the dealer may have to reveal its positions, which would put him at a higher risk versus other market participants that could benefit from the

information they have on his position to gain a profit. This negative possible effect could be mitigated by proper calibration of a future transparency regime such as it is already the case for the equities markets where a balance has been struck between the wider market interests in terms of transparency and market efficiency by foreseeing pre-trade transparency waivers and deferred post-trade publication for large transactions.

Besides requiring market data to be reliable, timely and available at a reasonable cost, investors also require the information to be brought together in a way that allows comparison of prices across different venues. Experience since the implementation of MiFID shows that the reporting and publication of trade data in shares is not living up to this expectation.[42] The main problems relate to the quality and format of the information, as well as the cost charged for the information and the difficulty in consolidating the information. If these issues are not fully addressed, they could undermine the overarching objectives of MiFID as regards transparency, competition between financial services providers, trading venues and investor protection. While a number of initiatives have been put in place to try to address these issues there are practical and commercial obstacles that appear to necessitate regulatory intervention to facilitate the consolidation and dissemination of post trade information.

Similar issues are likely to arise for non equity instruments if these are brought within the scope of a pre and post-trade transparency regime.

3.6. Problem 4: Lack of transparency for regulators and insufficient supervisory powers in key areas and inconsistent supervisory practice

In several areas, regulators are lacking the necessary information or powers to properly fulfil their role.

Commodities markets

Recent developments in commodity markets have highlighted a number of issues.

The G20 agreed "to improve the regulation, functioning, and transparency of financial and commodity markets to address excessive commodity price volatility." In its Communication of 2 June 2010 on "Regulating Financial Services For Sustainable Growth", the Commission announced it is preparing a comprehensive, balanced and ambitious set of policy initiatives which will touch upon commodity derivatives markets. More recently, the Communication of 2 February 2011 on commodity markets and raw materials has called for further action

Many commentators[43] have raised concerns that the increased presence of non-commercial investors, especially in some key benchmark commodity derivative markets (e.g. oil and agricultural markets) have led to excessive price increases and volatility.[44] Physical commodity and commodity derivatives markets are increasingly intertwined and influence each other. This stronger interaction requires reinforcing the cooperation between financial and physical regulators as well as between regulators at international level.

The second group of issues lies in the lack of transparency faced by both market participants and regulators in both financial and physical commodities markets as well as the lack of intervention powers for regulators. There is no position reporting requirements for derivatives and especially commodities derivatives and no harmonised and effective position management oversight powers to prevent disorderly markets and developments detrimental to commodity derivatives users. This lack of transparency has undermined the ability of regulators as well as market participants to understand the impact of the increasing flow of

financial investments in the commodity derivatives markets. In addition although position reporting or oversight are recognised as effective tools to ensure fair and orderly trading and prevent market abuse especially in commodity derivatives markets as highlighted by existing practices of trading venues, the powers given to trading venues and/or regulators vary significantly between Member States.

A third issue relates to the scope of the exemption from MiFID rules for commodity firms trading on own account in financial instruments, or providing investment services in commodity derivatives on an ancillary basis as part of their main business and when they are not subsidiaries of financial groups.[45] These exemptions intend to cover commercial users and producers of commodities, under the assumption that commercial firms and specialist commodity firms do not pose systemic risks comparable to traditional financial institutions or interact with investors. The size and level of activity of the exempted commodity firms has developed over the years and the assumption of their limited effect in terms of market disorder or systemic risk may not be as valid as before.

In addition, it has been suggested that commercial companies benefiting from the MiFID exemptions active in the oil market should not provide investment services in commodity derivatives even as an ancillary activity[46]. As these MiFID exempt firms are not subject to any MiFID provisions – including the conduct of business rules – some national regulators and market participants have argued that unsophisticated clients would not be adequately protected. On the other hand, this notion of ancillary activity appears to be an essential provision for agricultural cooperatives, enabling them to provide hedging tools to their farmers while remaining exempt from a regulatory regime ill-calibrated to the small risks they pose to the financial system.

Fourth, emission allowances[47] are an instrument created by the EU Emissions Trading Scheme Directive (the EU ETS Directive)[48], in force since 2005. Emission allowances are a new type of legal instrument which could lend itself to be classified as a financial instrument or as a physical commodity. At present, not all segments of the European carbon market are consistently covered by financial markets legislation or afforded equivalent regulatory and supervisory treatment by other European legislative instruments. Notably, MiFID does not apply to the secondary trading of spot emission allowances. This stands in contrast with the situation in the allowances derivatives market and the regulatory arrangements for the future primary spot market (i.e. instead of free allocation, emission allowances will be auctioned to market participants) in those instruments: in those two market segments, to a greater or lesser extent the provisions of the MiFID would apply[49]. This perceived distortion has only partially been covered by individual initiatives of a few Member States to bring the secondary spot activity in the carbon market under the national regimes implementing the MiFID or Market Abuse Directive[50]. The lack of consistency in the regulatory framework may eventually be detrimental to the spot segment's prospects. This makes it vulnerable to a risk of market abuse, for example through potential manipulation of spot price indices against which derivative positions are priced, as well as other forms of market misconducts, such as fraud due to insufficient checks on the integrity of market participants.

Transaction reporting

The second issue for regulators is the access to information. Transaction reporting under MiFID enables supervisors to monitor the activities of investment firms, the functioning of markets and ensure compliance with MiFID, and to monitor abuses under the Market Abuse Directive (MAD). Investment firms are required to report to competent authorities all trades in all financial instruments admitted to trading on a regulated market, regardless of whether

the trade takes place on that market or not[51]. Transaction reporting is also useful for general market monitoring, as it provides insight into how firms and markets behave.

The existing reporting requirements fail to provide competent authorities with a full view of the market because their scope is too narrow (e.g. financial instruments only traded OTC are currently not reportable) and because they allow for too much divergence. First, since it has an important function in monitoring the functioning of the market, including its integrity in the perspective of MAD, the requirements under the two directives need to remain aligned, taking also into account the ongoing review of the MAD[52]. Second, reporting requirements today diverge between Member States, which adds costs for firms and limits the use of trade reports for competent authorities. Third, third party firms that investment firms can use to report their transactions are not subject to on going monitoring by the supervisor. Last, for cost and efficiency purposes, double reporting of trades under MiFID and the recently proposed reporting requirements to trade repositories should be avoided[53] while at the same time, non-investment firms who may have direct access to markets do not need to report, which creates gaps between the trading activity actually done and the one reported.

Powers of competent authorities

Experience, especially during the financial crisis has shown that the powers granted to competent authorities[54] need to be strengthened in key areas, including in terms of investigatory powers[55].

There have recently been various calls to subject complex products such as certain types of structured products, to stricter regulatory scrutiny as regards the provision of certain investment services and activities.[56] The fact that national regulators do not have the power to ban or restrict the trading or distribution of a product or service in case of adverse developments, has appeared as a major lacking point, similarly to the absence of provisions that would ensure cooperation with regard to general market oversight. On the other hand, the access of third country firms to EU markets is not harmonised under MiFID and this gives rise to a patchwork of national third country regimes. Consequently, there is considerable divergence as to how third country regimes are applied across the Union. This is damaging the functioning of the single market as well as creating additional costs for these firms.

On sanctions, MiFID requires Member States to ensure that it is possible to impose administrative measures or sanctions that are effective, proportionate and dissuasive. In this context, evidence by CESR[57] shows that there are significant differences and lack of convergence across the EU in terms of the administrative measures available for MiFID infringements as well as the application of those sanctions.

3.7. Problem 5: Existence of areas in which investor protection has revealed deficiencies

There are a number of provisions in the current MiFID which result in investors not benefiting from sufficient or appropriate levels of protection. The consequences are that investors may be mis-sold financial products which are not appropriate for them, or may make investment choices which are sub-optimal. There are several drivers to these problems.

Uneven coverage of service providers

Member States may exempt from MiFID investment firms providing certain services only at national level, provided that they are subject to national rules[58]. This exemption means that an

investor buying a financial product from a MiFID exempt firm may be less protected than if he buys the same product from a MiFID regulated firm. Investors may not even be aware of the differences in the levels of protection.

Second, in the context of the Communication on packaged retail investment products (PRIPs)[59], the Commission has underlined the importance of ensuring a more consistent regulatory approach concerning the distribution of different financial products to retail investors, which however satisfy similar investor needs and raise comparable investor protection challenges[60]. Specifically, the sale of structured deposits, an activity almost exclusively carried out by credit institutions, is outside the scope of EU regulation

Third, national regulators[61] have raised concerns with respect to the applicability of MiFID when investment firms or credit institutions issue and sell their own securities. As a primary market activity, issuance of financial instruments is not covered by MiFID

Uncertainty around execution only services

MiFID allows investment firms to provide investors with a means to buy and sell so-called non-complex financial instruments in the market, mostly via online channels, without undergoing any assessment of the appropriateness of the given product - that is, the assessment against knowledge and experience of the investor.[62] This possibility is offered for products which are considered as non-complex which mostly include shares, money market instruments, bonds and some securitised debt and UCITS instruments. Individual investors greatly value the possibility to buy and sell (essentially) shares based on their own assessments and understanding.[63] Nonetheless, there are three potential problems with the status quo which should be addressed on precautionary grounds. First, the financial crisis clearly underlines that access to more complex instruments needs to be strictly conditional on a proven understanding of the risks involved. Second, the ability of investors to borrow funds solely for investment purposes even in non-complex instruments, thereby magnifying potential losses, needs to be tightly controlled. Third the classification of all UCITS as non-complex instruments needs to be reviewed in light of the evolution of the regulatory framework for UCITS, notably when assets they can invest in are themselves considered complex under MiFID, for instance derivatives.

Quality of investment advice

In the context of the financial crisis and recent debates on the quality of investment advice, including the debate on PRIPs, several possible areas for improvement have emerged. Under MiFID intermediaries providing investment advice are not expressly required to explain the basis on which they provide advice (e.g. the range of products they consider and assess) and more clarity is thus needed as to the kind of service provided by the intermediary. One study indicates that, at present, investment advice is unsuitable roughly half of the time[64].

Framework for inducements

MiFID regulated for the first time the payment of various types of incentives to investment firms which can influence the choice and the promotion of products when firms provide services to clients (inducements). The MiFID rules for incentives from third parties require inducements to be disclosed and to be designed to enhance the quality of the service to the client[65]. These requirements have not always proven to be very clear or well articulated for investors[66] and their application has created some practical difficulties and some concerns. Further, the treatment of inducements with respect to portfolio management and investment

advice[67] may require further tightening due to the characteristics of these services. Although the firm should always act in the best interests of the client, yet the possibility to accept inducements when providing advice, especially on an independent basis, and portfolio management can decisively compromise this principle and lead to sub-optimal choices on behalf of the investor.

Provision of services to non retail clients and classification of clients

In the current MiFID framework, clients are classified in three categories: retail clients, professional clients and eligible counterparties[68]. The level of protection and the level of requirements for investment firms in serving these clients decreases from retail clients to professional and eligible counterparties, the underlying principle being that larger entities have access to more information, benefit from higher expertise and more able to protect themselves.

The financial crisis showed that in practice a number of non-retail investors, notably local authorities, municipalities and corporate clients[69], suffered losses due to being mis-sold complex financial instruments the risks of which they did not fully understand. Further, the provision of services to certain investors (so called, eligible counterparties) is not subject to the general MiFID principles that these services should be fair and not misleading, whereas services to retail investors are.

Execution quality and best execution

Finally, although trading venues have to provide post-trade transparency on the prices of executed trades, they are not currently required to publish data on execution quality (such as the speed of trade execution or the number of trades cancelled prior to execution)[70]. Since both of these factors can affect the price at which shares are traded, the absence of published data on these aspects could impair the ability of investment firms to select the best possible venue for executing a trade for a client.

3.8. Problem 6: Weaknesses in some areas of the organisation, processes, risk controls and assessment of some market participants

The problem presents several dimensions.

Insufficient role of directors and insufficient organizational arrangements for the launch of new products, operations and services and weaknesses in internal control functions

The MiFID defines a high-level framework for fit and proper requirements regarding persons who direct the business of investment firms and a general framework for organizational requirement[71] and the establishment and the operation of internal control functions (compliance function[72], risk management function[73], internal audit function[74]). Recent events during the financial crisis such the insufficient assessment and control of risks have shown that the involvement of directors and the role of internal control functions are not always strong enough[75]. The issues generated during the recent financial crisis by some new products, such as complex credit related structured products have revealed the way investment firms design and launch new products and services[76] can be improved. The role and the involvement of directors and the internal control functions in developing firms' policies needs to be better defined in order to strengthen investment firms and avoid detrimental practices toward clients.

Lack of specific organisational requirements for portfolio management, underwriting and placing of securities

Regarding portfolio management, the actual management of these portfolios is not covered in MiFID by any specific provision and Member States have recorded numerous complaints where clients have challenged the way in which their portfolio has been managed[77]. For underwriting and placing, despite the fact that corporate business is covered under different investment and ancillary services in MiFID, some specific practices contrary to firms obligations to take all reasonable steps to prevent conflict of interest such as underpricing or overmarketing of securities to be issued have recently been noted.

Uneven regime for telephone and electronic recording

MiFID leaves to Member States the possibility to require firms to record telephone and electronic communications involving client orders. Most Member States have used this option. However, the wide discretion introduced by MiFID has led to different approaches being adopted by Member States, ranging from the lack of any obligations to the imposition of very detailed rules in this area[78]. There is therefore a lack of consistent framework across Europe on this question that creates differences in the supervisory tools available to regulators and disparities between firms providing the same services in different Member States. Indeed evidence collected through telephone and electronic recording is key in detecting and investigating cases of market abuses as acknowledged by CESR[79]. In case of cross market abuses it is also important that the level of information available to competent authorities is harmonised up to the most stringent level.

3.9. How would the problem evolve without EU action? The base line scenario

If no action is taken to revise the MiFID, it is very likely that the problems that have been identified will persist and could be aggravated by future market developments as very few countervailing forces are likely to exert themselves.

The lack of clarity as to the rules applicable to different trading venues and investment firms in the execution of orders would continue, and the share of OTC trading without an appropriate regulatory framework and with no pre-trade transparency would continue to feed uncertainty. There would be no upgrades to the framework of safeguards around trading in today's low latency, high-speed environment. If no action is taken, the regulatory framework governing trading venues and market partcipants' risk management tools will probably fall even further behind market changes as trading in a dark environment and new electronic means of trading seem likely to continue to grow. SME markets would remain an indistinct venue with a different level of transparency towards investors between the different junior markets, hindering the cross-trading of SME shares and the build up of a pan-European network of SME markets. Deficiencies in equity market transparency and data consolidation would persist, as would the delicate but ultimately unsustainable transparency environment in non-equities. Without any regulatory action, the deficiencies in the equities markets would likely persist. Opacity in the non-equity markets would also likely remain the general rule. Uncertainty would also continue in relation to the effectiveness of regulation applicable to commodity derivative markets. The increasing flow of financial investments has changed the way these markets function. In the absence of any regulatory action, the lack of transparency and regulatory tools would undermine regulators' ability to properly understand these developments and ensure the integrity and proper functioning of these markets. Failure to address the deficiencies in transaction reporting and access to telephone and electronic records would entail that the tools available to regulators for example for detecting market

abuse or checking the compliance of firms with their obligations under MiFID would remain sub-optimal. As for investor protection, the lack of action at EU level will likely result in an increase in the number of cases of mis-selling of financial services products and cases where gaps in the regulation, absence of information, or internal conflicts of interest at firms lead investors to take undue risks. A rise in the number of such cases could have a serious impact on investor confidence leading to strong consumer reactions and negative socio-economic impacts which could create further market disorder and systemic risk.

Other legislative proposals already, or shortly to be, adopted by the Commission complement the MiFID review in terms of increasing transparency towards regulators and market integrity. The review of the Market Abuse Directive (MAD)[80] will ensure all trading venues and practices are appropriately caught under the market abuse prohibitions. The objective is to adapt the MAD framework to market and technological developments, building upon the existing and future MiFID framework relating to rules for trading venues and market participants. The proposal for a regulation on OTC derivatives, central counterparties and trade repositories[81] will increase transparency of significant positions in OTC derivatives which will assist regulators to monitor for market abuse and help to detect any build up of systemic risks through the use of derivatives. There are currently no transaction reporting obligations for OTC derivatives under MiFID which is the main instrument available to regulators to detect market abuse cases. The existence of trade repositories might facilitate such reporting under certain conditions. The proposal for a Regulation on short selling and certain aspects of Credit Default Swaps[82] includes a short selling disclosure regime which would make it easier for regulators to detect possible cases of market manipulation. The issues of transparency requirements and manipulative behaviours specific to physical energy markets, as well as transaction reporting to ensure the integrity of energy markets, are the subject of the Commission proposal for a Regulation on energy market integrity and transparency[83]. This initiative covering the udnerlying phyiscal markets will complement the MiFID and MAD frameworks governing trading in derivatives on energy products as physical and financial markets are interlinked and influence each other. Overall these initiatives will significantly improve the transparency towards and the tools available to regulators to fulfill their supervisory duties. However it should be noted that these initiatives do not increase transparency of trading (pre-and post-trade transparency towards market participants (or only in a very limited way by the public disclosure of aggregated positions in OTC derivatives by trade repositories)

3.10. Subsidiarity and proportionality

According to the principle of subsidiarity (Article 5.3 of the TFEU), action on EU level should be taken only when the aims envisaged cannot be achieved sufficiently by Member States alone and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the EU.

Most of the issues covered by the revision are already covered by the acquis and MiFID today. Further, financial markets are inherently cross-border in nature and are becoming more so. International markets require international rules to the furthest extent possible. The conditions according to which firms and operators can compete in this context, whether it concerns rules on pre and post-trade transparency, investor protection or the assessment and control of risks by market participants need to be common across borders and are all at the core of MiFID today. Action is now required at European level in order to update and modify the regulatory framework laid out by MiFID in order to take into account developments in

financial markets since its implementation. The improvements that the directive has already brought to the integration and efficiency of financial markets and services in Europe would thus be bolstered with appropriate adjustments to ensure the objectives of a robust regulatory framework for the single market are achieved. Because of this integration, national intervention would be far less efficient and would lead to the fragmentation of the markets, resulting in regulatory arbitrage and distortion of competition. For instance, different levels of market transparency or investor protection across Member States would fragment markets, compromise liquidity and efficiency, and lead to harmful regulatory arbitrage.

The European Securities and Markets Authority (ESMA) should also play a key role in the implementation of the new legal proposals. One of the aims of the creation of the European Authority is to enhance further the functioning of the single market for security markets; new rules at Union level are necessary to give all appropriate powers to ESMA.

The options analysed below will take full account of the principle of proportionality, being adequate to reach the objectives and not going beyond what is necessary in doing so. Given the need for implementing legislation, the proportionality of individual options cannot always be fully assessed at this stage. For instance, regarding the new transparency rules that could be applied to bonds and derivatives markets, the revision advocates for a carefully calibrated regime that will take into consideration the specificities of each asset class and possibly each type of instrument. Whenever possible we have ensured that the preferred policy options are compatible with the proportionality principle, taking into account the right balance of public interest at stake and the cost-efficiency of the measure. The requirements imposed on the different parties have been carefully calibrated. In particular, the need to balance investor protection, efficiency of the markets and costs for the industry has been transversal in laying out these requirements.

4. OBJECTIVES

4.1. General, specific and operational objectives

In light of the analysis of the risks and problems above, the **general objectives** of the revision of MiFID are to:

(1) strengthen investor confidence,

(2) reduce the risks of market disorder;

(3) reduce systemic risks; and

(4) increase efficiency of financial markets and reduce unnecessary costs for participants

Reaching these general objectives requires the realisation of the following more **specific policy objectives**:

(1) Ensure a level playing field between market participants;

(2) Increase market transparency for market participants;

(3) Reinforce transparency towards and powers of regulators in key areas and increase coordination at European level;

(4) Raise investor protection

(5) Address organisational deficiencies and excessive risk taking or lack of control by investment firms and other market participants

The specific objectives listed above require the attainment of the following **operational objectives**:

(1) Regulate appropriately all market and trading structures taking into account the needs of smaller participants, especially SMEs

(2) Set up relevant framework around new trading practices

(3) Improve trade transparency for market participants on equities and increase it for non equities market

(4) Reinforce transparency towards and powers of regulators

(5) Improve consistency in the implementation of rules and coordination in supervision by national regulators

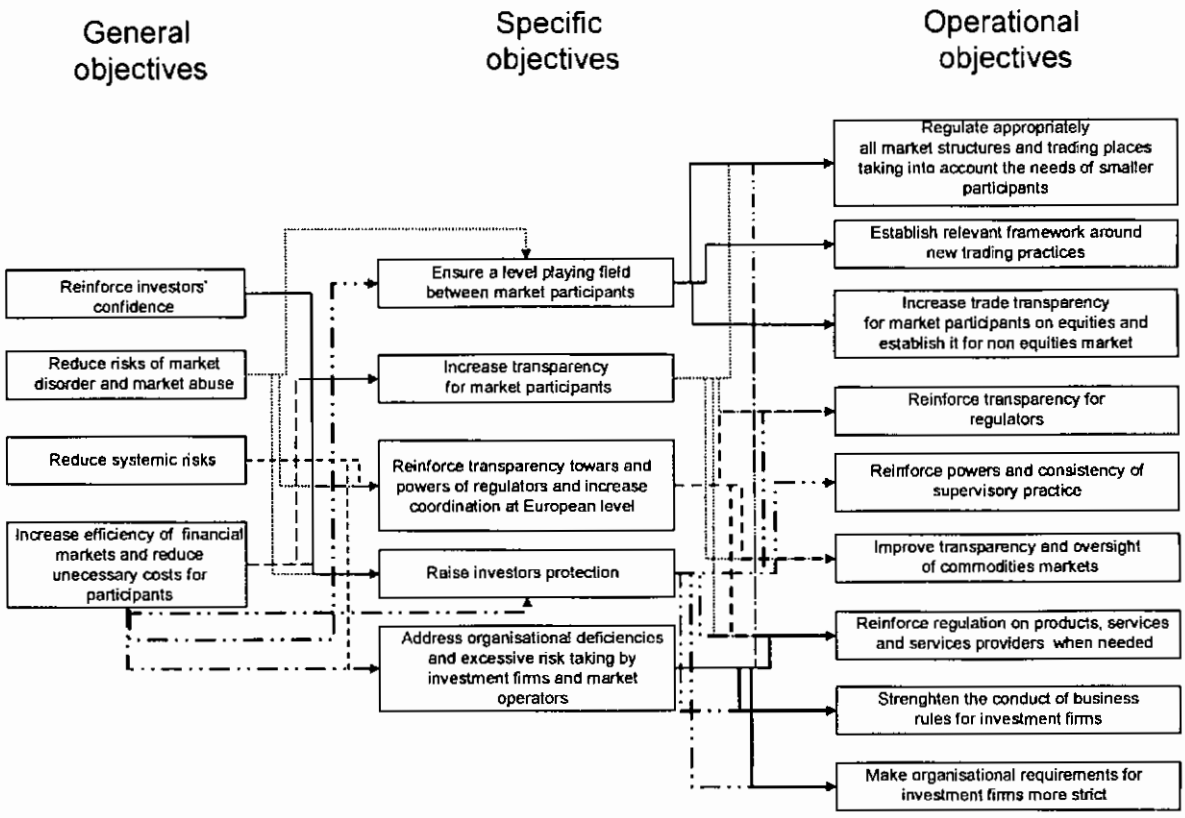
(6) Improve transparency and oversight of commodities derivatives markets

(7) Reinforce regulation on products, services and services providers when needed

(8) Strengthen the rules of business conducts of investment firms

(9) Make organizational requirements for investment firms more strict

An overview of the various objectives and their interrelationships is depicted in the figure below:



4.2. Consistency of the objectives with other EU policies

The identified objectives are coherent with the EU's fundamental goals of promoting a harmonised and sustainable development of economic activities, a high degree of competitiveness, and a high level of consumer protection, which includes safety and economic interests of citizens (Article 169 TFEU).

These objectives are also consistent with the reform programme proposed by the European Commission in its Communication *Driving European Recovery*.[84] More recently in the Commission Communication of 2 June 2010 on "Regulating Financial Services for Sustainable Growth" the Commission indicated that it would propose appropriate revision of the MiFID[85].

In addition, other legislative proposals already or shortly to be, adopted by the Commission complement the revision of MiFID in terms of increasing market transparency and integrity as well as containing market disorder and reinforce investor protection (for further details, see Annex 19). The proposal for a Regulation on short selling and certain aspects of Credit Default Swaps[86] includes a short selling disclosure regime which would make it easier for regulators to detect possible cases of market manipulation. The proposal for a regulation on derivatives, central counterparties and trade repositories[87] will also increase transparency of significant positions in derivatives for regulators as well as reducing systemic risks for market participants. The revision of the MAD[88] that should be presented together with the revision of MiFID will aim at enlarging the scope and increasing the efficiency of the directive and contribute to better and sounder financial markets. The issues of transparency requirements

specific to physical energy markets, as well as transaction reporting to ensure the integrity of energy markets, are the subject of the Commission proposal for a Regulation on energy market integrity and transparency[89].

4.3. Consistency of the objectives with fundamental rights

The legislative measures setting out rules for the provision of investment services and activities in financial instruments, including sanctions need to be in compliance with relevant fundamental rights embodied in the EU Charter of Fundamental Rights ("EU CFR"), and particular attention should be given to the necessity and proportionality of the legislative measures.

The following fundamental rights of the EU Charter of Fundamental Rights are of particular relevance:

- Respect for private and family life (Art.7)
- Protection of personal data (Art.8)
- Freedom to conduct a business (Art. 16)
- Consumer protection (Art. 38)
- The fundamental rights provided for in Title VI Justice: right to an effective remedy and to a fair trial (Art. 47); presumption of innocence and right of defence (Art.48)

Limitations on these rights and freedoms are allowed under Article 52 of the Charter. The objectives as defined above are consistent with the EU's obligations to respect fundamental rights. However, any limitation on the exercise of these rights and freedoms must be provided for by the law and respect the essence of these rights and freedoms. Subject to the principle of proportionality, limitations may be made only if they are necessary and genuinely meet the objectives of general interest recognised by the Union or the need to protect the rights and freedoms of others[90]. In the case of MiFID, the general interest objective which justifies certain limitations of fundamental rights is the objective of ensuring market integrity and compliance with MiFID rules such as conduct of business rules. On the other hand the MiFID review will overall reinforce the right to consumer protection (Art. 38) and the freedom to conduct business in line with the following specific objectives: to ensure a level playing field between market participants, to increase market transparency for market participants, and to enhance investor protection. As most of the options considered as part of this impact assessment do not interfere in any way with any of the fundamental rights identified above or reinforce the right to consumer protection and/or the freedom to conduct business, we have focused our assessment on the options which might limit these rights and freedoms. A summary of the impacts of the relevant policy options is set out for each option in the summary tables in section 6, and the full assessment for these options can be found in Annex 3.

5. POLICY OPTIONS

In order to meet the objectives set out in the previous section, the Commission services have analysed different policy options.

The range of policy initiatives included in the revision of MiFID being considerable, the different policy options have only been considered for the initiatives which are most critical and likely to have significant impacts.

A summary discussion of the secondary policy options can be found in Annex 9. We have chosen not to analyze these in the core of the text and limit our costs-benefits analysis in the annex to the preferred options envisaged (i.e. no alternative options considered).

Policy options	Summary of policy options
1 Regulate appropriately all market structures and trading places taking into account the needs of smaller participants, especially SMEs	
1.1 No action	Take no action at the EU level
	Trading platforms
1.2 Introduce a new category of Organised Trading Facilities (OTF), besides Regulated Markets (RM) and MTFs to capture current (including broker crossing systems - BCS) as well as possible new trading practices while further align and reinforce the organisational and surveillance requirements of regulated markets and MTFs	Under this option a new category called organised trading facility would be established capturing previously not regulated as a specific MiFID trading venue organised facilities such as broker crossing systems, "swap execution facility" type platforms, hybrid electronic/voice broking facilities and any other type of organised execution system operated by a firm that brings together third party buying and selling interests. This new category would ensure that all organised trading is conducted on regulated venues that are transparent and subject to similar organisational requirements. The different types of trading venues will be clearly distinguished based on their characteristics. Regulated markets and MTFs are characterised by non-discretionary execution of transactions and non-discriminatory access to their systems. This means that a transaction will be executed according to a predetermined set of rules. It also means that they offer access to everyone willing to trade on their systems when they meet an objective set of criteria. By contrast, the operator of an organised trading facility has discretion over how a transaction will be executed. He has a best execution obligation towards the clients trading on his platform. He may therefore choose to route a transaction to another firm or platform for execution. An organised trading facility may also refuse access to clients he does not want to trade with. An important constraint on OTFs is that the operator may not trade against his own proprietary capital. This would mean that firms operating internal systems that try to match client orders or that enable clients to execute orders with the firm will have to be authorised and supervised under the respective provisions of a MTF or OTF or Systematic Internaliser. The OTF category would not include ad hoc OTC transactions. It would also not include systems which do not match trading interests such as: systems or facilities used to route an order to an external trading venue, systems used to disseminate and/or advertise buying and selling trading interests, post-trade confirmation systems, etc. The organisational requirements applying to regulated markets and MTFs, as well as OTFs would be further aligned where businesses are of a similar nature especially those requirements concerning conflicts of interest and risk mitigation systems. Operators of the various trading venues trading identical instruments would be required to cooperate and inform each other of suspicious trading activity and various other trading events.
1.3 Expand the definition of MTF so it would capture trading on all broker crossing systems (BCS)	This option would expand the current definition of MTF so that all broker crossing systems (BCS) would be expressly captured and organisational and transparency requirements applicable to trading venues would apply.
	Trading of derivative instruments
1.4 Mandate trading of standardised OTC derivatives (i.e. all clearing eligible and sufficiently liquid derivatives) on RM, MTFs or OTFs	This option picks up on the G20 commitment to move trading in standardised derivatives to exchanges or electronic trading platforms where appropriate. All derivatives which are eligible for clearing and are sufficiently liquid (the criterion of sufficient liquidity would be determined via implementing measures) would be required to be traded on regulated markets, MTFs or OTFs. These venues would be required to fulfil specifically designed criteria and fulfil similar transparency requirements towards the regulators and the public.
1.5 Set targets for trading in standardised OTC derivatives to move to organised venues	This option would entail setting targets in the Directive for industry – i.e. suitably high percentages of transactions per asset class – for moving trading in standardised OTC derivatives onto organised venues within a given timeframe. The venues selected could be regulated markets, MTFs and OTFs, or only the first two. The Directive would provide for the setting of targets in the implementing legislation.
	SME markets

1.6 Introduce a tailored regime for SME markets under the existing regulatory framework of MTF	Under this option a special category of SME market would be established in MiFID, under the existing regulatory framework MTF, specifically designed to meet the needs of SME issuers. Such a regime would entail more calibrated elements in relation to the eligibility of SME issuers facilitating access of SMEs to MTFs while still creating a unified European quality label for SMEs providing for more visibility and therefore more liquidity in SME stocks.
1.7 Promote an industry-led initiative to enhance the visibility of SMEs markets.	In this option, instead of setting up an EU harmonized regulatory framework for SME markets, an industry-led initiative could be promoted developing market standards leading to a harmonized appearance of SME markets and finally networks between SME markets across the EU. The industry may, according to SMEs' and investors' demand and needs, create a self-regulated standard model taking into account existing market models and practises. This would entail to give some incentives to SME markets at EU level (e.g. communication, financing) to enhance their visibility and promote a European network of SME trading venues.

Options 1.2 and 1.3 are mutually exclusive, as are options 1.4 and 1.5, as well as options 1.6 and 1.7.

2 Regulate appropriately new trading technologies and address any related risks of disorderly trading

2.1 No action	Take no action at the EU level
	Organisational requirements
2.2 Narrow the exemptions granted to dealers on own account to ensure that High Frequency Traders (HFT) that are a direct member or direct participant of a RM or MTF are authorised	Under this option, all entities that are a direct member or a direct participant of a RM or MTF, including those engaging in high-frequency trading, would be required to be authorised as an investment firm under MiFID so that they would all be supervised by a competent authority and required to comply with systems, risk and compliance requirements applicable to investment firms.
2.3 Reinforce organisational requirements for firms involved in automated trading and/or high-frequency trading and firms providing sponsored or direct market access	Under this option specific obligations would be imposed targeted specifically at algorithmic and HFT trading ensuring that firms have robust risk controls in place to prevent potential trading system errors or rogue algorithms. Information about algorithms would also be required to be made available to regulators upon request. In addition, firms granting other traders direct or sponsored access to their systems would need to have stringent risk controls in place as well as filters which can detect errors or attempts to misuse their facilities.
2.4 Reinforce organisational requirements (e.g. circuit breakers, stress testing of their trading systems) for market operators	This option would address automated trading from the perspective of the market operators. Operators of organised trading venues would be obliged to put in place adequate risk controls to prevent a breakdown of trading systems or against potentially destabilising market developments. These operators would be required to stress test and encode so-called circuit breakers into their systems which can stop trading in an instrument or the market as a whole in adverse conditions when orderly trading is in danger and investors need to be protected. Operators would also be obliged to put in place rules clearly defining circumstances in which trades can be broken following trading errors and procedures to be followed if trades can be broken.
	Activity of HFT
2.5 Submit HFT to requirements to provide liquidity on an ongoing basis	While the previous options entailed measures regarding the organisational aspects of automated and high-frequency trading the now following options focus on the way high-frequency traders conduct their business. Option 2.5 would primarily impose a requirement on market operators, however with a direct impact on how high-frequency traders operating on the respective platforms. Operators would need to ensure in their rules that high frequency traders executing a significant volume of trades in an instrument would be obliged to continuously provide liquidity on the trading venue for the instrument (in a similar but not identical way to market makers). That is they would not be able to intermittently withdraw from trading in instruments.
2.6 Impose minimum latency period of orders in the order book	Under this option an obligation would be implemented according to which orders on electronic platforms would need to rest on an order book for a minimum period of time before they can be withdrawn. This would prevent the use of many algorithmic and high frequency trading systems that involve submitting and withdrawing large number of orders in very short periods (which is an essential element of many forms of automated trading).
2.7 Impose an order to executed transaction ratio by imposing incremental penalties on cancelled orders and setting up minimum tick size	Under this option market operators would need to ensure that their market participants maintain an adequate order to transaction executed ratio. It would impose that market operators impose a system of incremental penalties for cancelled orders. This would limit the number of orders that can be placed and then cancelled by high frequency traders. This would reduce stress on trading systems as it would prevent excessively large numbers of orders from being sent and then withdrawn and updated. It would also prevent behaviour where participants submit a multitude of orders withdrawing them almost immediately just to gauge the depth of the order book. In addition, the obligation for market operators to set up minimum tick size (i.e. a tick size is the smallest increment (tick) by which the price of exchange-traded instrument can move) on

	their trading venues would prevent excessive arbitrage by HFT as well as unsound competition between trading venues that could lead to disorderly trading.

Policy options 2.2, 2.3 and 2.4 are not mutually exclusive and can complement each other. Options 2.5, 2.6 and 2.7 are also not mutually exclusive.

3 Increase trade transparency for market participants

3.1 No action	Take no action at the EU level
	Trade transparency for equities markets
3.2 Adjust the pre and post trade transparency regime for equities by ensuring consistent application and monitoring of the utilisation of the pre-trade transparency waivers, by reducing delays for post trade publication and by extending the transparency regime applicable to shares admitted to trading on RMs to shares only traded on MTFs or OTFs	This option would focus on strengthening a number of features of the existing trade transparency regime for equities. The current waivers from pre-trade transparency obligations would be further harmonised as to their application and their monitoring would be improved giving ESMA an enhanced role in the process. In the post-trade section the maximum deadline for real-time reporting would be reduced down to one minute (from three) and the permissible delays for publishing large transactions would be significantly reduced. Furthermore, the scope of the transparency regime would be extended to instruments only traded on MTFs and organised trading facilities.
3.3 Abolish pre trade waivers and deferred post trade publication regime for large transactions	This option would go one step further than option 3.2 providing for total transparency in European equities trading. Each order regardless of its type or size would be required to be pre-trade transparent. Every concluded transaction would be required to be published to the market immediately.
	Trade transparency for non-equities markets
3.4 Introduce a calibrated pre and post trade transparency regime for certain types of bonds and derivatives	This option would entail extending the MiFID trade transparency rules (both pre- and post-trade) from equities to certain types of other financial instruments such as bonds, structured products and derivatives eligible for central clearing and submitted to trade repositories. As non-equity products are very different from equity products and very different one from another, the detailed transparency provisions would need to be defined for each asset class and in some cases for each type of instrument within that asset class. This calibration will need to take into account several factors including: (i) the make-up of market participants in different asset classes, (ii) the different uses investors have for the instruments, and (iii) the liquidity and average trade sizes in different instruments. The detailed provisions will be laid down in delegated acts.
3.5 Introduce a calibrated post trade only transparency regime for certain types of bonds and derivatives	This option would take a similar approach to the previous option the difference being that the new transparency regime for non-equity asset classes would only cover post-trade information.
	Costs and consolidation of trade data
3.6 Reduce data costs notably by requiring unbundling of pre and post trade data and providing guidance on reasonable costs of data, and improve the quality of and consistency of post trade data by the set up of a system of Approved Publication Arrangements (APAs)	Under this option, measures would be implemented reducing the costs of data for market participants: - organised trading venues would be required to unbundle pre- and post-trade data so that users would not be required to purchase a whole data package if they are only interested in, for example, post-trade data; - Standards by ESMA determining criteria for calculating what constitutes a reasonable cost charged for data would be envisaged; - Introduce further standards regarding the content and format of post trade data; - Investment firms would be required to publish all post-trade transparency information via so-called Approved Publication Arrangements (APAs). These APAs would need to adhere to strict quality standards to be approved ; and - Trade data would be required to be provided free of cost 15 minutes after the trade.
3.7 Reduce data costs by establishing a system for regulating the prices of data	This option would entail setting up maximum prices that can be charged for market data with a view to reduce the cost significantly

3.8 Improve the consolidation of post trade data for the equities markets by the set-up of a consolidated tape system operated by one or several commercial providers. Introduce a consolidated tape for non-equities markets after a period of 2 years under the same set-up as for equities markets	This option would be complementary to option 3.6 as the data pre-managed by the APAs would then be submitted to dedicated consolidators (i.e. one or several commercial providers) that would need a separate approval. The function of these consolidators would be to collect all information that is published per share at any given time and make it available to market participants by means of one consolidated data stream at a reasonable cost. The set-up of a consolidated tape by one or several commercial providers would be required for non-equities markets after a transitional period of 2 years depending on the type of financial instrument. This differed application would ensure that the consolidation of trade data would take place after the implementation of the new trade transparency requirements for non-equities markets by market participants.
3.9 Improve the consolidation of post trade data for the equities markets by the set-up of a consolidated tape system organised as a public utility industry body. Introduce a consolidated tape for non-equities markets after a period of 2 years under the same set-up as for equities markets	This option would also be complementary to option 3.6. However, instead of having one or several commercial providers of consolidation a single public entity would be established to operate the consolidated tape system on a not for profit basis. The set-up of a consolidated tape by a public utility body would be required for non-equities markets after a transitional period of 2 years depending on the type of financial instrument. This differed application would ensure that the consolidation of trade data would take place after the implementation of the new trade transparency requirements for non-equities markets by market participants.

Policy options 3.2 and 3.3 are mutually exclusive, as well as options 3.4 and 3.5. Options 3.6 and 3.7, as well as options 3.8 and 3.9 are mutually exclusive, but these two sets of options are complementary to each other.

4 Reinforce regulators powers and consistency of supervisory practice at European and International level

4.1 No action	Take no action at the EU level
	Powers of regulators
4.2 Introduce the possibility for national regulators to ban for an indefinite period specific activities, products or services under the coordination of ESMA. Give the possibility to ESMA under specific circumstances to introduce a temporary ban in accordance with Article 9(5) of the ESMA regulation N°1095/2010[91]	This option would consist in giving national regulators the power to ban or restrict for an indefinite period the trading or distribution of a product or the provision of a service in case of exceptional adverse developments which gives to significant investor protection concerns or poses a serious threat to the financial stability of whole or part of the financial system or the orderly functioning and integrity of financial markets. The action taken by any Member State should be proportionate to the risks involved and should not have a discriminatory effect on services or activities provided by other Member Sates. ESMA would perform a facilitation and coordination role in relation to any action taken by Member States to ensure that any national action is justified and proportionate and where appropriate a consistent approach is taken. ESMA would have to adopt and publish an opinion on the proposed national ban or restriction. If the national Competent Authority disagrees with ESMA's opinion, it should make public why. In addition to the powers granted to national competent authorities under the coordination of ESMA, ESMA would have the power to temporarily ban products and services in line with the ESMA regulation. The ban could consist in a prohibition or restriction on the marketing or sale of financial instrument or on the persons engaged in the specific activity. The provisions would set specific conditions for both of these bans on their activation, which can notably happen when there are concerns on investor protection, threat to the orderly functioning of financial markets or stability of the financial system. Such a power would be complementary to the national powers in the sense that a ban by ESMA could only be triggered in the absence of national measures or in case the national measures taken would be inappropriate to address the threats identified.
4.3 Introduce an authorisation regime for new activities, products or services	This option would consist in requiring that before being distributed all new products and services are to be properly authorised by a dedicated mechanism at EU level.
4.4 Reinforce the oversight of positions in derivatives in particular commodity derivatives, including by granting regulators the power coordinated via ESMA to introduce positions limits	This option has several layers. First trading venues on which commodity derivatives trade would be required to adopt appropriate arrangements to support liquidity, prevent market abuse, and ensure orderly pricing and settlement. Position limits are a possible measure to this effect, i.e. hard position limits are fixed caps on the size of individual positions that apply to all market participants at all times. Position management is another, i.e. the possibility for the venue operator to intervene ad hoc and ask a participant to reduce its position. Second, national competent authorities would also be given broad powers to carry out position management with regard to market participants' positions in any type of derivatives and require a position to be reduced. They would also be given explicit powers to impose both temporary (i.e. position management approach) and permanent limits (i.e. position limits) on the ability of persons to enter into positions in relation to commodity derivatives. The limits should be transparent and non-discriminatory. ESMA would perform a facilitation and coordination role in relation to any measure taken by national competent authorities. Finally, ESMA would have temporary powers to intervene in positions and to limit them in a temporary fashion consistent with the emergency powers granted in the ESMA regulation. In other words, ESMA would be equipped with position management powers in case a national competent authority fails to intervene or does so to an insufficient degree, but no position limit powers.

4.5 Reinforce the oversight of financial markets which are increasingly global by strengthening the cooperation between EU and third country securities regulators. In addition reinforce monitoring and investigation of commodity derivatives markets by promoting international cooperation among regulators of financial and physical markets	This option would consist in strengthening cooperation between competent authorities with other market supervisors around the world, possibly through ESMA. In the specific case of commodity derivatives markets this option would in addition reinforce the cooperation between financial and physical regulators both within the EU and at international level. This entails establishing new memoranda of understanding and cooperation agreements. In addition, there will also be ongoing information sharing, assistance in information requests, and cooperation in cross-border investigations. This option is complementary to a similar option proposed in the review of the Market Abuse Directive. While MAD is limited to market abuse, this option seeks to promote cooperation in supervising fair and orderly working of markets.
	Conditions of access of third country firms
4.6 Harmonise conditions for the access to the EU of third country investment firms, by introducing a third country regime (based on a common set of criteria and memoranda of understanding (MoU) between the Member States regulators and the third country regulators under the coordination of ESMA)	This option would create a harmonised framework for granting access to EU markets for firms based in third countries. The provision of services to retail clients would always require the establishment of a branch in the EU territory; the provision of services without a branch would be limited to non-retail clients. The national competent authority would have to register (and thus grant access to the EU internal market) and supervise third country investment firms intending to establish a branch in its territory. Based on a decision of the national competent authority that the third country firm is subject to and complies with legal requirements in a number of relevant areas (authorisation, criteria for appointment of managers, capital, organisational requirements), access to the EU could be granted subject to appropriate cooperation agreements between the relevant third country authority and the EU competent authority (i.e. Memoranda of understanding would have to be established between the third country authorities and the Member States regulators under the coordination of ESMA) and compliance by the firm with key MiFID operating and investor protection conditions. To ensure consistency of approach across the EU, ESMA would be able to resolve any disputes arising between Member State authorities regarding the authorisations.
4.7 Introduce an equivalence and reciprocity regime by which after assessment by the Commission of the third country regulatory and supervisory framework access to the EU would be granted to investment firms based in that third country.	This option would entail the assessment of equivalence and reciprocal access of the third country regulatory and supervisory regime in relation to the EU regime and to EU-based operators. This assessment would be formatised by a decision of the Commission. Memoranda of understanding (MoU) between the Member States regulators and the third-country regulators should be concluded based on a standard MoU that could be drafted by ESMA. Investment firms established in third countries for which equivalence has been granted would have access to the EU market, with the provision of services to retail clients would always requiring the establishment of a branch in the EU territory and compliance by the firm with key MiFID operating and investor protection conditions.
	Sanctions
4.8 Ensure effective and deterrent sanctions by introducing common minimum rules for administrative measures and sanctions	This option would require Member States to provide for administrative sanctions and measures which are effective, proportionate and dissuasive byintroducing minimum rules on type and level of administrative measures and administrative sanctions. Administrative sanctions and measures set out by Member States would have to satisfy certain essential requirements in relation to addressees, criteria to be taken into account when applying a sanction or measure, publication of sanctions or measures, key sanctioning powers and minimum levels of fines. This option would also entail establishing whistleblowing mechanisms.
4.9 Ensure effective and deterrent sanctions by harmonising administrative measures and sanctions	This option would introduce uniform types and level of administrative measures and administrative sanctions across the EU. This option would also entail establishing whistleblowing mechanisms.

Policy options 4.2, 4.3, 4.4 and 4.5 can complement each other. Policy options 4.6 and 4.7 are mutually exclusive as well as options 4.8 and 4.9.

5 Reinforce transparency to regulators

5.1 No action	Take no action at the EU level
	Scope of transaction reporting
5.2 Extend the scope of transaction reporting to regulators to all financial instruments (i.e. all financial instruments admitted to trading and all financial instruments only traded OTC). Exempt those only traded OTC which are neither dependent on nor may influence the value of a financial instrument admitted to trading. This will result in a full alignment with the scope of the revised	This option entails that investment firms report the details of transactions in all instruments which are traded in an organised way, either on a RM, a MTF or an organised trading facility to regulators. Notably the extension to OTFs would bring a whole set of derivatives products into scope (e.g. part of equity derivatives, credit derivatives, currency derivatives, and interest rate swaps). All transactions in OTC instruments which are not themselves traded in an organised way will also have to be reported, except when the value of those does not depend to some extent on or may not influence that of instruments which are admitted to trading. Extending the scope of transaction reporting to such instruments will bring the reporting requirements in line with the existing provisions of MAD, as well as with those of the revised MAD, and corresponds to existing practice in some Member States (e.g. UK, Ireland, Austria, and Spain). Commodity

Market Abuse Directive. Lastly regarding derivatives, harmonise the transaction reporting requirements with the reporting requirements under EMIR	derivatives may be used for market abuse purposes, notably to distort the underlying market. Commodity derivatives will need to be brought into scope separately. This extension overlaps considerably with the scope of reporting requirements to trade repositories under EMIR.
5.3 Extend the scope of transaction reporting to all financial instruments that are admitted to trading and all OTC financial instruments. Extend reporting obligations also to orders	This option entails that trading in all financial instruments will need to be reported, regardless of whether an instrument is admitted to trading or not, and whether its value depends to some extent on or may influence that of instruments which are admitted to trading. In addition, reporting parties will have to transmit to their competent authorities not only the transactions that they have done but also the orders that they have received or initiated
5.4 Require market operators to store order data in an harmonised way	This option entails that all market operators keep records of all orders submitted to their platforms, regardless of whether these orders are executed or not. Such records need to be comparable across platforms, notably with regard to the time at which they were submitted. The information stored should include a unique identification of the trader or algorithm that has initiated the order. ESMA will set the appropriate standards.
	Reporting channels
5.5 Increase the efficiency of reporting channels by the set up of Approved Reporting Mechanisms ("ARMs") and allow for trade repositories under EMIR to be approved as an ARM under MiFID	This option entails that all entities involved in reporting transactions on behalf of investment firms are adequately supervised. Under this option, competent authorities' powers to monitor ARM's functioning on an ongoing basis will be clarified. Also, the standards that ARM's need to comply with will be harmonised.
5.6 Require trade repositories authorised under EMIR to be approved as an ARM under MiFID	This option entails that financial firms would be required to use trade repositories to report derivatives transactions on their behalf, and that all trade repositories are required to report the transactions they receive under EMIR on behalf of market participants under MiFID. If data requirements are not the same under MiFID and EMIR, firms would have to send additional data fields to enable trade repositories to report on their behalf

Policy options 5.2 and 5.3 are mutually exclusive, while option 5.4 is complementary. Policy options 5.5 and 5.6 are mutually exclusive.

6 Improve transparency and oversight of commodities markets

6.1 No action	Take no action at the EU level
	Evolution of commodity derivatives markets
6.2 Set up a system of position reporting by categories of traders for organised trading venues trading commodities derivatives contracts	Under this option organised trading venues which admit commodity derivatives to trading would have to make available to regulators (in detail) and the public (in aggregate) harmonised position information by type of regulated entity. A trader's position is the open interest (the total of all futures and option contracts) that he holds. The trader would have to report to the trading venue whether he trades on own account or on whose behalf he is trading including the regulatory classification of their end-customers in EU financial markets legislation (e.g. investment firms, credit institutions, alternative investment fund managers, UCITS, pension funds, insurance companies). If the end beneficiary of the position is not a financial entity, this position would by deduction be classified as non-financial. The focus of this obligation will be commodity derivatives contracts traded on organised trading venues (contracts traded either on regulated markets, MTFs or organised trading facilities) which serve a benchmark price setting function. The objective of this position reporting would be to improve the transparency of the price formation mechanism and improve understanding by regulators of the role played by financial firms in these markets.
6.3 Control excessive volatility by banning non hedging transactions in commodity derivatives markets	Under this option, any entity willing to take positions in the commodity derivatives markets for other purposes than hedging an underlying physical commercial risk would be banned to do so. As a result this would prohibit financial entities to invest in these markets and offer investment products like commodity exchange traded funds to their clients
	Exemptions for commodity firms
6.4 Review exemptions for commodity firms to exclude dealing on own a/c with clients and delete the exemption for specialist commodity derivatives	Specialist commodity firms whose main business is to trade on own account in commodities and/or commodity derivatives would not be exempt any more. Commercial entities would not be allowed any more to trade on own account with clients and the possibility to provide investment services to the clients of their main business on an ancillary basis would be applied in a very precise and narrow way. This option would not by itself affect capital requirements imposed on firms.
6.5 Delete all exemptions for commodity	The current exemptions for commodity firms would be deleted. This would considerably reduce

firms	the scope of the exemptions for these firms as they would only be able to rely on the general exemption for trading on own account. There would no longer be a separate exemption for specific instruments.
	Secondary spot trading of emission allowances
6.6 Extend the application of MiFID to secondary spot trading of emission allowances	This option would involve coverage under the MiFID of emission allowances and other compliance units under the EU Emissions Trading Scheme. As a result, MiFID requirements would apply to all trading venues and intermediaries operating in the secondary spot market for emission allowances. Venues would need to become regulated markets, MTFs, or OTFs. Financial market rules would apply to both spot and derivative markets for emissions trading, establishing a coherent regime with overarching rules. This would replace the need to devise a tailor made regime for secondary spot emission allowances markets.
6.7 Develop a tailor-made regime for secondary spot trading of emission allowances	Under this option, a dedicated, stand-alone framework would be developed to cater for the needs of the secondary spot trading in emission allowances. Any such framework would complement the existing rules applicable to trading in derivatives on emission allowances and those envisaged for the auctioning of emission allowances in the ETS third trading period starting in 2013. This means that whatever solution would emerge, it would need to be consistent with the regulatory approach of the MiFID which applies directly to trading in derivatives on emission allowances and is extended to the activity of auction platforms, investment firms and credit institutions in the primary (auction) market via the Auctioning Regulation[92].

Policy options 6.2 and 6.3 can complement each other, whereas options 6.4 and 6.5, as well as options 6.6 and 6.7 are mutually exclusive.

7 Broaden the scope of regulation on products, services and service providers when needed

7.1 No action	Take no action at the EU level
	Optional exemptions for certain investment service providers
7.2 Allow Member States to continue exempting certain investment service providers from MiFID but introduce requirements to tighten national requirements applicable to them (particularly conduct of business and conflict of interest rules)	This option leaves Member States the possibility to exempt certain entities providing advice from the Directive but requires that national legislation includes requirements similar to MiFID in a number of areas (notably proper authorization process including fit and proper criteria and conduct of business rules). Member States would maintain discretion in adapting organizational requirements to the exempted entities based on national specificities
7.3 Delete the possibility for Member States to exempt certain service providers from MIFID (Article 3)	This option is an extension of the previous one. By deleting the optional exemptions, all these firms, often small service providers or even individuals, would be subject to all MiFID obligations (including, for instance, organizational requirements).
	Conduct of business rules for unregulated investment products
7.4 Extend the scope of MiFID conduct of business and conflict of interest rules to structured deposits and deposit based products with similar economic effect	This option would aim at extending MiFID conflicts of interest and conduct of business rules (particularly information to and from clients, assessment of suitability and appropriateness, inducements) to structured deposits, products which currently are not regulated at EU level
7.5 Apply MIFID conduct of business rules and conflict of interest rules to insurance products	This option would be to broaden the scope of MiFID in order to apply directly MiFID conduct of business and conflict of interest rules to investment products marketed by insurance companies (instead of modifying the sectoral legislation, the Insurance Mediation Directive, in line with MiFID principles)

Policy options 7.2 and 7.3 are mutually exclusive, as well as options 7.4 and 7.5.

8 Strengthen rules of business conduct for investment firms

8.1 No action	Take no action at the EU level
	Execution only services and investment advice

8.2 Reinforce investor protection by narrowing the list of non-complex products for which execution only services are possible and strengthening provisions on investment advice	This policy option combines two measures which will have complementary effects. The first measure consists in the limitation of the definition of non-complex products which allows investment firms to provide execution only services i.e. without undergoing any assessment of the appropriateness of a given product. The second measure consists in reinforcing the conduct of business rules for investment firms when providing investment advice, mainly by specifying the conditions for the provision of independent advice (for instance, obligation to offer products from a broad range of product providers). Further requirements concerning the provision of investment advice (reporting requirements and annual assessment of recommendations provided) would be mainly introduced via implementing measures to complement these changes in the framework directive.
8.3 Abolition of the execution only regime	This option consists in abolishing the execution only regime. As a consequence, except in the case of investment advice, investment firms would be always required to ask client information about their knowledge and experience in order to assess the appropriateness of any investment. Clients would retain the possibility to refuse to give information or to proceed with any transaction indicated as inappropriate by the firm.
	Customers' classification
8.4 Apply general principles to act honestly, fairly and professionally to eligible counterparties resulting in their application to all categories of clients and exclude municipalities and local public authorities from list of eligible counterparties and professional clients per se	This options aims at reinforcing the MiFID regime for non-retail clients by narrowing the list of type of entities that are de facto eligible counterparties or professional clients. Further requirements would be modified in the implementing measures (deletion of the presumption that professional clients have the necessary level of experience and knowledge).
8.5 Reshape customers' classification by introducing new sub categories	This option is the extension of the previous one. It would consist in reviewing the overall customers' classification of MiFID by sub dividing them into more refined categories in order to match more closely the diversity of existing market participants.
	Complex products and inducements
8.6 Reinforce information obligations when providing investment services in complex products and strengthen periodic reporting obligations for different categories of products, including when eligible counterparties are involved	This option aims at increasing the information and reporting requirements to clients of investment firms, including eligible counterparties. In the case of more complex products, investment firms should provide clients with a risk/gain and valuation profile of the instrument prior to the transaction, quarterly valuation during the life of the product as well as quarterly reporting on the evolution of the underlying assets during the lifetime of the product. Firms holding client financial instruments should report to clients about material modifications in the situation of financial instruments concerned. Most of these detailed obligations would be introduced in implementing measures and should be calibrated according to the level of risk of the relevant product.
8.7 Ban inducements in the case of investment advice provided on an independent basis and in the case of portfolio management	The objective of this option is to strengthen the existing MiFID inducement rules by banning third party inducements in case of portfolio management and independent advice. These measures that would affect the Level 1 Directive would be complemented by changes in the Level 2 implementing acts where inducements are currently regulated; this will include the improvement of the quality of information given to clients about inducements.
8.8 Ban inducements for all investment services	This option would take the previous option one step further by introducing a formal ban on all inducements for investment firms when they provide any investment services.
	Best execution
8.9 Require trading venues to publish information on execution quality and improve information provided by firms on best execution	This option consists in improving the framework for best execution by inserting in the MiFID an obligation for trading venues to provide data on execution quality. Data would be used by firms when selecting venues for the purpose of best execution. The implementing directive would clarify technical details of data to be published and would reinforce the requirements relating to information provided by investment firms on execution venues selected by them and best execution.
8.10 Review the best execution framework by considering price as the only factor to comply with best execution obligations	This option aims at narrowing the current factors to consider for the purpose of best execution. In particular, price would be the only factor to assess best execution; it would replace the current multifactor approach (price and costs for retail clients; further factors such as speed and likelihood of execution for professional clients).

Policy options 8.2 and 8.3, as well as 8.4 and 8.5 are mutually exclusive. Options 8.7 and 8.8 are mutually exclusive, with option 8.6 being complementary to either 8.7 or 8.8. Options 8.9 and 8.10 are also mutually exclusive.

5.9 Strengthen organisational requirements for investment firms

9.1 No action	Take no action at the EU level
	Corporate governance
9.2 Reinforce the corporate governance framework by strengthening the role of directors especially in the functioning of internal control functions and when defining strategies of firms and launching new products and services. Require firms to establish clear procedures to handle clients' complaints in the context of the compliance function.	This option strengthens and specifies the overall framework for corporate governance in the design of firms' policies, including the decision on products and services to be offered to clients (clear involvement of executive and non-executive directors), in the framework for internal control functions (reinforced independence, further definition of role of the compliance function including handling with clients' complaints) and in the supervision by competent authorities (involvement in the assessment of the adequacy of members of the board of directors at any time and in the removal of persons responsible for internal control functions). In addition it will explicitly require that within the compliance function clear procedures have been developed to deal with clients' complaints.
9.3 Introducing a new separate internal function for the handling of clients' complaints	This option aims at creating a detailed framework, including a separate organisational function, for the handling of complaints. The detailed framework could include specific procedures from the reception of complaints to the final answer provided to the client.
	Organisational requirements for portfolio management and underwriting
9.4 Require specific organisational requirements and procedures for the provision of portfolio management services and underwriting services	This option introduces a more detailed, while still general framework for the provision of the services of portfolio management (formalization of investment strategies in managing clients' portfolios) and underwriting (information requirements concerning allotment of financial instruments, management of conflicts of interest situations).
	Telephone and electronic recording
9.5 Introduce a fully harmonised regime for telephone and electronic recording of client orders	This option implies the deletion of the current option for Member States to introduce requirements to record telephone conversations or electronic communications involving client orders and the introduction of a fully harmonized regime.
9.6 Introduce a common regime for telephone and electronic recording but still leave a margin of discretion for Member States in requiring a longer retention period of the records and applying recording obligations to services not covered at EU level.	This option aims at introducing a common regime for telephone and electronic recording in terms of services covered (for instance, execution and reception and transmission of orders, dealing on own account) and retention period (three years) while still leaving a margin of discretion to Member States in applying the same obligation for other services (for instance portfolio management) and in requiring a longer retention period (up to the ordinary 5 years period required for other records). This common regime would focus on the services which are the most sensitive from a supervisory point of view in terms of market abuse or investor protection and would be fully complaint in terms of retention period with the Charter of EU Fundamental Rights.

Policy options 9.2 and 9.3 can complement each other, while options 9.5 and 9.6 are mutually exclusive.

6. ANALYSIS OF IMPACTS AND CHOICE OF PREFERRED OPTIONS AND INSTRUMENTS

This section sets out in the form of summary tables the advantages and disadvantages of the different policy options, measured against the criteria of their effectiveness in achieving the related objectives (to be specified for each basket of options), and their efficiency in terms of achieving these options for a given level of resources or at least cost. Impacts on relevant stakeholders are also considered.

The options are measured against the above-mentioned pre-defined criteria in the tables below. Each scenario is rated between "---" (very negative), 0 (neutral) and "+++" (very positive). Unlike compliance costs, the benefits are nearly impossible to quantify in monetary terms. This is why we have assessed the options based on the respective ratio costs-benefits in relative terms. The assessment highlights the policy option which is best placed to reach the related objectives outlined in section 5 and therefore the preferred one. Should the preferred options significantly differ from those suggested by CESR (now ESMA), this will be clearly specified. Lastly whenever our policy options draws on the work carried out at the level of the International Organization of Securities Committee (IOSCO), we have clearly indicated it.

You will find in Annex 3 a table highlighting the key initiatives under this review with their respective level of priority, their link with international or other EU initiatives, the impact on the market structure and/ business models (i.e. level of transformational impact), the level of execution risks, and the level of costs. A more detailed analysis of the impacts follows in that same Annex 3.

6.1. Regulate appropriately all market structures and trading practices taking into account the needs of smaller participants, especially SMEs

Comparison of options (the preferred options are highlighted in bold and underlined in grey):

Policy option	Impact on stakeholders	Effectiveness	Efficiency
1 Regulate appropriately all market structures and trading places taking into account the needs of smaller participants, especially SMEs			
1.1 No action	0	0	0
Trading platforms			
1.2 Further align and reinforce the organisational and surveillance requirements of regulated markets and MTFs and introduce a new category of Organised Trading Facilities (OTF) to capture current and possible new trading practices, including BCS ***OR***	(++) creation of a level playing field between market participants (++) improved prevention of market abuse (-) implementation costs for operators of MTFs (--) compliance costs for operators of systems that will have to register as OTFs	(+++) increased market transparency (++) strengthening market integrity (++) strong convergence with the US regulation	(++)compliance costs compensated by sustainable benefits through sounder and more transparent trading facilities benefiting to all participants
1.3 Expand the definition of MTF so it would capture trading on all broker crossing systems (BCNs)	(+) improvement of the level playing field between market participants (-) higher cost of execution of large orders for institutional investors (--) compliance costs for existing operators of BCS	(++) stricter framework for BCS (-) inflexibility of the framework that will not be future proof	(+) compliance costs compensated by benefits
Trading of derivative instruments			
1.4 Mandate trading of standardised OTC derivatives (i.e. all clearing eligible and sufficiently liquid derivatives) on RM, MTFs or OTFs ***OR***	(++) increased transparency for end users of derivatives (++) increased transparency for market regulators (++) increased market surveillance (--) change in the business model of dealers with likely substantial drop of profitability of dealing activities (-) compliance costs for investment firms	(++) increased transparency on the derivatives market for both market participants, especially smaller ones and regulators (+) increased competition between trading venues that could improve quality and reliability of prices (-) lack of customisation of derivatives traded electronically (--) potential drop in derivatives market liquidity as dealers shrink their activities,	(++)compliance costs largely compensated by benefits for market participants and regulators in terms of more transparent and efficient trading

		if no proper calibration	
1.5 Set targets for trading in standardised derivatives to move to organised venues	(+) increased transparency for end users of derivatives (+) increased transparency for market regulators (+) increased market surveillance (-) compliancecosts for investment firms	(+) increased transparency on the derivatives market for both market participants and regulators	(+) benefits for market participants compensating compliance costs
SME markets			
1.6 Introduce a tailored regime for SME markets under the existing regulatory framework of MTF ***OR***	(++) keeping the high level of investor protection as provided for in the regulated market (+) harmonized requirements will reduce issuer-administrative burden (+) quality label will attract more investments and provide for more liquidity (+) as the EU tailored regime is a non-mandatory one full flexibility is left to market operators to use different market models	(++) easier access to financial markets for SMEs (+) more consistent and transparent framework for SME financing (+) possibility to build up pan-European market networks giving access to a broader capital pool	(+) limited complaince costs more than compensated by benefits for SME in terms of easier access to financing sources
1.7 Promote an industry-led initiative to enhance the visibility of SMEs markets.	(+) enhanced source of financing for SMEs (-) enlarged investment solutions for investors	(+) increased source of capital for SMEs (-) success depends on the willingness of industry (market operators)	(=) compliance costs in line with limited benefits for SMEs

The creation of OTF has three different objectives:

- The first one is to deal with the issue of the broker crossing systems present in the equities markets by setting up an appropriate framework for these activities. The OTF regime will bring increased transparency and control as well as limit the activities of these systems to the pure matching of orders.

  Regarding this first objective, the alternative option to deal with Broker Crossing Systems (BCS) could have been to use the existing MiFID market infrastructure of MTFs and change their definition so they could encompass BCS. In order to do so, the MTFs regime would have required to be amended to allow for discretionary execution and discriminatory access which are the two key specificities of BCS compared to MTFs. This would fail to recognise the functional differences between a broker crossing its client orders (a traditional and legitimate activity carried on by brokers) and the operation of an exchange. Further it is doubtful that such an option would capture all existing trading models and any of those possibly to be invented in the future which would undermine our objective of having an all-encompassing and future proof regulatory framework in order to ensure a level playing field. It would have also generated large transformation costs for the operators of BCS. These transformations and risks appear disproportionate in regard to the size of the trading mode that it aims to address, only 1.5 % of total equity trading[93] is on broker crossing systems.

- The second objective of OTFs is to set up an appropriate framework for different types of trading systems besides BCS and irrespective of the traded financial instruments. Mostly used in the trading of derivatives, these systems are currently not authorised as trading venues in MiFID but the firms operating them are authorised as an investment firm under MiFID and not as trading venue.Under the OTF category very different set-ups such as multi dealer platforms (when they are not registered as MTFs), interdealer broker platforms, and hybrid voice/electronic trading systems will be captured. The establishment of this framework will be combined with the obligation to trade on these OTFs all standardised derivatives which are not traded on regulated markets or MTFs. This will contribute to reduce the share of derivatives which are currently dealt OTC (89 %)[94].

  For the second objective, the alternative solution could have been to use the MTF category but the MTF regime does not offer enough leeway to adapt the discretionary nature of execution and possibly the transparency rules to the specificities of derivatives and especially their intrinsic lower liquidity. Contrary to equities which are actively traded on a secondary market, derivatives are very often not traded on a secondary market. A trade on a derivative is often a primary trade, meaning that a derivative contract is created for each new trade. This is why most derivative markets operate under a request for quote model rather than under an exchange order book model. The consequence is that the trading of derivatives is far less active than for equities and therefore the liquidity of these markets much lower. This liquidity is important as it conditions the ability of market participants, including non financial parties, to hedge their risks. This liquidity depends on market makers and broker dealers who are creating these derivatives and take capital risk to do so. The transparency and execution rules have to combine the needs to preserve liquidity and therefore ability for dealers to perform their function with the needs for the derivative markets to trade in an orderly fashion with a sufficient level of transparency which avoid dealers abusing their function. While allowing appropriate calibration depending on the specificities of the instrument (see 6.3 trade transparency for non-equities markets), the OTF regime should apply the same transparency regime as other trading venues, the only different feature of OTFs being the discriminatory access and the discretionary execution.

- The third objective of the OTF regime is to have a framework which is dynamic enough to accommodate the future trading systems and solutions that could emerge in the future. Financial innovation is such that such emergence can be very fast. For example, while crossing of client orders is a traditional broker activity, increased automation of such activities was not foreseen when MiFID was adopted.

Overall, the creation of the OTF category will ensure a level playing-field without imposing a one-size-fits-all regulation. The proposed approach is to allow for different business models but require all venues to play by the same rules. Hence all trading venues would be subject to the same transparency and core organisational rules. Regarding transparency, the requirements would be calibrated by asset class and if necessary by type of financial instrument within that asset class via delegated acts (see 6.3 trade transparency for non-equities). However these transparency requirements would be the same irrespective of the trading venue. Regarding the organisational requirements, existing core organisational rules for trading venues covered by MiFID should be extended to all types of trading venues offering competing services, including OTFs. Most of the calibration relating to these requirements is set in the framework directive and should therefore not require major additional fine-tuning in implementing acts.

In addition, the creation of OTF and the obligation to trade on them standardised products should substantially decrease the weight of OTC trading in both equities and non-equities

markets. The risk of regulatory arbitrage between MTF and OTF should be low as on the one end, MTFs are in most cases successful business models that their operators are unlikely to put into danger by switching to OTF, and on the other end, OTFs and MTFs will have very similar organisation and trading rules. Further exchanges or MTFs would be unlikely to wish to become OTFs as they would then become subject to onerous client facing obligations (that a traditional broker has).

There are both overlaps and differences between our approach and CESR recommendations in that field. CESR recommended to create a new regulatory regime for BCS and also acknowledged that the set up of a new category of organised trading venue might be necessary to enact the G20 commitment of trading of standardised derivatives on organised trading venues when appropriate. We have built further upon these recommendations by creating one additional category encompassing all types of unregulated trading venues.

Regarding the alignment and reinforcement of the organisational and surveillance requirements of regulated markets and MTFs, we estimate the one off aggregated costs to be between €1 and €10 million. We expect the compliance with the requirements of the new OTF definition would lead to one-off aggregate costs of €4.2–€11.3 million and ongoing costs of €0.6-€3.2 million for the nine crossing system networks currently operating in Europe and the estimated 10 to 12 electronic platforms that would have to register as an OTF.

This option of mandating the trading of clearing eligible and sufficiently liquid instruments on OTFs would entail incremental costs to market participants and give rise to estimated aggregated one-off costs of €4.7 to €9.3 million and ongoing costs €8.7 and €17.3 million. Mandating trading on transparent platforms should increase competition between dealers leading to reduced spreads. Spreads decrease represents a benefit to the market as a whole, but an opportunity cost to dealers. The revenue from OTC derivative trading for the largest global dealers is estimated to be around $55 billion, of which $33 billion are within the EU. Depending on the proportion of OTC derivatives that would be suitable for on on-exchange trading, a reduction of a few percentages in the dealers margins could bring benefits for the entire market beyond €100 million (see Annex 8.1). It should be noted that this loss of profitability for dealers could to a certain extent be compensated by increased trading volumes and operational efficiencies.

There is broad support from Member States (including the UK to a certain extent which would be the most impacted Member State because of its leading position in OTC derivatives trading) and operators of exchanges for this approach, but limited support from market participants due to concerns over liquidity, possible costs, and the ability to continue trading customised contracts.

It should be noted that this option build upon the CESR advice which has then been superseded by IOSCO recommendations[95] on how to enact the G20 commitment of moving trading in standardised derivatives onto exchanges and electronic trading platforms where appropriate.

Regarding the important issue of SME markets, rather than an industry led initiative that could have limited impact (option 1.7), the introduction of a tailored regime (option 1.6) would enlarge the sources of financing for this type of companies with relatively limited set-up costs. Apart from Members States (i.e. Germany, France, and the UK are the Member States hosting the main SME-focused stock exchanges) who are broadly supportive of this option, most other categories of stakeholders are much more reserved or negative about it. They have concerns about the efficiency of such system and even the potential detrimental

impact it could have on the existing SME markets. However the negative feedback from stakeholders may be due to the fact that the consultation on that specific point may have been insufficiently clear. More fundamentally, this tailor made regime will aim at creating a specific quality label for SME markets which will be optional. The objective is neither to lower existing transparency standards neither to restrict the existing range of SME markets. Hence we believe this tailor made regime will yield real benefits for SMEs while at the same time be flexible enough to accommodate the existing SME markets. Finally, this policy option is not in itself a panacea and is part of several complementary initiatives that aims at improving the business conditions of SMEs in Europe.

In conclusion all the above preferred options would give rise to one-off aggregated costs of €10 to €31 million and yearly ongoing costs of €9 to €21 million. These costs are proportionate as the above policy options would bring significant benefits in terms of increasing competition by helping create a level playing field and improved transparency for market participants, while not being disruptive of the existing business models and preserving the liquidity of the markets.

6.2. Regulate appropriately new trading technologies and address any related risks of disorderly trading

Comparison of options (the preferred options are highlighted in bold and underlined in grey):

2 Regulate appropriately new trading technologies and address any related risks of disorderly trading			
Policy option	**Impact on stakeholders**	**Effectiveness**	**Efficiency**
2.1 No action	0	0	0
Organisational requirements			
2.2 Narrow the exemptions granted to dealers on own account to ensure that all High Frequency Traders (HFT) that are direct member or a direct participant of a RM or MTF are authorised	(++) better monitoring by supervisors of HFT activity (--) marginal compliance costs for HFT which are not yet authorised	(+) improve the level playing field between non regulated and regulated entities (++) improvement in the quality of supervision (++) application of relevant organisational requirements for an authorised firm	(++) marginal compliance costs for entities affected by the new authorisation regime compensated for by benefits for all market participants in terms of level playing field and increased oversight by regulators
2.3 Reinforce organisational requirements for firms involved in automated trading and/or high frequency trading and firms providing sponsored or direct market access	(++) better risk control at investment firm level (-) marginal compliance costs for investment firms	(++) decrease in risks of market disorder and disruption (++) alignment with measures introduced in the US	(++) marginal compliance costs for entities affected by the new requirements more than compensated by benefits for all market participants in terms of safer trading and operational environment
2.4 Reinforce organisational requirements (e.g. circuit breakers, stress testing of their trading systems) for market operators	(++) better risk control at market operator level (-) marginal compliance costs for market operators	(++) decrease in risks of market disorder and disruption (++) alignment with the measured being considered in the US	(++) marginal costs for entitiesaffected by the new requirements more than compensated by benefits for all market participants in terms of safer trading and operational environment
Activity of HFT			
2.5 Submit HFT to requirements to provide liquidity on an ongoing basis	(+) benefits of more liquid and less disorderly markets to all investors (-) opportunity costs for HFT	(+) increased level playing field (-) possible backlash effects of the measure if HFT withdraw from the market	(+) indirect costs (lower market efficiency) lower than benefits (stability)

2.6 Impose minimum latency period of orders in the order book	(+) decrease in the tension of IT systems of market operators (-) opportunity costs for HFT that will need to have their orders resting longer in the market	(+) reduced risks of disorderly markets (+) increased market integrity (-) difficulty in defining the relevant minimum period (--) damage to market efficiency and liquidity	(-) indirect costs (lower market efficiency)higher than benefits
2.7 Impose an order to executed transaction ratio	(+) decrease in the tension of IT systems of market operators (-) opportunity costs for HFT that will need to have their orders resting longer in the market	(+) decrease risks of disorderly markets (+) increased market integrity (-) damage to market efficiency and liquidity	(+) costs in terms of trading constraints more than compensated by benefits for all market participants in terms of fewer chances of crashes of trading systems.

In order to regulate appropriately the new trading technologies and contain any system risks or risks of disorderly trading, it is first important to regulate all the parties involved in these activities i.e. high frequency traders (HFT) themselves, firms conducting automated trading, including firms providing sponsored or direct market access, as well as market operators themselves. Options 2.2, 2.3 and 2.4 all aim at providing better monitoring and better risk control of these activities. The overall cost impact of these preferred policy options will be marginal given that we will essentially enshrine existing practice into legislation. However codifying existing practice is key to ensure a level playing field and making these players accountable for the risks the technologies they use might pose to the financial markets. Most respondents to the consultation also broadly support these options.

Regarding firms providing sponsored or direct market access, IOSCO has issued principles[96] to give guidance on the controls to put in place to frame these new practices. Our preferred policy option takes into account these recently developed principles, as well as CESR advice.

The second group of options consider several ways to impact on the activity of HFT in itself (options 2.5 to 2.7). These options have several drawbacks from damaging liquidity, being difficult to implement or easy to circumvent and potentially distorting the market or indiscriminately affecting other forms of trading. Liquidity provision obligations would probably help prevent market stress and execution at extreme prices even though affected participants could be reluctant to buy under extreme stress circumstances and even prefer to be fined for non-compliance. A minimum latency period would be a new measure which has not yet been tested and would impede market participants to react to exogenous events exposing them to additional risks and creating distortions with the ones not subject to these obligations.[97] Another appropriate option would be to impose an order to executed transaction ratio (option 2.7) that would alleviate the stress on IT systems of market operators and would still have limited impact on market liquidity and efficiency. Respondents' views are mixed with many preferring to leave any such controls up to the venues themselves. Although there is a lack of clear evidence of the impact of this form of trading on the liquidity and efficiency of the markets, there is no doubt that the increased share of HFT has dramatically contributed to increase the number of orders entering trading systems putting heavy load on them, and has aggravated the threat on orderly trading. An order to transaction ratio is already in place on some trading venues (see Annex 5.2.4). Lastly there is a need to harmonise these measures across trading venues as otherwise there would be a significant risk of regulatory arbitrage among trading venues that could compete on the level of such a ratio in order to attract order flows from HFT traders.HFT trading is a key source of trading revenues for market operators (i.e. HFT traders are mainly active on organised trading venues offering high level of liquidity), and they are unlikely to take any measure which might lead to a migration of their HFT clients to other platforms.

Regarding the organisational requirements for players involved in automated trading as per above, CESR/ESMA recommendations are fully in line with our proposals. ESMA is currently working on future potential additional measures in the area of automated trading (see their recently published consultation paper[98]).

In conclusion the preferred options highlighted above would contribute to reduce the risks posed by these new technologies and more resilient financial markets at very marginal costs.

6.3. Increase trade transparency for market participants

Comparison of options (the preferred options are highlighted in bold and underlined in grey):

3 Increase trade transparency for market participants			
Policy option	**Impact on stakeholders**	**Effectiveness**	**Efficiency**
3.1 No action	0	0	0
Trade transparency for equities markets			
3.2 Adjust the pre and post trade transparency regime for equities by ensuring consistent application and monitoring of the utilisation of the pre-trade transparency waivers, by reducing delays for post trade publication and by extending the transparency regime applicable to shares admitted to trading on RMs to shares only traded on MTFs or OTFs	(++) improvement in price discovery and market efficiency (-) less commitment of capital by dealers but this should be limited if proper calibration (-) opportunity costs for dealers	(++) improvement in transparency (+) reduction in scope for regulatory arbitrage (-) reduction in market liquidity if less capital committed by dealers	(++)compliance costs and possible side effects in terms of additional costs for trading firms and lower liquidity largely compensated by benefits in terms of more transparent and harmonised trading regime in Europe
3.3 Abolish pre trade waivers and deferred post trade publication regime for large transactions	(--) strong negative impact for larger equity investors and dealers	(++) maximum transparency (+) large increase in level playing field (--) substantial damage to market liquidity as larger investors and market makers could become far less active	(--) collective damage in excess of collective benefits
Trade transparency for non-equities markets			
3.4 Introduce a calibrated pre and post trade transparency regime for certain types of bonds and derivatives	(++) increased transparency for most investors especially smaller ones (-) negative impact on revenues of dealers which could decide to commit less capital to their market making activities	(++) increased transparency on derivatives and bonds markets (-) potential negative impact on market participants if liquidity of the markets drop but should be contained by proper calibration	(++) compliance costs and possible indirect side effects on market liquidity more than compensated by benefits for all market participants in terms of increased transparency
3.5 Introduce a calibrated post trade only transparency regime for certain types of bonds and derivatives	(+) increased post-trade transparency for most investors especially smaller ones (-) negative impact on revenues of dealers which could decide to commit less capital to their market making activities	(+) increased post-trade transparency on derivatives and bonds markets (-) detrimental impact on market participants if liquidity of the markets drop but contained by proper calibration	(+) costs slightly compensated by benefits
Costs and consolidation of trade data			
3.6 Reduce data costs notably by requiring unbundling of pre and post trade data and providing guidance on reasonable costs of data, and improve the quality of and consistency of post	(++) lowering of data costs for investors (++) improvements of data quality through the APAs	(++) better informed investors and issuers (++) more transparent markets (++) more efficient	(++) costs of opportunity for regulated markets and compliance costs of the set up of APAs more than compensated by benefits for

trade data by the set up of a system of Approved Publication Arrangements (APAs)	(-) opportunity cost for market operators who would generate less revenues from the sale of market data (-) opportunity costs for market data providers	markets	all market participants in terms of higher quality and more affordable market data
3.7 Reduce data costs by establishing a system for regulating the prices of data	(++) lowering of data costs for investors (-) opportunity cost for market operators who would generate less revenues from the sale of market data (-) opportunity costs for market data providers	(++) better informed investors and issuers (++) more transparent markets (++) more efficient markets (--) difficulty in setting price levels (-) interference with free competition	(+) collective damage exceeded by collective benefits
3.8 Improve the consolidation of post trade data for the equities markets by the set-up of a consolidated tape system operated by one or several commercial providers. Introduce a consolidated tape for non-equities markets after a period of 2 years under the same set-up as for equities markets.	(++) reduce information cost for market participants (++) better market transparency for participants (++) closer tracking of best execution by market participants	(+) closer alignment with the US set up for equities markets (-) possible uneven market information because of competition between providers (-) possible conflict of interests if some APA are given preferential treatment	(++) compliance costs more than compensated by benefits for all market participants in terms of increased transparency
3.9 Improve the consolidation of post trade data for the equities markets by the set-up of a consolidated tape system organised a public utility industry body. Introduce a consolidated tape for non-equities markets after a period of 2 years under the same set-up as for equities markets.	(++) reduce information cost for market participants (++) better market transparency for participants (++) closer tracking of best execution by market participants	(+) strong alignment with the US set up for equities markets (--) creation of a situation of monopoly (-) risks of less innovative service	(-) collective costs not compensated by benefits

The options to increase trade transparency for market participants can be grouped in three large categories.

The first group deals with equity markets (options 3.2 and 3.3). Rather than deleting the existing pre transparency waivers and the deferred post trade publication regime (option 3.3) which would have substantial negative impact on the liquidity of the markets and put European markets at a competitive disadvantage to venues outside the EU, the preferred option consists of adjusting these waivers and the post-trade deferral regime as well as extending them to shares only traded on MTFs or OTFs. This would increase transparency while preserving liquidity. A large majority of respondents support the options for clarifying the regime of waivers, but views are more mixed on reducing available delays in post-trade reporting.

Neither the uniform application of the waivers nor the shortening of publication delays are expected to create significant incremental costs. The costs of extending the equities-transparency regime to shares traded only on MTFs or organised trading facilities would lead to an estimated one-off cost of around €2 million and about ongoing costs of €0.4 million for all the trading platforms concerned. An order of magnitude of the benefits could be derived from the experience of the SME market AIM, which is regulated as a MTF and has applied the same transparency regime as its parent entity – the London Stock Exchange - since the introduction of MiFID. According to Europe Economics econometric model, spreads were on average 16% lower relative to the average bid-ask spread in the pre-MiFID period (See Annex 8.2).

The second group of options deals with markets other than equity markets i.e. bonds and derivatives markets (options 3.4 and 3.5). In order to increase the transparency on these markets to market participants, the favourite option (option 3.5) is to conceive a tailor made regime of pre- and post-trade transparency obligations that will be calibrated to each type of financial instrument included. This regime is tailor made in the sense that this regime will not simply be a copy paste of the MiFID equity transparency regime, but a regime which will be devised taking into account the specificities of each asset class (i.e. characteristics, liquidity and trading mode of non equities markets are completely different from equities markets). Thanks to this calibration, it will preserve the liquidity of these markets much better, while ensuring a higher level of transparency than if only a post trade transparency regime were implemented (option 3.5). While many respondents broadly agree with the notion of a calibrated regime, many signal that poorly designed disclosure rules especially pre-trade will harm liquidity. Member Sates broadly agree with post-trade transparency requirements, while being much more cautious in terms of pre-trade transparency requirements.

The advice from CESR in the field of transparency for non-equity markets is broadly in line with our preferred policy option. It recommended to develop harmonised tailor made post-trade transparency requirements for non-equity markets across the board, as well as harmonised tailor made pre-trade transparency requirements for non-equity instruments traded on organised trading platforms. However it has not at this stage proposed to cover the OTC space under these mandatory pre-trade transparency requirements, but has left this possibility to the discretion of Member States. Nonetheless we believe that harmonisation is key in that regard as financial markets, especially derivatives markets, are inherently cross-border. In addition transparency should become the general rule and any exemption to it should be provided for when justified by appropriate calibration and/or in the form of pre-trade transparency waivers in the implementing legislation.

Concerning the introduction of a transparency regime for non-equities, the overall one-off costs would range from €5.5 million to €9.2 million with yearly ongoing cots of €8.8 million to €12.7million. These costs are pure compliance costs that are expected to be incurred by trading platforms and market participants active in these markets as they will have to upgrade their systems to receive and disseminate quotes and prices. It is not possible at this stage to assess the impact of such a regime on the liquidity of the markets as this will largely depend on the calibration of the transparency requirements in terms of delays and content by type of instrument to be developed in the implementing legislation. However we have tried to assess what the potential benefits of a post-trade transparency regime for bonds could be by looking at the US experiment of the Trade Reporting and Compliance Engine (TRACE) system (see Annex 8.3). Overall, a narrowing of spreads, more reliable pricing, as well as improved valuation is expected. Indirect costs in terms of market depth undermining the ability of dealers who commit capital to easily unwind large trades could be addressed by a proper calibration of the disclosure regime for orders of large size.

The last group of options (options 3.6 to 3.9) relate to market data in order to improve their quality and reduce their costs. Rather than establishing a system for regulating prices of data (option 3.7) that would be too intrusive, the chosen solution is to combine the provision of costs guidance with a system of APAs that would contribute to the quality and ease of access to the data while also requiring the unbundling of pre- and post-trade data and the obligation to release data free of charge once 15 minutes have expired since the trade was executed. These improvements should facilitate the emergence of a consolidated tape as data quality issues, lack of data standardisation and consistency, and costs were the main impediments to the emergence of a consolidated tape. Besides these improvements, there is a need to ensure that market data can be brought together in a way that allows efficient comparison of prices

and trades across venues. Consolidation of data should meet high quality standards while at the same time be provided at a reasonable costs. The setting up of a consolidated tape, preferably through a system of one or several commercial providers duly approved would meet these objectives and increase the access to market data information for market participants, in an optimised way in terms of cost and efficiency. In addition the commercial solution, as opposed to a regulated public monopoly solution, would be more innovative and prone to cater for clients needs. Respondents, including Member States, largely agree with the approach regarding APAs, unbundling, and free data publication after 15 minutes. Views are more mixed on the need for a consolidated tape, with most support for a commercially lead model operating in accordance with mandatory standards.

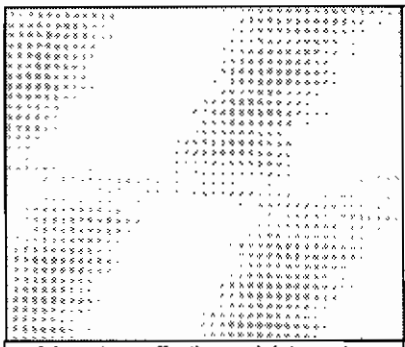
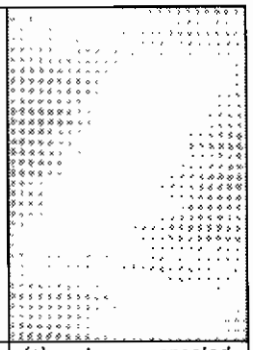
The one-off compliance costs for EU authorised firms and APAs of conforming with and providing a fully standardised reporting format and content for post-trade data are estimated at €30 million, with ongoing costs of €3 million to €4.5 million. Finally, compliance and operational costs for a commercial consolidator are considered to be entirely manageable (they already provide similar solutions for equities markets). In order to have an order of the magnitude of the possible benefits, one could look at the huge discrepancy in costs for market participants to get access to a consolidated set of trade data (€500 in the EU versus $70 in the US per user and per month). Requiring venues and vendors to sell pre-and post-trade data in unbundled form, provided that the format and content of trade reports are fully standardised, may be expected to reduce the cost of a European consolidated post-trade data feed by 80%, i.e. from €500 to €100 a month per user. Another benefit would be that the availability of better quality and consolidated trade data should help investment firms to comply with their best execution obligations, which could for the equity markets only generate benefits of €12 million (see par. 9.4).Taken together, these preferred options would give rise to one-off aggregated costs of €38 to €41 million and yearly ongoing costs of €12 to €18 million. These options would significantly improve transparency towards markets participants, especially in the case of non-equities markets where there were no uniform trade transparency requirements before. Increasing transparency in a properly calibrated way should contribute to a better price formation mechanism and improve liquidity. These options would complement the options under 6.1 as this transparency regime would apply to all types of trading venues further aligning the requirements they are subject to.

6.4. Reinforce regulators' powers and consistency of supervisory practice at European and international levels

Comparison of options (the preferred options are highlighted in bold and underlined in grey):

4 Reinforce regulators powers and consistency of supervisory practice at European and International level			
Policy option	**Impact on stakeholders**	**Effectiveness**	**Efficiency**
4.1 No action	0	0	0
Powers of regulators			
4.2 Introduce the possibility for national regulators to ban for an indefinite period specific activities, products or services under the coordination of ESMA. Give the possibility to ESMA under specific circumstances to introduce a temporary ban in accordance with Article 9(5) of the ESMA regulation N°1095/2010	(++) safer environment for market participants and investors (-) opportunity costs for developers of product that are banned (-) opportunity costs for traders of and investors in banned products	(++) no possibility for regulatory arbitrage (++) increased orderly markets (++) reduced systemic risks (-) reduction in investment or hedging opportunities (–) restriction to financial innovation	(++) marginal costs in terms of opportunity costs for providers of banned products more than compensated by benefits for all investors in terms of safer environment

4.3 Introduce an authorisation regime for new activities, products or services	(++) safer environment for market participants and investors (--) opportunity costs for developer of the product to be banned (---) huge costs and burden put on competent authorities	(++) increased orderly markets (++) reduced systemic risks (--) alleviation of responsibility (moral hazard) for product developers (--) possible reduction in investment or hedging opportunities (--) restriction to financial innovation	(-) costs not compensated by benefits
4.4 Reinforce the oversight of positions in derivatives out of which commodity derivatives, including by granting powers to regulators and coordinating via ESMA to introduce positions limits	(-) opportunity costs for market participants (-) compliance costs for market participants (+) better insight into market dynamics for regulators	(++) improved understanding of the price formation process (+) greater market integrity (+) greater market stability	(++) marginal costs for persons involved in very speculative activities more than compensated by benefits for all market participants in terms of increased market integrity and more orderly market
4.5 Reinforce the oversight of financial markets which are increasingly global by strengthening the cooperation between EU and third country securities regulators. In addition, reinforce monitoring and investigation of commodity derivatives markets by promoting international cooperation among regulators of financial and physical markets	(+) gives supervisors a consolidated overview of the market (+) allows supervisors to combine their market experience	(++) increases market integrity by reducing risk of cross-market manipulation (+) promotes fair and orderly markets	(+) no additional obligations on market participants (-) supervisors will incur costs for transmitting and processing data
Conditions of access of third country firms			
4.6 Harmonise conditions for the access to the EU of third country investment firms, by introducing a third country regime (a common set of criteria , registration at national level, memoranda of understanding (MoU) between the Member States regulators and the third country regulators under the coordination of ESMA)	(+) widening of choice of providers for investors (-) increased competition for investment firms with no reciprocal access	(+) more harmonised and legally clear basis for granting third country investment firms pan-EU access to EU securities markets (-) different access mechanisms applicable to investors and dual application of rules	(+) costs partially compensated by benefits for all market participants in terms of increased competition and product offering in a level playing field, and enhanced single market
4.7 Introduce an equivalence and reciprocity regime by which after assessment by the Commission of the third country regulatory and supervisory framework access to the EU would be granted to investment firms based in that third country.	(+) widening of choice of providers for investors (+) increased horizons for investment firms with reciprocal access	(+++) minimum duplication of rules for firms (-) risk of non operative scheme if political reticence	(++) costs and time involved more than compensated by benefits for all market participants (-) difficulties in negotiating such an equivalence regime
Sanctions			
4.8 Introduce effective and deterrent sanctions by introducing common minimum rules for administrative measures and sanctions	(++) reinforced and harmonised powers for regulators (+) better protection for persons providing information on infringements (+) more information on infringements for regulators	(++) sounder financial markets thanks to more efficient fight against unauthorised practices detrimental to investors (+) limit regulatory arbitrage (+) step towards further harmonisation of sanction across EU	(++) costs more than compensated by benefits for all market participants in terms of safer environment resulting from improved enforcement
	Impact on fundamental rights: Option interferes with Articles 7 and 8and potentially also with Articles 47 and 48 of the EU Charter. Option provides for limitation of these rights in law while respecting the essence of these rights. Limiting these rights is necessary to meet the general interest objective of ensuring compliance with MiFID rules to ensure fair and orderly trading and investor protection. . In order to		

	be lawful the administrative measures and sanctions which are imposed must be proportionate to the breach of the offence, respect the right not to be tried or punished twice for the same offence, the presumption of innocence, the right of defence, and the right to an effective remedy and fair trial in all circumstances. Whistle blowing schemes interferes with Art 8 of the EU Charter and Art. 16 of the Treaty on the Functioning of the EU and Art. 48 of the EU Charter. Therefore, any implementation of whistle blowing schemes should comply and integrate data protection principles and criteria indicated by EU data protection authorities and ensure safeguards in compliance with the Charter.	
4.9 Introduce effective and deterrent sanctions by harmonising administrative measures and sanctions	(++) reinforced and harmonised powers for regulators (+) better protection for persons providing information on infringements (+) more information on infringements for regulators	(+) sounder financial markets thanks to more efficient fight against unauthorised practices detrimental to investors (+) step towards further harmonisation of sanction across EU	(+) costs compensated by benefits (-) distinct market situations and legal traditions
	Impact on fundamental rights: Option interferes with Articles 7, and 8, and potentially also with Articles 47 and 48 of the EU Charter. Option provides for limitation of these rights in law while respecting the essence of these rights. Limiting these rights is necessary to meet the general interest objective of ensuring compliance with MiFID rules to ensure fair and orderly trading and investor protection. In order to be lawful the administrative measures and sanctions which are imposed must be proportionate to the breach of the offence, respect the presumption of innocence, the right of defence, and the right to an effective remedy and fair trial in all circumstances. Whistle blowing schemes interferes with Art 8 of the EU Charter and Art. 16 of the Treaty on the Functioning of the EU and Art. 48 of the EU Charter. Therefore, any implementation of whistle blowing schemes should comply and integrate data protection principles and criteria indicated by EU data protection authorities and ensure safeguards in compliance with the Charter.		

The policy options selected in order to reinforce the regulators powers and consistency of supervisory practice at European and international levels can be divided into three categories.

The first group (option 4.2 to 4.5) relates to the powers of regulators on products and services, or markets. In order to address situations of risks on investor protection, market stability or systemic risk, the first of the preferred options (option 4.2) is to introduce the possibility for regulators to ban activities, products or practices in specific circumstances.

Currently most national regulators do not have any explicit power, stemming from EU or national legislation, to ban for an indefinite period of time financial products or activities. Where such powers are foreseen at national level, there is no coordination mechanism at EU level which could significantly undermine the single market should one of the Member State decide unilaterally to introduce such a ban (e.g. such an example has already been seen with the German unilateral ban on short selling). Option 4.2 reinforces both national and ESMA powers and ensure a more streamlined regulatory procedure by specifying the conditions under which a ban could be activated.

It should be borne in mind that the power of banning products or activities should be seen as a last resort measure which would be needed in the unlikely although plausible event that prevention measures such as reinforced organisational requirements and conduct of business

rules for investment firms have failed. Bearing in mind the last resort character of such a measure the costs of a full ex ante authorisation regime compared to the benefits would be disproportionate. In addition should an authorisation regime be introduced the scope and pace of financial innovation might be significantly hindered due to a lengthy and costly authorisation process that would put an extraordinary strain of resources of competent authorities. This could lead to "a reduction in investment opportunities". Such negative impacts would be rather limited under the product ban option as only toxic products or activities would a posteriori be prohibited. Lastly the banning option is more efficient and fosters greater responsibility among investment service providers than an authorisation regime for new products and services. If there was an authorisation process for each financial product this could be taken as a seal of approval by the investing public as to the quality of such product. However, the future development of a product and in particular whether it is going to create losses for the investor is impossible to predict. Should the investor occur losses there is the very real and significant concern that he is going to turn to the competent authorities for damages thus alleviating the responsibility of the product developer.

In addition, the reinforcement of oversight of positions (including position limits) (option 4.4) and the strengthening of the cooperation between regulators of physical and financial commodities markets (option 4.5) would contribute to more orderly and stable markets. While Member State authorities broadly support such new powers (i.e. main commodity derivatives markets are located in France, Germany, and the UK), few market participants are in favour. They say they could give rise to legal uncertainties, and argue that limits on positions are arbitrary and misguided. Regarding product bans, the financial crisis has clearly demonstrated the needs to give more powers to regulators to avoid both toxic financial instruments, such as CDOs square that can put investors at risk, or practices such as cornering commodities markets, that threaten market stability. The views on these measures are very divided according the nature of stakeholders with strong support from national regulators and NGOs and, as one would expect, opposition from investments banks. Despite strong support from key stakeholders, the preferred options still insert the new regulatory powers into precise frameworks to avoid abuse or unintended side effects. For instance, the powers to ban products or services will only be possible in case of serious threat to the orderly functioning and integrity of financial markets or significant and sustained investor protection concerns.

The costs of stronger oversight of positions, including the setting up of position limits, for both trading platforms and market participants are estimated to be between €8.2 million and €12.9 million for one-off costs, and on-going costs to be between €9.5 million to €20.2 million a year.

The second group of options deals with the harmonisation of conditions of access of third country investment firms (options 4.6 and 4.7). The preferred route is to establish a third country regime based on an equivalence and reciprocity approach (option 4.7) that would replace the current patchwork of national third party regimes more efficiently albeit less quickly than a regime based on common criteria (option 4.6). Respondents' views are divided with many broadly in favour but cautioning against either overly strict equivalence requirements or granting access to third country operators with no reciprocity. Our preferred option takes due account of these concerns as the idea is to assess the equivalence of the regulatory regime based on clear criteria and insisting on effective reciprocal access.

The last group of options refers to administrative measures and sanctions. A maximum harmonisation of administrative measures (option 4.9) while being highly effective as measures and sanctions for similar offences across the EU would be more comparable and stricter, which should reduce the scope for regulatory arbitrage. However such an option

would not be efficient as market situations, legal systems and traditions differ across Europe. Therefore, to have exactly the same types and levels of sanctions might not be reasonable and proportionate to ensure deterrent sanctions across Europe. As a result the preferred policy option is to insert common minimum rules for administrative measures and sanctions at EU level, accompanied by necessary principles and safeguards to ensure the respect of fundamental rights. Respondents are largely in favour of this approach.

6.5. Reinforce transparency towards regulators

Comparison of options (the preferred options are highlighted in bold and underlined in grey):

5 Reinforce transparency to regulators			
Policy option	**Impact on stakeholders**	**Effectiveness**	**Efficiency**
5.1 No action	0	0	0
Scope of transaction reporting			
5.2 Extend the scope of transaction reporting to regulators to all financial instruments (i.e. all financial instruments admitted to trading and all financial instruments only traded OTC). Exempt those only traded OTC which are neither dependent on nor may influence the value of a financial instrument admitted to trading. This will result in a full alignment with the scope of the revised Market Abuse Directive. Lastly regarding derivatives, harmonise the transaction reporting requirements with the reporting requirements under EMIR.	(++) competent authorities see trading in all products susceptible to be used for abusive purposes (-) additional reporting cost for firms (-) additional market participants will need to start reporting	(++) brings all potentially abusive trading in scope (+) level playing field for commodity and other derivatives (-) non-financial firm trading is not covered	(++) higher compliance costs for firms but limited increase thanks to the harmonisation between EMIR and MiFID
5.3 Extend the scope of transaction reporting to all financial instruments that are admitted to trading and all OTC financial instruments. Extend reporting obligations also to orders	(++)competent authorities see trading in all products (--) additional reporting cost for firms (--) additional market participants will need to start reporting	(+) offers a complete picture of firms' trading and other investment services and activities (+) robust to trading innovation (-) not all OTC instruments are sufficiently standardised (--) covers much trading which is not potentially abusive (-) non-financial firm trading is not covered	(-) higher compliance costs for firms due to too large scope of products covered while no marginal increase of market integrity
5.4 Require market operators to store order data in an harmonised way	(+) more efficient monitoring by competent authorities especially in a highly automated environment (--) additional costs imposed on market operators	(+) better monitoring for market abuse and market manipulation by competent authorities	(=) compliance costs compensated by medium term gains in terms of improved market integrity and more orderly trading
Reporting channels			
5.5 Increase the efficiency of reporting channels by the set up of Approved Reporting Mechanisms ("ARMs") and allow for trade repositories under EMIR to be approved as an ARM under MIFID	(++) Better data quality reported (-) cost of registration may increase the cost of reporting for firms using ARMs	(+) Trade repositories are likely to be able to report significant parts of the derivatives markets	(+) additional costs for reporting firms more than compensated by better information for regulators

5.6 Require trade repositories authorised under EMIR to be approved as an ARM under MiFID	(+) no double reporting (--) additional costs for trade repositories	(+) easier access to consolidated information for regulators (-) restricts reporting's firm choice of reporting mechanism	(+) additional costs for reporting firms more than compensated by better information for regulators

The reinforcement of transparency towards regulators includes two groups of options. The first set of policy options (options 5. 2 to 5.4) look at extending the scope of transactions reporting while the second group aim (options 5.6 and 5.7) at improving the organisation of the reporting.

Regarding the extension of the scope of transaction reporting, the preferred and principal option is to extend the scope to all financial instruments not admitted to trading but whose value depends on a financial instrument that is admitted to trading and financial instruments that can have an effect on a financial instrument admitted to trading (option 5.2). This will notably bring into scope all derivatives that could be used for manipulative purposes, and as result will allow a much better and extensive monitoring of markets by regulators. Aligning the transaction reporting requirements under MiFID with those under EMIR allows for the majority of the associated costs of this extension to be avoided, and for the additional reporting costs and additional number of reporting firms to be reduced. The other extension that is favoured because of better cost/benefits outcome is the requirements for market operators to store data in a harmonised way (option 5.4). As part of the information stored, the unique identification of the trader or algorithm that has initiated the order will facilitate and improve market surveillance in a highly automated environment. Respondents largely support these proposals, but many signal that position reporting in lieu of transaction reporting for commodity derivatives is more appropriate. Reporting on transactions and reporting on positions have different goals and are not mutually exclusive. Reporting on transactions allow regulators to monitor for market abuse while reporting on position also allows for monitoring on market abuse as well detection of systemic risks by monitoring the building up of excessive positions in regards to the financial capacity of the person taking them. We believe there is a need to be as comprehensive as possible in terms of information provided to regulators. In parallel we acknowledge there is a need to streamline reporting requirements in order to avoid double reporting and undue costs on market participants. This is why we propose to leverage the existence of trade repositories for derivatives to the extent possible (see option 5.5 below).

The extension in scope of transaction reporting is estimated to generate incremental one off costs ranging from €65.4 to €84.1million and yearly ongoing costs from €1.6 to €3.0 million. The bulk of these costs relates to the extension to OTC instruments and commodity derivatives. Member States that already collect OTC derivatives transactional data (UK, Ireland, Austria and Spain) would be of course less impacted. Anyway these costs would not materialise if reporting requirements under MiFID and EMIR are harmonised. As storage of orders is already standard practice to a certain extent, the incremental costs are not significant. One of the main benefits of the extension of the transaction reporting regime would be to enable regulators to effectively detect market abuse cases. But just as it is difficult to give a precise estimate of the size of the problem of market abuse, it is hard to quantify the benefits of more effectively tackling this problem.

Concerning reporting channels, option 5.5 aims at increasing the efficiency of reporting channels by the set up of approved reporting mechanisms (ARMs). It should be noted that transaction reporting is already being conducted through ARMs in the UK. In addition this option envisages the possibility (option 5.5) but not the obligation (option 5.6) which would

lead to too much data for regulators, for trade repositories under EMIR to be approved as ARM. Respondents generally support streamlining reporting channels in this way, with many commenting on the importance of synergising data flows under MiFID and EMIR.

Taken together, these preferred options would give rise to one-off aggregated costs of €65 to €84 million and yearly ongoing costs of €3 to €5 million. These incremental costs would be more than compensated by the benefits in terms of market integrity (i.e. regulators would have all the necessary information to detect abusive practices across all types of instruments)

6.6. Improve transparency and oversight of commodities markets

Comparison of options (the preferred options are highlighted in bold and underlined in grey):

6 Improve transparency and oversight of commodities markets			
Policy option	**Impact on stakeholders**	**Effectiveness**	**Efficiency**
6.1 No action	0	0	0
Evolution of commodity derivatives markets			
6.2 Set up a system of position reporting by categories of traders for organised trading venues trading commodities derivatives contracts	(++) increased transparency for all market participants (++) better tracking by regulators of the interaction between physical and financial commodities markets (-) set up costs for trading venues	(++) increased transparency (++) improvement in price formation (+) alignment with the US	(++) marginal additional compliance costs for organised venues more than compensated by improvement in terms of more transparency and orderly trading for all market participants
6.3 Control excessive volatility by banning non hedging transactions in commodity derivatives markets	(-) would limit the possibility to hedge as it becomes more difficult to find a counterparty	(+) may decrease volatility (--) sharp drop in liquidity (---) position taking activities may move to physical markets	(--) larger indirect costs in terms of market efficiency than benefits for the whole community
Exemptions for commodity firms			
6.4 Review exemptions for commodity firms to exclude dealing on own account with clients and delete the exemption for specialist commodity derivatives	(--) additional compliance costs for previously exempted firms	(++) increased level playing field (++) increased investors protection	(++) costs more than compensated by benefits for all market participants in terms of level playing field and better oversight by regulators
6.5 Delete all exemptions for commodity firms	(---) additional compliance costs for previously exempted firms	(++) Increased level playing field (++) increased investors protection (-) disproportionate measure compared to the risk involved	(-)Costs above benefitsfor the whole community
Secondary spot trading of emission allowances			
6.6 Extend the application of MiFID to secondary spot trading for emission allowances	(-) additional costs for intermediaries and trading venues that would require a MiFID licence to conduct such operations	(+) comprehensive regulatory framework for the carbon market (++) full consistency with financial markets rules (++) increased level playing field (++) increased investors protection (-) potential issue for suitability and proportionality for some intermediaries	(+) compliance costs more than compensated by benefits in terms of safer and sounder market environment for the carbon market

6.7 Develop a tailor-made regime for secondary spot trading of emission allowances	(--) all exchanges and intermediaries required to adapt to new organisational and operational duties and obtain authorisation to operate	(+) comprehensive regulatory framework for the carbon market (++) Increased level playing field (++) increased investors protection (+) more flexibility to adapt to the specificities of the carbon market (--) possible discrepancies with the financial markets rules governing the derivatives market or risk to develop a lighter regime	(-) a specific framework and instrument to be developed giving rise to additional compliance costs

The options to improve transparency and oversight of commodity derivatives markets can be grouped in three categories.

The first group of options (options 6.2. and 6.3) aims at addressing the issue of the increasing inflow of financial investments in these markets. Our preferred option is to increase transparency towards both regulators and the public by introducing a position reporting by categories of traders. This should enable regulators to better assess the impact of these financial investments on the price formation mechanism and the related price volatility. Banning non hedging transactions would imply banning financial investments which could dry up liquidity and significantly undermine the ability of commercial users and producers of commodities to hedge their risks, and is therefore not preferred. Overall, respondents are broadly in favour of a position reporting system similar to the one in the US. Many note however that any classification is partly subjective and can be misleading. However market participants have increasingly called for increased transparency which has led to market initiatives[99] in that field inspired by the US commitment of traders report distinguishing between open positions held by financial and non financial entities. Although this distinction is not watertight, this would significantly improve the situation compared to the status quo, especially in an environment of high volatility of prices and the misunderstanding of the role played by speculation in these markets.

The introduction of position reporting by categories of traders would entail costs for both the trading venues and the market participants which overall are estimated at between €0.8 and €1.0 million for one-off costs and between €3.3 and €3.8 million as yearly ongoing costs.

The second group of options relate to the exemptions granted to commodities firms (options 6.4 and 6.5). Narrowing these exemptions will ensure a level playing field between financial and non financial firms providing investment services in commodity derivatives. In addition we want to enhance investor protection by ensuring that clients of these commercial companies are benefiting from MiFID conduct of business rules when receiving investment services. A complete deletion of these exemptions would be disproportionate compared to the risks posed by these commodity firms to the financial system as a whole and would undermine their ability to trade on own account for hedging purposes. It should be noted that the capital requirements these firms should be subject to will be dealt with as part of the forthcoming review of the existing exemptions for commodity firms under the Capital Requirements Directive (CRD).[100] Broadly, most respondents agree with the proposal to reduce the scope of the exemptions. However, significant opposition is noted among the corporate end-users, most notably energy companies, who are wary of the cost of setting up their operations to comply with MiFID and, more critically, possible capital requirements incumbent upon MiFID firms, and clearing requirements emanating from the Commission proposal on mandatory central clearing for financial firms – also originating in G20 agreements. However, the application of capital requirements does not automatically follow

from being caught by MiFID – there is an exemption in the Capital Requirements Directive due to be reviewed before end-2014. Our consultation paper was not sufficiently clear in that regard, namely that the debate about the MiFID exemptions (i.e. application of MiFID organizational requirement and conduct of business rules) should be clearly distinguished from the debate around the CRD ones (i.e. level of capital requirements needed). The current work under MiFID does not prejudge about the outcome of the CRD exemptions for which all options will be analysed in due course. Second, central clearing is already widespread in energy markets and leads to cost-benefits in terms of netting and lower counterparty risk.

Our preferred option in that field goes one step further than CESR's earlier advice on commodities business dated October 2008[101] by proposing to delete the exemption for commodity specialist firms. The case for this exemption is no longer valid in light of the lessons learned from the financial crisis and the G20 clear commitment to ensure appropriate regulatory coverage of all main participants in financial markets and commodity derivatives markets in particular.[102]

Regarding the review of the exemptions, the number of firms that could be impacted and the related costs is very difficult to assess as these firms are not known to regulators because they are usually not required to be authorised. However as a rule of thumb the number of firms being impacted should be limited as most of the commercial companies (e.g. big energy companies) having significant trading activities have already set up a MiFID authorised subsidiary. In addition most of the MiFID exempt firms active in the energy markets and located in the UK – which is together with France hosting the main European commodity derivatives exchanges – have to be authorised and are already subject to a national regulatory regime.

The third group of options looks at how best to improve the oversight and integrity of the secondary spot carbon market (options 6.6 and 6.7). Developing a tailor-made regime would probably offer more flexibility to adapt to the specificities of the spot carbon trade. At the same time, that flexibility would be limited by the need to conform to the overall approach to market regulation set out in the MiFID and applicable to the other segments of the carbon market. Hence our preferred option is to extend the application of MiFID to secondary spot trading of emission allowances. Such an extension would ensure appropriate regulation and oversight of the spot market, while allowing compliance buyers to trade on own account and hedge their risks by using the existing MiFID exemptions. In addition, it would ensure consistency in the regulatory framework between the physical markets and the derivatives markets, as the latter are already covered by the MiFID. It would also ensure consistency between the primary market and the secondary market, as the Auctioning regulation adopted by the Commission in July 2010 provides an extension of the relevant provisions of MiFID and MAD in the national legislation of Member States hosting an auction platform. Overall, there was limited support at this stage for extending the scope of MiFID to emission allowances among respondents. While many noted that some of the problems witnessed in emission allowances markets could thus be overcome, most urged further study in view of the possible implications for smaller firms. First, it is worth to recall that derivatives on emission allowances are already covered under MiFID and emission allowances per se may trade similarly to financial instruments. Second, the rather negative feedback from stakeholders on the proposed extension of MiFID is probably due to the lack of knowledge by most users of these allowances (i.e. compliance buyers), of the MiFID provisions and the other financial markets legislation that cross reference to MiFID. We acknowledge that our consultation paper might have provided more insight in that respect. Compliance buyers and sellers dealing on own account in emission allowances will be exempt from MiFID if this activity is ancillary to their main business and they are not part of a financial group. As mentioned

above, the status of the CRD exemptions will be part of a separate review. The spill over effects of an extension of MiFID to the carbon market in terms of other financial markets legislation (e.g. Prospectus Directive (2003/71/EC), Listings Directive (2001/34/EC), Transparency Directive (2004/109/EC), etc.) should be rather limited as these legislations will in most cases not apply or an exemption will be provided if needed.

The extension of MiFID to the secondary spot trading of emission allowances would give rise to aggregated one-off costs of € 1.5-€1.8 million, with yearly ongoing costs of €390,000-€480,000 for smaller regional carbon exchanges (i.e. the major carbon exchanges are already authorised as regulated markets). The costs impact on compliance buyers and non-financial market intermediaries (i.e. non-MiFID firms) is difficult to assess at this stage as the number of entities that would be impacted is not known.

Together, this package of options would improve the functioning of commodity derivatives markets by reinforcing transparency and applying similar rules to financial and non financial entities carrying out similar activities. However the costs triggered by these options are marginal (i.e. one-off aggregated costs of €2 to €3 million and yearly ongoing costs of €4 million)

6.7. Broaden the scope of regulation on products, services and providers under the directive when needed

Comparison of options (the preferred options are highlighted in bold and underlined in grey):

7 Broaden the scope of regulation on products, services and service providers when needed			
Policy option	**Impact on stakeholders**	**Effectiveness**	**Efficiency**
7.1 No action	0	0	0
Optional exemption for certain investment service providers			
7.2 Allow Member States to continue exempting certain investment service providers from MIFID but introduce requirements to tighten national requirements applicable to them (particularly conduct of business and conflict of interest rules)	(++) increased level playing field between service providers. (++) better understanding of applicable rules from investors because of their uniformity (-) compliance costs for entities concerned	(++) increased investor protection (-) persisting areas of discretion for each Member States that could maintain a level of inconsistency at European level	(++) compliance costs for entities concerned compensated by increased protection of investors
7.3 Delete the possibility for Member States to exempt certain service providers from MiFID (article 3)	(+++) full level playing field between service providers (--) compliance costs for entities concerned (++) better understanding of rules from investors because of their uniformity	(++) increased investor protection	(--) compliance costs for firms not sufficiently compensated by benefits; organizational requirements included in MiFID would be disproportionate in view of the average size of the exempted providers and could force several commercial companies out of business
Conduct of business rules for unregulated investment products			
7.4 Extend the scope of MIFID conduct of business and conflict of interest rules to structured deposits and other deposit based products with similar economic effect	(++) level playing field between products (++) better understanding of rules from investors (-)compliance costs for banks which could pass some of them on to their clients	(++) increased investor protection	(++) compliance costs partially compensated by benefits for firms (most entities selling different categories of investments will apply the same rules irrespective of products they sell) and clients

7.5 Apply MIFID conduct of business rules and conflict of interest rules to insurance products	(+) level playing field between products but possible need to adapt certain requirements to specificities (+) better understanding of rules from investors (though different rules would continue applying to insurance products which are not Prips) (--) compliance costs (especially for entities currently not covered under MiFID)	(++) increased investor protection (-) possible more fragmented regulatory framework for the insurance industry as MiFID rules unlikely to apply to non investment insurance products	(+) compliance costs for entities not covered under MiFID (e.g. insurance companies) but which should be compensated by increased and more consistent investors protection

The first preferred option (7.2) consists in introducing principles for national regimes that regulates in certain countries certain investment advisors under the exemptions granted by article 3 of MiFID. Most of the 16 Member States that make use of this exemption already have in place to a certain degree a national regime very similar to the MiFID provisions. Germany is the Member State with the highest number of exempt service providers. The requirement for these national regimes to have analogous conflicts of interest and conduct of business rules (suitability, information and reporting requirements) as the ones for MiFID authorised entities would ensure a comparable protection of clients receiving investment advice irrespective of the entities providing it. This would increase investor protection without imposing undue costs on the beneficiaries of these exemptions as a deletion of the optional exemptions would do (option 7.3). The other favourite option is to extend some of the MiFID rules to structured deposits (option 7.4) but not to insurance products (option 7.5) in order to provide to the investors a more consistent and protective legal framework. Member States with the highest investments in retail structured products are Italy, Germany, Spain, Belgium, and France. There is very significant support among respondents for both of the preferred options.

We expect the introduction of principles for the national regimes applying to firms operating under the Article 3 exemption to imply a one-off cost across all of the affected service providers of €15–30 million. An extension of MiFID rules to the sale of such deposits would imply an estimated one-off impact of €31-€44m with ongoing costs of €9-€15m on a yearly basis. Taken together the preferred options would give rise to one-off aggregated costs of €46 to €74 million and yearly ongoing costs of €9 to €15 million.

6.8. Strengthen rules of business conduct for investment firms

Comparison of options (the preferred options are highlighted in bold and underlined in grey):

8 Strengthen rules of business conduct for investment firms			
Policy option	**Impact on stakeholders**	**Effectiveness**	**Efficiency**
8.1 No action	0	0	0
Execution only services and investment advice			

8.2 Reinforce investor protection by narrowing the list of non-complex products for which execution only services are possible and strengthening provisions on investment advice	(-) possible difficulties in introducing distinction complex/non complex for certain categories of products (for instance UCITS) (++) better knowledge of clients and products by firms and better assessment of clients' profiles (-) compliance costs for investment firms	(+) increased clarity in classification of non-complex instruments (+) increased clarity of conditions for provision of advice (++) increased investor protection	(++) compliance costs for firms compensated by improvement of quality service provided to clients at global level
8.3 Abolition of the execution only regime	(+) simplification of framework by eliminating distinction complex/non-complex instruments (+) improved treatment for clients with low level of knowledge and experience (--) opportunity costs for investment firms (especially those only providing execution only services) (-) possible additional costs for clients with good knowledge and experience	(++) increased investor protection	(--) compliance and opportunity costs for investment firms not compensated by benefits (especially those only providing execution only services) (-) possible additional opportunity costs for clients not compensated by benefit in the case of clients with good knowledge and experience
Customers' classification			
8.4 Apply general principles to act honestly, fairly and professionally to eligible counterparties resulting in their application to all categories of clients and exclude municipalities and local public authorities from list of eligible counterparties and professional clients per se	(++) increased protection for public entities receiving investment services (+) clear provision of general principles in the provision of services to eligible counterparties (-) marginal additional compliance costs for investment firms (especially those providing services mainly to professional clients and eligible counterparties)	(+) safer access to investment services for municipalities and local public entities (while leaving possibility to ask classification as professional client on request) (+) increased professionalism and correctness in provision of services among eligible counterparties (-) only partial improvement as the diversity of eligible counterparties will remain	(+) possible additional costs for certain municipalities receiving investment services largely compensated by safer services provided to the entire category (+) compliance cost for firms compensated by benefits for client because of increased attention to the quality of services provided to them
8.5 Reshape customers classification by introducing new sub categories	(--)compliance costs for investment firms to reshape the internal systems for client classification and to re-classify their existing clients (+) possible benefits for certain clients (-) additional costs for clients	(+) increased protection for limited categories of clients (-) difficulty in implementing sub division in each categories	(--) compliance costs for investment firms to reshape the internal systems for client classification and to re-classify their existing clients not compensated by benefits for all clients (-) additional costs for clients with little benefits as they are already able to ask for a different classification under the current regime
Complex products and inducements			

8.6 Reinforce information obligations when providing investment services in complex products and strengthen periodic reporting obligations for different categories of products, including when eligible counterparties are involved	(--)compliance costs for investment firms (++) benefits for clients receiving more precise and timely information about products and to some extent to regulators	(++) increased awareness of different categories of clients about the characteristics and the valuation of products traded with their investment firms (++) overall improvement in the quality of information on products (-) reduction in opportunities for investors if costs passed on to them	(++) compliance costs for investment firms compensated by better knowledge of products by firms and clients and improved relationship with clients
8.7 Ban inducements in the case of investment advice provided on an independent basis and in the case of portfolio management	(--) compliance costs for investment firms (+) possibility for firms, in the case of advice, to diversify the service they offer to clients (++) increased quality of service and clarity to clients	(++) removal of certain situations of conflicts of interests for the most sensitive services (-) increased direct costs for investors that may have to pay (higher) fees for these services (+) increased investor protection	(++) compliance costs for investment firms compensated by benefits for investors in terms of higher quality services
8.8 Ban inducements for all investment services	(---) compliance costs for investment firms (-) reduced choice and increased costs for clients	(--) broad application of the ban without any distinction between services would be disproportionate and could greatly damage the business model of many investment firms	(-) costs for firms and clients not adequately compensated by benefits
Best execution			
8.9 Require trading venues to publish information on execution quality and improve information provided by firms on best execution	(-)compliance costs for trading venues (+) improved ability of firms to select trading venues (+) better execution (and better information) for clients	(++) improvements in delivering best execution to different category of clients (+) improvement in the ability of supervisors to monitor firms' compliance with best execution	(++) compliance costs for trading venues largely compensated by benefits for other stakeholders in terms of best execution
8.10 Review the best execution framework by considering price as the only factor to comply with best execution obligations	(+) increased clarity for investors (-) uncertainties to market participants on the impact of factors other than price on best execution (--) compliance costs for firms	(-) additional complexity if best execution is extended (--) focus on price would not systematically lead to better execution than the current system because of the importance of other factors (costs, market impact, likelihood) in the choice of execution venues.	(-) costs not compensated by clear and univocal benefits

The strengthening of business conduct for investment firms is tackled from different angles. The first favourite option is to review the list of products for which execution only services are possible and reinforce conduct of business rules for the provision of investment advice (option 8.2). This will reinforce the protection of investors while preserving their freedom to use execution only services which was not the case in option 8.3. The second favoured option is to improve the rules of engagement for eligible counterparties by applying general principles of acting honestly as well as adapting slightly (without reshaping them as suggested in option 8.5) the customers' classification set in MiFID (option 8.4). Overall, there is broad support for narrowing the list of non-complex instruments, but with many cautioning against any negative implications for the UCITS brand. There is also broad support for option 8.4. Views are more mixed on the merits of strengthening provisions and requirements around investment advice.

The costs resulting from a reduction of the scope of non-complex products that can be distributed via execution-only services should be marginal. The overall compliance costs resulting from a strengthening conduct of business rules for the provision of investment advice for investment advisers would amount to an estimated one-off cost of between €5.6

million and €12.5 million, and ongoing estimated costs of between €134 million and €279 million.

We expected ongoing costs of €16 million resulting from the clarification of the rules of engagement with eligible counterparties. We do not expect significant costs from excluding municipalities from being classified as eligible counterparties or professional clients per se as such a change has already been effected – at least to an extent – in a number of Member States.

Two other favourite options look at reinforcing the protection of investors when dealing with complex products (option 8.6) with the requirements for additional information or when offered investment advice on an independent basis or portfolio management (option 8.7) with the ban of inducements. A total ban of all inducements has nevertheless been disregarded because of its excessive costs and potential impact on investment firms. Stakeholder views are divided with some agreeing with the need for more timely and stringent reporting in relation to complex products, while others consider this would overload clients with information. Views are also divided on restricting inducements as per above, with more support however in the case of portfolio management.

The proposal to clarify the concept of independent advice takes into account evolutions at national level (e.g. United Kingdom) although is not directly dealt with in CESR advice. Netherlands has also indicated that it is considering a prohibition of inducements for investment advice. The proposal tightens the existing rules while at the same time leaving freedom of choice for investment firms and clients as to the service they wish to provide or receive.

Regarding the additional information proposed for clients in relation to complex products, we would expect the overall one-off costs to be between €83.2-145.9 million and yearly ongoing costs between €11.6-36.6 million. In the case of the banning of inducements when providing investment advice on an independent basis, we estimate the costs for firms as being about €41m one-off and being about €24-28m ongoing. With respect to a ban on inducements for portfolio managers we expect overall one-off cost implications of about €131 million, and on-going costs of €3.7m. The key benefit in terms of investor protection would be that the inherent conflicts of interests that exist today would be removed, with the consequence that portfolio managers and independent advisors would align more their decisions with the interests of their clients. The structure of the market would move to a certain extent from a commission-based towards a fee-based model (i.e. it should be noted that in the case of non-independent advice inducements would still be allowed).

Another favourite option consists in requiring trading venues to publish information about execution quality and investment firm to improve information on execution venues they use and best execution (option 8.9). This option will also lead to more precise execution policies to be disclosed by investment firms to their clients. Many stakeholders say that sufficient information already exists in this respect, but broad support is expressed by Member States and buy-side firms.

The requirement for trading venues to publish information about execution quality is expected to trigger one-off costs of €18m and on-going costs of €6m. This would reinforce the benefits in terms of best execution that are expected from the introduction of a consolidated tape (see par. 6.3. above).

Taken together these preferred options will strongly enhance investor protection mainly by reinforcing information requirements, by better protecting less knowledgeable investors, and by removing inherent conflict of interests (i.e. banning of inducements for independent investment advice and portfolio management). Taken together the preferred options would give rise to one-off aggregated costs of €281 to €351 million and yearly ongoing costs of €196 to €369 million. Although we acknowledge these costs are significant we believe these options strike the right balance between costs and benefits as we have limited the information requirements and the prohibition of inducements to certain complex products and investment services. The need to reinforce investor protection, by among other removing inherent conflicts of interests, is so urgent and evident that national initiatives have already been taken (e.g. UK retail Distribution review which foresees to ban the payment of third party commissions not only for independent advice as targeted here, but also for all types of investment advice).

6.9. Strengthen rules of organisational requirements for investment firms

Comparison of options (the preferred options are highlighted in bold and underlined in grey):

9 Strengthen organisational requirements for investment firms			
Policy option	**Impact on stakeholders**	**Effectiveness**	**Efficiency**
9.1 No action	0	0	0
Corporate governance			
9.2 Reinforce the corporate governance framework by strengthening the role of directors especially in the functioning of internal control functions and when defining strategies of firms and launching new products and services. Require firms to establish clear procedures to handle clients' complaints in the context of the compliance function.	(-) compliance costs for investment firms	(++) greater consistency in role of directors in shaping policies of firms and on internal control functions across EU (+) increased focus on directors' role and on their professionalism, also in the perspective of supervisors (+) improved handling of clients' complaints (-) increased level of rigidity in a currently flexible framework	(++) compliance costs for investment firms largely compensated by benefits in terms of safer products for investors
9.3 Introducing a new separate internal function for the handling of clients' complaints	(-)compliance costs for investment firms (-) multiplication of internal functions in investment firms	(+) more uniformity in dealing with clients' complaints (-) less flexibility to adapt the procedure for handling with clients' complaints to the situation of each firms (type of services and clients, structure of the firm)	(-) compliance costs and negative aspects not compensated by benefits
Organisational requirements for portfolio management and underwriting			
9.4 Require specific organisational requirements and procedures for the provision of portfolio management services and underwriting services	(-) limited compliance costs for firms (+) increased protection for investors (+) increased protection for issuers	(++) introduction of common principles across the EU for aspects of portfolio management and underwriting currently insufficiently regulated (++) possibility for supervisors to establish more uniform supervisory practices (-) additional rigidity	(++) compliance costs for investment firms largely compensated by benefits for all investors and issuers in terms of better services
Telephone and electronic recording			

9.5 Introduce a fully harmonised regime for telephone and electronic recording of client orders	(--) compliance costs for investment firms (except for those already subject to the obligation). (+) increased tools for supervisors (++) better protection of clients and detection of abusive behaviours for market integrity	(+) common regime across Europe (--) a fully harmonized model does not allow to take into account the technological evolution as well as specificities in the provision of services	(–) compliance costs and downsides not compensated by benefits
	Impact on fundamental rights: Option interferes with Articles 7 and 8 of CFR. Option provides for limitation of these rights in law while respecting the essence of these rights. Limiting these rights is necessary to meet the general interest objective of ensuring market integrity and compliance with conduct of business rules. In order to respect fundamental rights, this requirement must be proportionate to the objective pursued and must respect EU data protection rules taking into account a maximum retention period for data of 2 years and also laying down the conditions for processing recorded communications. Supervision of the lawfulness of the processing of recorded communication shall be subject to the independent oversight of Member States data protection authorities set up by Directive 95/46/EC.		
9.6 Introduce a common regime for telephone and electronic recording but still leave a margin of discretion for Member States in requiring a longer retention period of the records and applying recording obligations to services not covered at EU level.	(--) compliance costs for investment firms (except for those already subject to the obligation). (+) increased tools for supervisors (++) better protection of clients and detection of abusive behaviours for market integrity	(++) leaving some flexibility to Member States allows to take into account technological evolution as well as specificities in the provision of services (+) common regime across Europe	(++) icompliance costs are compensated by benefits in terms of better protection of clients and improved market integrity
	Impact on fundamental rights: Option interferes with Articles 7 and 8 of CFR. Option provides for limitation of these rights in law while respecting the essence of these rights. Limiting these rights is necessary to meet the general interest objective of ensuring market integrity and compliance with conduct of business rules. In order to respect fundamental rights, this requirement must be proportionate to the objective pursued and must respect EU data protection rules and also laying down the conditions for processing recorded communications. Supervision of the lawfulness of the processing of recorded communication shall be subject to the independent oversight of Member States data protection authorities set up by Directive 95/46/EC.		

In order to reinforce the rules over organisational requirements for investment firms, three policy options have been retained.

The first one aims at strengthening corporate governance by increasing the role of directors in a number of processes, with an additional focus on the handling of clients' complaints (option 9.2). The second one is to require specific organisational requirements and procedures for the provision of portfolio management services and underwriting services (option 9.4) while the third one is to set up a common regime for telephone and electronic recording while preserving a certain margin of discretion for Member States (option 9.6). About 15 Member States have already a recording requirement which is incorporated in national legislation or rules. The selected options should ensure an appropriate reinforcement of the organisation of investment firms in some key areas for investors protection and market integrity (options 9.2 and 9.4) while contributing to a more coherent framework in Europe (option 9.6) without excessive costs (option 9.3 which considers the introduction of a new internal function for

handling of clients' complaints) or rigidity (option 9.5 for a fully harmonised regime for telephone and electronic recording). Respondents generally support provisions on stronger governance and internal reporting requirements, but are more reserved on specific requirements for portfolio management and underwriting services. There is broad support for a minimum taping regime involving telephone and electronic communications which must in any case respect fundamental rights, particularly the rights to private life and protection of personal data.

Strengthening the role of the directors in the functioning of the internal control functions is likely to lead overall to an incremental on-going cost for firms of €24-36m across the EU. Requiring specific organizational requirements would lead to a one-off cost of €2.8-4.2 million in the case of portfolio management, and to one-off costs of €11-€26 million as well as ongoing costs of about €0.25 million in the case of underwriting. In relation to the introduction of a harmonised requirement for recording client orders we have estimated the range of incremental aggregated one-off costs to be €41.7-99.2 million and ongoing costs to be €45.2-101.2 million for the whole of the EU. Taken together the preferred options would give rise to one-off aggregated costs of €61 to €134 million and yearly ongoing costs of €69 to €133 million.

7. THE PREFERRED POLICY OPTIONS AND INSTRUMENT

7.1. The preferred policy options

Based on the analysis of the impacts above, the preferred options to achieve the objectives set out in this impact assessment have been identified in the tables above. An overview is included in Annex 4.

Overall, the preferred policy options will lead to considerable improvement in the confidence of investors and derivative markets users, large reduction in systemic risks and substantial improvement in market efficiency. First, the improved transparency rules on equities and the new transparency rules on bonds and derivatives combined with the new reporting obligations and systems will greatly increase the level of transparency of financial markets, including commodities markets, towards regulators and market participants. Coupled with new powers for regulators, this should result in more orderly functioning of financial markets across the board. Second, the new obligations imposed on investment firms in terms of organisation, process and risk controls will strongly reinforce investor protection and therefore raise investor confidence. Third, the new trading framework and obligations imposed on some market participants will at the same time decrease systemic risk and lead to more efficient markets.

7.2. The choice of instruments to ensure an efficient revision of MiFID

7.2.1. Non-legislative cooperation between Member States with guidelines by ESMA

A potential option to achieve the objectives set out in this report could be to extensively utilise cooperation between national regulators through ESMA. Under the current MiFID framework national regulators are already required to cooperate, for example in respect of the supervision of branches of investment firms where supervisory competences are split between the home- and the host-Member State regulator, and to exchange information. Such cooperation could be further intensified and facilitated by guidelines commissioned by ESMA in order to achieve a greater degree of supervisory convergence when applying rules in

practice. A case in point could be the regulatory response to the relatively new developments in automated and high-frequency trading where common guidelines in how to deal with that phenomenon in supervisory daily practice could be designed.

However, the disadvantage of this approach is that it would be based on cooperation of regulators, devising guidelines that are non-binding to market participants within the limited room for manoeuvre the existing legal framework permits. Cooperation can only go so far as is allowed by the law and cannot be a substitute for specific, binding legal rules designed to address new developments in the markets which the current legislation does not cover or to extend the existing framework to additional areas which are currently insufficiently regulated. Therefore, legal provisions are needed to accomplish the desired improvements in market transparency, market structure and investor protection. This instrument does not represent a viable solution for accomplishing the goals described in this impact assessment.

7.2.2. *The right legal instrument to amend the MiFID*

Having rejected the option of proceeding by non-legislative cooperation, this leaves the option of trying to achieve the objectives described in this impact assessment by a legal instrument. This would ensure the implementation and application of targeted amendments, additions and extensions envisaged for the scope of MiFID in all Member States. The improvements in relation to market transparency and structure and investor protection would be achieved in the entirety of the European markets, potential regulatory arbitrage could be minimised and especially firms operating on a cross border basis could benefit from economies of scale being assured that the same legal framework is applied wherever they operate within the EU. The suitable legal instrument for attaining the goals described in this impact assessment would be a combination of a Directive and a Regulation. Choice between these is made on the basis of a case-specific analysis.

The high level group on Financial Supervision recommended that future legislation should be avoided that permits inconsistent implementation and application of rules[103]. This recommendation does point to an increased use of regulations as a legal instrument where by design there can be no inconsistencies in implementation due to deviations in national transposition processes and where manifest differences in application can be kept to a minimum by devising a stringent set of rules directly on the European level. In addition, a Regulation could avoid diverging national rules being created in the transposition processes and would ensure best a harmonised set of core rules applicable in the EU. Specifically for the subject matters covered by MiFID three areas can be distinguished where the choice of legal instrument can be assessed separately.

A Regulation might be the best way to ensure full harmonisation of national supervisory powers and to further enhance these powers. In addition a Regulation is necessary to grant specific direct competences to ESMA in the areas of setting position limits and banning of investment products, as well as in the area of coordination of national supervisory powers.

Concerning other areas, a regulation could be appropriate for the subjects of trade-transparency and transaction reporting where the application of the rules often depends on numeric thresholds (eg for determining when a deferred publication of a trade large in scale is permitted) and specific identification codes (populating the automated and machine-readable transaction reports supervisors need to investigate potential cases of market abuse). Here any deviation on the national level would inevitably lead to market distortions and regulatory arbitrage, preventing the development of a level playing field. The current MiFID framework has already acknowledged these considerations and dealt with them adequately. While the

framework directive does entail the general rules, a Level 2 regulation[104] conclusively regulates the technical details on trade-transparency and transaction reporting. Practical shortcomings of this regulatory structure have not been encountered yet, but in the spirit to use as much as possible a Regulation as the legal instrument to take advantage of all the benefits it could bring, it might be appropriate to introduce these requirements in a Regulation. This may require the change of the legal basis. The same approach could be utilised when extending the rules in these areas, for example, to non-equity products.

Concerning investor protection guaranteeing a level-playing field by using a Regulation as the legal instrument might appear to be an attractive option.

Especially for retail investors across the EU a uniform set of rules may promote the use of cross-border providers or the investment in financial products from other Member States. However one has to bear in mind that national retail markets for financial instruments across the EU still differ with certain instruments and services being more popular in some Member States than others. Therefore, in the specific case of MiFID, flexibility for Member States to add specific rules tailored for their markets adds to a high standard of protection for retail investors. A directive is the right legal instrument for granting such flexibility. A one size fits all approach would not be suitable to adequately reflect the diversity of European markets. This would increase compliance costs for investment firms while not bringing any benefit in terms of investor protection.

Another case in point is the proposal to exclude municipalities and local public authorities from the list of eligible counterparties to better protect them as investors. The terms municipalities and local public authorities are deliberately broadly framed as the structures of local governments are very different in the Member States. Therefore, it appears valid to leave it to Member States to determine which institutions on the local level should precisely be captured by the terms municipalities and local public authorities. The directive again does seem to be the more suitable instrument to ensure that the ensuing provisions are appropriately designed to fit in with the national structures and to work seamlessly in practice.

Shortcomings of MiFID cannot be linked to the current legal structure and a lack of direct applicability of the rules, but rather to technical developments, gaps and limitations in scope that need to be addressed.

The current MiFID set-up (framework directive and two implementing measures, one of them being a regulation for technical aspects) has worked reasonably well in supervisory practice and should even improve due to stronger ESMA coordination. A restructuring of this framework by devising regulations on all levels would trigger substantial adaptation costs for public authorities and market participants alike only three and a half years after transposition (November 2007) of the original MiFID.

While financial markets are increasingly international in design and outlook national specificities remain, e.g. in relation to market models used or, in particular, in the ways retail investors access the financial markets (for example, instruments preferred by retail investors differ between Member States as well using independent advisers or high-street banks as the prime gateway to invest). For regulators to be able to appropriately take into account such national specificities it is still a valid point within the wide-ranging MiFID field to grant Member States a certain degree of flexibility for which the directive is the more suitable tool.

In conclusion, the Commission services consider that a Regulation should be devised dealing with competences of ESMA, as well as in the area of coordination of national supervisory

powers and possibly further enhancement of national powers. A regulation might also be appropriate for the subjects of trade transparency and transaction reporting. It should be noted that a different legal basis (Article 114 TFEU) than the existing one (Article 53 TFEU) should be used as the latter only allows for the issue of directives. A directive rather than a regulation is deemed to be the most appropriate instrument for establishing the amended framework dealing with the substantive matters of markets in financial instruments. This outcome is consistent with the choices made for other European legal instruments in the field of regulating financial markets and services.

7.3. Impact on retail investors and SMEs

In this regard, the strengthening of the provisions on conduct of business rules (i.e. on inducements, on complex and non-complex products, on information to be provided to clients and the best execution rules, linked also to the enhancement of the quality of data), the modification of some organisational requirements and the strengthening of supervisory powers will be measures with a direct impact on the better protection of retail investors and thus will improve and enlarge the access of these investors to financial markets. In addition, the revision of MiFID will also have an impact in the protection of professional investors, which will have additional safeguards concerning the way investment firms deal with their investments (e.g. more transparency, stricter organisational rules, new clients classification).

With regard to SMEs, their protection will be enhanced when acting as investors. In addition, through the revision of MiFID, by introducing an EU label for SME markets, their access to capitals markets will be facilitated. By giving more visibility to SME markets and thus more liquidity to their assets, more investors will be attracted to these markets. The fact that the regime proposed will facilitate a network of SMEs markets within the EU gives even more possibilities for SMEs to obtain financing via capital markets, as their assets will have the possibility to be traded in all the markets belonging to the network.

7.4. Impact on third countries/ impact on EU competitiveness

Financial markets, including commodity derivatives markets, are global markets; therefore any modification in the EU legislation will have an impact on third countries.

However, it is important to signal that several of the modifications proposed to the current legal framework are steps taken in order to put into effect G20 commitments. In September 2009, the G20[105] committed to tackle less regulated and more opaque parts of the financial system, and improve the organisation, transparency and oversight of various market segments, especially in those instruments traded mostly over the counter. In particular they agreed that all standardised over-the counter ('OTC') derivatives should be traded on exchanges or electronic trading platforms where appropriate. During its Pittsburgh summit, the G20 also agreed "to improve the regulation, functioning, and transparency of financial and commodity markets to address excessive commodity price volatility."[106] The G20 commitment was reinforced in November 2010 by the summit statement in Seoul, which pledges to address food market volatility and excessive fossil fuel price volatility.[107] Therefore, the legal framework of other important jurisdictions (i.e. USA, Japan) will also be modified in the same sense.

A comparison of the US regulatory reforms with the MiFID review is included in Annex 14. Overall the US is making similar choices, albeit to suit its own market structure and framework of laws and oversight. Competition between trading venues is welcomed. In Dodd-Frank, information duties between firms and clients are being tweaked and

transparency rules are being extended to new instruments. High frequency trading and dark pools are both under study. At this stage, neither will be radically restricted but some possible safeguards are being discussed. As a result, the EU and US are poised to make regulatory adjustments to deal with common issues, although differences in approaches may be justified according to the structure and needs of each respective market. By way of exception, EU-US measures in relation to OTC derivatives need to go beyond broad parallelism and be nearly identical. Unlike other instruments more closely tied to local issuers, investors, laws, and infrastructures, trading in OTC derivatives can be uprooted more easily to another jurisdiction. As a result, the EU and US need to adopt highly similar, viable and ambitious regulatory frameworks for migrating trading in derivatives increasingly from OTC markets to transparent, multilateral organised trading venues in line with the G20 commitment. Close alignment is also required as regards regulatory improvements to commodity derivatives, although the solutions cannot ignore differences in the structure and make-up of underlying local markets.

However, the possibility of regulatory arbitrage exists with countries that are not part of the G20 and therefore not bound by the commitments taken at that level. A close monitoring of the evolution of the regulation in these countries will therefore be needed in order to ensure that the EU competitiveness is not harmed.

Third countries will be positively impacted as the revision of MiFID will introduce a third country regime to frame the access of third country firms to the EU markets. Nowadays their access is fragmented, as each Member State decides whether to establish a third country regime and how to do it. This third country regime will have a positive impact in the current trend of the industry to create mergers at international level, as it has recently been announced by important stock exchanges (see Annex 2.4.3), as the third country regime will require establishing comprehensive memoranda of understanding between the EU regulators and third country regulators to deal with the regulatory aspects in order to have the necessary tools to better supervise third country firms/market operators. Full account should be taken of the EU's international commitments, both in the WTO and in bilateral Agreements

7.5. Social impact

Some of the proposals suggested will increase investor protection, reinforce the means of regulators for controlling financial markets and financial operators, and make financial markets more transparent and more secure. Therefore, there will be a direct benefit to all types of market participants: investors, retail or institutional, as well as issuers. In particular, the reclassification of some professional investors, such as municipalities and charities, as retail investors will avoid that those investors accede the markets without the necessary level of protection, as it has been evidenced during the financial crisis, where some of these actors had invested in assets that were not at all suitable for them.

The proposals taken should lead to higher investor confidence and possibly greater participation in financial markets. In addition, by contributing to reducing markets' disorder and systemic risks, these options should improve the stability and reliability of financial markets thereby making it easier for enterprises to raise capital to grow and create more jobs.

In addition, by requiring investment firms to disclose further information to investors and to learn more about their investment criteria, the revision of MiFID might encourage investments in specific types of business, such as social, environmental, ethical, etc.

7.6. Impact on fundamental rights

An assessment was made of the policy options to ensure compliance with fundamental rights[108]. As most of the options considered as part of this impact assessment do not interfere in any way with any of the fundamental rights or reinforce the right to consumer protection and/or the freedom to conduct business, we have focused our assessment on the options which might limit these rights and freedoms. A detailed analysis for these relevant policy options can be found in Annex 3. The proposal is in compliance with the charter as it will lead to more effective and harmonised regimes for provision of investment services and activities in financial instruments improving market integrity and compliance with MiFID rules. However any limitation on the exercise of these rights and freedoms will be provided for by the law and respect the essence of these rights and freedoms. To this end the policy options relating to whistleblowing (as part of the option on administrative sanctions) and telephone and electronic recording ensure that access to telephone and data records, access to private premises, data on whistle blowing are subject to appropriate safeguards. These policy options will contribute to market integrity by facilitating the detection of market abuse within the EU as well as facilitating the monitoring of compliance with MiFID conduct of business rules. The proposed sanctioning regime will ensure that similar breaches are sanctioned in similar ways throughout the EU, unless differences can be objectively justified. This Impact Assessment addresses problems relating to divergences and weaknesses of administrative sanctions. It is without prejudice to the situation concerning criminal sanctions regimes in the field of MiFID, which deserves further analysis. Following such analysis the Commission will decide on policy actions to be taken in this regard, based on a full assessment of the relevant impacts.

7.7. Environmental impact

It does not appear that the preferred options identified will have any direct or indirect impacts on environmental issues.

However, there are some positive indirect environmental issues, as thanks to a better oversight of commodities markets, the current functioning of commodities markets could be improved, which could contribute to a more stable environment for producers of physical commodities which could improve overall allocation of resources and possibly better take into consideration environmental constraints. Lastly, improving transparency and oversight of the emission allowances market would contribute to a better functioning of the EU Emissions Trading Scheme (ETS) which is a cornerstone of the EU's policy to combat climate change. The EU ETS is a cap and trade system aimed at cost effective and economically efficient reductions of greenhouse gas emissions by creating a market in emission allowances and a price signal that reflects the abatement costs, as well as the scarcity, of allowances and guides decisions on abatement measures. An efficient allocation implies that emission allowances go to those participants that have a marginal cost of reducing emissions above the market price. Participants with lower marginal cost would choose instead to abate their emissions, e.g. by production optimisation or investment in low carbon technology. The most important place for price discovery is the secondary market, where trading takes place between many parties throughout the day. Liquidity of the secondary market is crucial for the reliability of the price signal. In this context, higher standards of integrity and transparency applicable to the spot carbon markets will enhance investor confidence and contribute to securing sufficient liquidity in that market.

8. ESTIMATE OF IMPACT IN TERMS OF COMPLIANCE COSTS AND ADMINISTRATIVE BURDEN

8.1. Estimated overall compliance costs

The estimates of compliance costs provided below are based on the study carried out by Europe Economics. A more detailed breakdown of consolidated costs can be found in Annex 5. Further detailed analysis is also provided in this annex, including a detailed explanation of all the underlying assumptions.

The MIFID review is estimated to impose one-off compliance costs of between €512 and €732 millions and ongoing costs of between €312 and €586 million. This represents one-off and ongoing costs impact of respectively 0.10% to 0.15% and 0.06% to 0.12% of total operating spending of the EU banking sector[109]. This is only a fraction of the costs imposed at the time of the introduction of MiFID. The one-off cost impacts of the introduction of MiFID were estimated as 0.56 per cent (retail and savings banks) and 0.68 per cent (investment banks) of total operating spending. Recurring compliance costs were estimated at 0.11 per cent (retail and savings banks) to 0.17 per cent (investment banks) of total operating expenditure.[110]

Consolidated overview of compliance costs (€ millions)	TOTAL INCREMENTAL COSTS			
	one-off		on-going	
	low	high	low	high
Market structures	10	31	9	21
New trading technologies ("automate trading")	1	1	1	1
Pre and post-trade transparency and data consolidation	38	41	12	18
Reinforce regulatory powers	8	13	10	20
Transparency to regulators	65	84	3	5
Commodity derivatives markets	2	3	4	4
Broaden the scope of regulation	46	74	9	15
Strengthening of conduct of business rules	281	351	196	369
Organizational requirements for investment firms	61	134	69	133
TOTAL MiFID REVIEW COSTS	**512**	**732**	**312**	**586**
Total operating costs of investment firms	500.000	500.000	500.000	500.000
Total MiFID review costs as a % of total operating costs	**0,10%**	**0,15%**	**0,06%**	**0,12%**

We have been cautious in assessing these costs taking conservative assumptions. For example, the incremental one-off costs imposed upon investments firms relating to transaction reporting of OTC derivatives (including commodity derivatives) would virtually disappear when reporting requirements under MiFID and EMIR are fully harmonised, so that trade repositories can be allowed to be approved as Approved Reporting Mechanism. This would mean that the any additional costs due to MiFID in that regard would be eliminated, reducing the total estimated compliance costs by €64 to 82 million.

8.2. Estimate of impact in terms of administrative burden

The administrative burden costs are part of the compliance costs presented above. We have identified the compliance costs above which meet the definition of administrative burden and for these compliance costs which are at the same time administrative costs have constructed the Standard Costs Model ("SCM") estimates. The preferred options generating administrative burden (i.e. the measuresgiving rise to information obligations) are as follows:

- Pre-and post-trade transparency (both equity and non-equity).

- Reporting channels and Data consolidation
- Commodity derivatives — position reporting
- Transparency to regulators: transaction reporting, storage of orders and direct reporting to ESMA
- Investor protection — the information obligations when offering investment services in complex products and the enhanced information to be published by trading venues on execution quality and the information given to clients by firms on best execution
- Further convergence of the regulatory framework — telephone and electronic recording of client orders
- Supervisory powers — position oversight.

€ millions	TOTAL ADMINISTRATIVE BURDEN COSTS			
	one-off		on-going	
	low	high	low	high
Pre- and post-trade transparency	7,5	11,2	9,3	13,1
Reporting channels and Data consolidation	30,0	30,0	3,0	4,5
Reinforce regulatory powers: Position oversight & limits	8,2	12,9	9,5	20,3
Transparency to regulators	65,4	84,1	2,6	4,9
Commodity derivatives: Position reporting by categories of traders	0,8	1,0	3,3	3,8
Information on complex products	83,2	145,9	11,6	36,6
Trading venues - Execution quality	18,0	18,0	6,0	6,0
Harmonisation of the telephone and electronic recording regime	41,7	99,2	45,2	101,2
Total administrative burden	**254,8**	**402,3**	**90,5**	**190,4**

9. ESTIMATE OF IMPACT IN TERMS OF INDIRECT ECONOMIC EFFECT

We try to assess in this section the impact in terms of indirect economic effects of our preferred options. We focus on the areas for which some information is available.

9.1. Trading of clearing eligible and sufficiently liquid derivatives on organised trading platforms

Trading derivatives on exchanges, MTFs or electronic platforms should result in operational efficiencies for traders (both buy- and sell-side), reduce the occurrence of front and back office errors and provide a clear and easily accessed audit trail. The increased transparency on such platforms, as well increased competition between dealers, is also likely to reduce the bid-ask spreads in the relevant markets provided that liquidity is not reduced. This reduction in spreads which will represent an opportunity cost to dealers of trading on a platform rather than purely over the counter, can be considered as a positive effect for the wider market. In addition, even for dealers, the opportunity costs could be largely offset by the significant increase in volume (i.e. when a product is traded on a platform the level of standardisation increases, trading volumes increase, trading costs decrease and liquidity increases) as well as increasing ease of trades.[111] Please refer to Annex 8 for more detailed analysis.

9.2. Extension of the trade transparency regime for equities to shares traded only on MTFs or other organised trading facilities

The experience of the UK Alternative Investment Market (AIM), a junior market regulated as a MTF and part of the London Stock Exchange Group (LSE), indicates a 16% reduction in spreads with the advent of MiFID transparency regime for shares. AIM was indeed one of the primary MTFs, such as First North, which complied with the MiFID transparency regime in the same way as the main market they belong to. Hence the impact of MiFID on the AIM should be similar to the impact that would be observed in other primary market MTFs if the more detailed transparency regime for shares admitted to trading on a regulated market were to be applied.

9.3. Trade transparency in non-equity markets

Concerning wholly new pre- and post-trade transparency requirements for non-equities, it is not possible to make a complete assessment of the possible economic impact - notably in terms of liquidity in these markets - at this stage, as these will largely depend on the detailed requirements in terms of delays and content by type of instrument and venue to be developed in implementing legislation. However, some presumptive assessments can be made.

Overall, the indirect benefits of improving pre-trade data flows in non-equity markets in terms of more efficient price formation, increased competition among dealers and greater certainty for investors in contrast to the present context of available data across non-equity products is difficult to judge.

Increased post-trade transparency may have benefits of reducing transaction costs (in the form of bid/offer spreads), as informational advantages of large market makers would be reduced and investors would be able to negotiate better trading terms.

We have tried to assess what the potential benefits of post-trade transparency could be by first looking at the US experiment (the Trade Reporting and Compliance Engine (TRACE) system) and second by analysing available data of exchange traded and OTC bonds.

Regarding the US experiment, TRACE was fully phased in by January 2006, and offers real-time, public dissemination of transaction and price data for all publicly traded corporate bond. Please refer to Annex 18 for a detailed analysis of the TRACE initiative. Unfortunately mapping the impacts of TRACE on the US market to the EU market is not something that can be done easily, if at all. There are important differences between the two markets, such as greater competition between dealers and historically tighter bid-ask spreads in the EU market. Trading activity is more highly concentrated in US markets, with a handful of banks or dealers controlling the majority of the trading and syndication. Nonetheless a number of interesting lessons could be drawn:

- The main three studies[112] examining the impacts of TRACE find that TRACE significantly reduced transaction costs (spreads). As customers originally (in the opaque market) had to pay a search cost to find out quote prices from different dealers, increasing transparency had increased their ability to accurately evaluate the costs they pay and as a result reduced transactions costs and improved liquidity. The impact on the liquidity in its broader sense such as market depth, trade volume, and the ease of transacting is less clear cut and still open to debate.

- Evidence from TRACE has shown that TRACE has directly benefitted investors and traders by increasing the precision of corporate bond valuation and consequently decreasing the bond price dispersion. Research indicated that at the individual bond level, regardless of rating or issue size, valuation of bonds positions across a fund became much tighter once TRACE was implemented. As a result, another potential indirect benefit of post-trade transparency is higher quality and reliable information for valuation purposes.

Second Europe Economics carried out analysis of available bond data. It is important to bear in mind that the vast majority of corporate and government bonds are traded over the counter (estimated at 89 per cent of all trades)[113].

The first set of data relates to corporate bonds traded on exchanges. The analysis of these data suggests that increasing post-trade transparency for bonds traded on exchanges and regulated markets will have a positive impact in terms of reducing bid/offer spreads. Comparisons between countries that currently have post-trade transparency on exchanges (such as Italy and Denmark) with those that don't shows the spreads in the former group decreased on average by eight basis points after the introduction of post-trade transparency. The potential benefit of extending transparency to other Member States that do not currently have post-trade transparency for bonds is estimated to be approximately €8 million a year based on trading volumes taking place on exchanges.

The second set of data relates to a subset of OTC corporate and government bonds traded OTC. Analysis of data from bonds traded over the counter reveals less scope for benefits arising from post-trade transparency. This is likely to be due to lower levels of liquidity than on-exchange bonds. However, an interesting result emerged in that average spreads for OTC traded bonds are lower in countries that have post-trade transparency for on-exchange bonds. Given that our OTC and exchange-traded bond samples consisted of almost all the same bonds, it is likely that price formation and transparency of bonds traded on exchanges influences the transparency of the same bonds traded OTC.

As a conclusion, both in the case of on exchange traded and OTC bonds, a narrowing of spreads, more reliable pricing, as well as improved valuation is expected. In addition increased transparency should deliver improved best execution of clients' transactions. But indirect costs in terms of less immediacy and market depth can arise if the ability of dealers to provide liquidity is impaired. This risk is likely to be far lower for government bonds than for corporate bonds as the former are in general more liquid. This potential downside effect could be addressed by a proper calibration of the disclosure regime for orders of large size (e.g. by calibrating the type and the timing of information to be published).

9.4. Consolidation of post-trade data in the equities and non-equities markets

As for a mandatory consolidated tape in the equities markets, it is expected that this should bolster competition between trading venues, leading to a further reduction in direct fees associated with trading. There should also be an improvement in market depth and liquidity, as the consolidated tape should overcome some effects of fragmentation in European markets. Moreover, it should deliver best execution benefits to investors. Based on a study of a sample of Europe's most liquid stocks in January 2010, it has been estimated that this would amount to savings of €12.38 million in terms of transaction costs.[114]

With respect to non-equities markets, the set-up of a consolidated tape is expected to deliver similar benefits.

9.5. Ban inducements in the case of investment advice provided on an independent basis and in the case of portfolio management

Independent advice

The following possible effects of this measure could take place:

- There is a risk that a number of small providers may exit the market as a result of the ban of inducements[115] (notably those for which commissions is an important source of revenues and that will not be willing or able to change their business model).

- There is a significant possibility that many investment advisers working with a remuneration structure geared towards third-party commissions would simply cease to self-describe as being independent and switch their business to the provision of non-independent advice (in that making the nature of their business more transparent to clients).

- There may be a switching effect away (by clients) from advisers that switch from a commission-basis to a fee-basis. The scale of this switch will be critically dependent upon the extent to which consumers value (and are therefore willing to pay) "*independent* investment advice" against "investment advice". If this is the case, any secular trend towards independent advice (in the sense of not being restricted in market choice and also having a remuneration structure geared towards downstream remuneration) would be considerably strengthened. This would benefit consumer choice and the quality of service received.

Portfolio management

Whereas in investment advice provided on packaged products downstream charging is typically not standard practice, fees are usually charged to final investors in the case of discretionary portfolio management.

The reception of commissions by portfolio managers from product providers has attracted attention by regulators, due to the discretionary nature of this service. In 2007 and 2011 CESR indicated the difficulty for portfolio managers receiving inducements to comply with their duty to act in the best interest of the clients[1] and the opportunity to consider a possible ban of inducements[2]. In the UK common market practice excludes the reception of inducements in the context of portfolio management. In Italy inducements are strongly discouraged in this case. Unfortunately no data are available to assess the scale of the changes driven by such a measure in Italy. An Italian trade association described this as having had the following impact on the business models of banks:

- the reduction in the use of inducements has resulted in an increase in the charges levied on investors (to compensate the portfolio managers for the revenues lost — however, previously the customer would have borne these charges implicitly as the product provider would have charge higher fees in order to enable him to pay commissions to the portfolio manager and these fees would have been deducted from the investment returns achieved)

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[1] Inducements under MiFID – CESR 07/228b.

[2] CESR Technical Advice to the European Commission in the context of the MiFID review and Responses to the European Commission request for additional information – 29 July 2010.

- A switch away from packaged products (where there had been inducements) towards direct investments by portfolio managers.

However, we note that private banking and discretionary portfolio management (combined) have been recently estimated to account for about 6 per cent of mutual fund distribution in Italy.[116] This was 7 per cent in 2007 (FERI Fund Market Information). Whilst we recognise that market changes flowing from the regulatory change in Italy may not be fully reflected in the current estimate (and there could also be other drivers of the change) and that the split between private banking and discretionary portfolio management activities might have changed this scale of change does not appear likely to be having significant impacts upon the asset management sector.

Whether the same impacts would occur if this model were applied elsewhere in Europe is unclear. However one could argue that the prohibition of inducements would result in increased charges to the clients of the portfolio managers so that the net impact for the latter is neutral. In this case, the inducements on packaged products could be passed on to the end clients who would (in theory) be exactly compensated for the increased charges made by the portfolio managers. This would also mean that the clients were put into an equivalent position, as we have described above: i.e. that the increase in annual service charge from the portfolio manager would be matched by the reduction in fees levied by the product provider and deducted from investment returns.

10. MONITORING AND EVALUATION

The Commission is the guardian of the Treaty and therefore will monitor how Member States are applying the changes proposed in the legislative initiative on markets in financial instruments. When necessary, the Commission will pursue the procedure set out in Article 226 of the Treaty in case any Member State fails to respect its duties concerning the implementation and application of Community Law.

The evaluation of the consequences of the application of the legislative measure could take place three years after the transposition date for the legislative measure, in the context of reports to the Council and the Parliament. The reports shall be produced by the Commission following consultation of the European Securities and Markets Authority (ESMA). Key elements of such reports would assess in how far market structures have changed in the EU following the implementation of the MiFID Review; how the level of transparency in trading in various financial instruments has developed; and how the cost of trading for market participants has changed due to the measures implemented.

The main indicators and sources of information that could be used in the evaluation are as follows:

- A report assessing the impact on the market of the new Organised Trading Facilities and the supervisory experiences acquired by regulators; impact indicators should be the number of Organised Trading Facilities licensed in the EU; the trading volume generated by them per financial instrument as opposed to other venues and particular over the counter trading;

- a report on the progress made in moving trading in standardised OTC derivatives to exchanges or electronic trading platforms; impact indicators should be the number of

facilities engaging in OTC derivatives trading; and the trading volume of exchanges and platforms in OTC derivatives as opposed to volume remaining over the counter;

- a report on the functioning in practice of the tailor-made regime for SME markets; impact indicators should be the number of MTFs which have registered as SME growth market, the number of issuers choosing to have their financial instruments traded on the new designated SME growth market; and the change in trading volume in SME issuers following implementation of the MiFID Review;

- a report on the impact in practice of the newly introduced requirements regarding automated and high-frequency trading; impact indicators should be the number of high-frequency firms newly authorised; and the number of cases of disorderly trading (if any) perceived to be related to high-frequency trading;

- a report on the impact in practice of the newly designed transparency rules in equities trading; impact indicators should be the percentage of trading volume being executed following pre-trade transparent rules as opposed to dark orders; and the development in trading volume and transparency levels in equity like instruments other than shares;

- a report on the impact in practice of the newly designed transparency rules in bonds, structured products and derivatives trading; impact indicators for these two reports should be the size of spreads designated market-makers offer following implementation of the new transparency rules; and associated with that the development in costs of trading for instruments of various liquidity levels across the different asset classes;

- a report on the functioning of the consolidated tape in practice; impact indicators should be the number of providers offering the service of a consolidated tape; and the percentage of trading volume they cover and the reasonableness of the prices they charge;

- a report on the experience with the mechanism for banning certain products or practices; impact indicators should be the number of times the banning mechanisms have been utilised; and the effectiveness of such bans in practice;

- a report on the impact of the proposed measures in the commodity derivatives markets; impact indicator should be the change in price volatility on commodity derivatives markets following implementation of the MiFID Review;

- a report on the experience with the third country regime and a stock-taking of number and type of third country participants granted access; impact indicators should be the uptake of third country firms of the new regime; and the supervisory experiences in practice with such firms; and

- a report on experiences regarding the measures designed to strengthen investor protection; impact indicators should be the development of retail participation in trading of financial instruments following implementation of the MiFID Review; and the number and severity of cases where investors, in general, and retail investor, in particular, have suffered losses.

11. ANNEXES: TABLE OF CONTENTS

11. ANNEX 1: OPERATIONAL GLOSSARY OF MAIN TERMS EMPLOYED IN THE DOCUMENT

Admission to trading	The decision for a financial instrument to be traded in an organised way, notably on the systems of a trading venue.
Algorithm	An algorithm is a set of defined instructions for making a calculation. They can be used to automate decision making, for instance with regards to trading in financial instruments.
Algorithmic trading	Algorithmic trading is trading done using computer programmes applying algorithms, which determine various aspects including price and quantity of orders, and most of the time placing them without human intervention.
Approved Publication Arrangement (APA)	An Approved Publication Arrangement is a system that requires firms executing transactions to publish trade reports through a body that ensures timely and secure consolidation and publication of such data. See section 4 (on data consolidation) of the *Review of the Markets in Financial Instruments Directive.*
Approved Reporting Mechanism (ARM)	An approved reporting mechanism is a platform that reports transactions on behalf of firms. This can also be done via the multi-lateral trading facility or regulated market on which the transaction was performed.
Arbitrage strategy	An arbitrage strategy is one that exploits differences in price that exist due to market inefficiencies, for example, buying an instrument on one market and simultaneously selling a similar instrument on another market.
Asset Backed Security (ABS)	An Asset Backed Security is a security whose value and income payments are derived from and collateralized (or "backed") by a specified pool of underlying assets which can be for instance mortgage or credit cards credits.

Automated trading	The use of computer programmes to enter trading orders where the computer algorithm decides on aspects of execution of the order such as the timing, quantity and price of the order. A specific type of automated or algorithmic trading is known as high frequency trading (HFT). HFT is typically not a strategy in itself but the use of very sophisticated technology to implement traditional trading strategies.
Best execution	MiFID (article 21) requires that firms take all reasonable steps to obtain the best possible result for their clients when executing orders. The best possible result should be determined with regard to the following execution factors: price, costs, speed, likelihood of execution and settlement, size, nature or any other consideration relevant to the execution of an order.
Bid-ask spread	The bid-ask spread is the difference between the price a market maker is willing to buy an asset and the price it is willing to sell at.
Bilateral order	An order which is only discussed and disclosed to the counterparties to the trade.
Broker Crossing System (BCS)	A number of investment firms in the EU operate systems that match client order flow internally. Generally, these firms receive orders electronically, utilise algorithms to determine how they should best be executed (given a client's objectives) and then pass the business through an internal system that will attempt to find matches. Normally, algorithms slice larger 'parent' orders into smaller 'child' orders before they are sent for matching. Some systems match only client orders, while others (depending on client instructions/permissions) also provide matching between client orders and house orders. Broker crossing systems do not show an order book, and as noted above, simply aim to match orders; due to this nature they are sometimes compared to Dark Pools, which have similar characteristics.
Central Counterparty (CCP)	A Central Counterparty is an entity that acts as an intermediary between trading counterparties and absorbs some of the settlement risk. In practice, the

	seller will sell the security to the central counterparty, which will simultaneously sell it on to the buyer (and vice versa). If one of the trading parties defaults, the central counterparty absorbs the loss.
Circuit breaker	A circuit breaker is a mechanism employed by a market in order to temporarily suspend trading in certain conditions, including sudden, deep price falls. One aim of the use of circuit breakers is to prevent mass panic selling and to prevent associated herd behaviours.
Classification of clients	Protection requirements are calibrated in MiFID to three different categories of clients, notably clients, professionals, and eligible counterparties. The high level principle to act honestly, fairly and professionally and the obligation to be fair, clear and not misleading apply irrespective of client categorization.
Clearing eligible	A financial instrument which is deemed to be sufficiently standardised in order to be cleared by a central counterparty.
Client assets	Client assets are assets (cash, equities, bonds, etc) which belong to the client, but which are held by investment firms for investment purposes.
Committee of European Securities Regulators (CESR)	The Committee of European Securities Regulators was one of advisory committees, composed by national security regulators advising the Commission and coordinating the work of securities regulators, and has now been succeeded by the ESMA (cf below).
Commodities Futures and Trading Commission (CFTC)	The CFTC is a regulatory body responsible for the regulation of the commodity futures and option markets in the United States.
Commodity derivative	A financial instrument the value of which depends on that of a commodity, such as grains, energy or metals.
Competent authority	A competent authority is any organization that has the legally delegated or invested authority, capacity, or power to perform a designated function. In the context of MiFID, it refers to the

	body which is in charge of supervising securities markets. .
Complex product	A financial product the structure of which includes different components, often made of derivatives and the valuation of which will evolve in a non linear fashion.. These notably include tailor-made products such as structured products, asset backed securities, and non-standard OTC derivatives.
Conflicts of interest	The term conflict of interest is widely used to identify behaviour or circumstances where a party involved in many interests finds that two or more of these interests conflict. Conflicts of interest are normally attributed to imperfections in the financial markets and asymmetric information. Due to the diverse nature of financial markets, there is no general definition of a conflict of interest; however they are typically grouped into Firm/Client, Client/Client and Intra Group Conflicts. MiFID contains provisions for areas where conflicts of interest commonly arise and how they should be dealt with.
Consolidated tape	A consolidated tape is an electronic system which combines sales volume and price data from different exchanges and certain broker-dealers. It consolidates these into a continuous live feed, providing summarised data by security across all markets. In the US, all registered exchanges and market centres that trade listed securities send their trades and quotes to a central consolidator. This system provides real-time trade and quote information.
Credit Default Swap (CDS)	A credit default swap is a contract between a buyer and a seller of protection to pay out in the case that another party (not involved in the swap), defaults on its obligations. CDS can be described as a sort of insurance where the purchaser of the CDS owns the debt that the instrument protects; however, it is not necessary for the purchaser to own the underlying debt that is insured.
Cross-market behaviour	Trading strategies which involve placing orders or executing trades in several markets.

Dark pool	Dark pools are trading systems where there is no pre trade transparency of orders in the system (i.e. there is no display of prices or volumes of orders in the system). Dark pools can be split into two types: systems such as crossing networks that cross orders and are not subject to pre-trade transparency requirements, and trading venues such as regulated markets and MTFs that use waivers from pre-trade transparency not to display orders.
de Larosière group	The de Larosière group is a group chaired by former head of the Banque de France, Jacques de Larosière, mandated by EC President José Manuel Barroso to advice on reforms to financial services regulation and supervision. The group published a report in February 2009, which led to the establishment of the three new supervisory authorities including ESMA.
Dealer	A dealer is an entity that will buy and sell securities on their own account, acting as principal to transactions.
Derivative	A derivative is a type of financial instrument whose value is based on the change in value of an underlying asset.
Direct Market Access (DMA)	Participants require access to a market in order to trade on it. Direct market access is a form of sponsored access and refers to the practice of a firm, who has access to the market as a Member, to allow another 3rd party firm to use its own systems to access to the market It is different from the direct sponsored access in which the orders of the 3rd party are sent directly to the market through a dedicated system providing by the sponsoring Member
Directive	A directive is a legislative act of the European Union, which requires Member States to achieve a particular result without dictating the means of achieving that result. A Directive therefore needs to be transposed into national law contrary to regulation that have direct applicability.
Dodd Frank Act	The Dodd–Frank Wall Street Reform and Consumer Protection Act became law in the United

	States in 2010, introducing reforms to financial regulation.
ECOFIN	The Economic and Financial Affairs Council of the European Union.
Electronic order book trading	A system of transacting in financial instruments based on publicly available prices and sizes at which investors are willing to transact. It is distinguished from request for quote trading, where investors contact each other bilaterally in order to establish the prices which they can trade on.
EMIR	European Market Infrastructure Regulation.
EU Emission Allowance (EUA)	An allowance to emit one tonne of carbon dioxide equivalent during a specified period, as more specifically defined in Article 3(a) of Directive 2003/87/EC.
ESMA	The European Securities and Markets Authority is the successor body to CESR, continuing work in the securities and markets area as an independent agency and also with the other two former level three committees.
ETS	European Union Emission Trading Scheme a 'cap and trade' system: it caps the overall level of emissions allowed but, within that limit, allows participants in the system to buy and sell allowances as they require. These allowances are the common trading 'currency' at the heart of the system. One allowance gives the holder the right to emit one tonne of CO2 or the equivalent amount of another greenhouse gas. The cap on the total number of allowances creates scarcity in the market..
European Systemic Risk Board (ESRB)	The European Systemic Risk Board was set up in response to the de Larosière group's proposals, in the wake of the financial crisis. This independent body has responsibility for the macro-prudential oversight of the EU.
Execution-only service	Investment firms may provide investors with a means to buy and sell certain financial instruments in the market without undergoing any assessment of the appropriateness of the given product - that is,

	the assessment against knowledge and experience of the investor. These execution-only services are only available when certain conditions are fulfilled, including the involvement of so-called non-complex financial instruments (defined by article 19 paragraph 6 of MiFID).
Fair and orderly markets	Markets in financial instruments where prices are the result of an equilibrium between supply and demand, so that all available information is reflected in the price, unhindered by market deficiencies or disruptive behaviour.
Financial instrument	A financial instrument is an asset or evidence of the ownership of an asset, or a contractual agreement between two parties to receive or deliver another financial instrument. Instruments considered as financial are listed in MiFID (Annex I)
Fit and proper	Persons who effectively direct the business of an investment firm need to be of sufficiently good repute and sufficiently experienced as to ensure the sound and prudent management of the investment firm. This is the so called fit and proper test.
Fundamental data	Information on the supply and demand of goods and services in the real economy.
Hard position limit	A hard position limit is a strict pre-defined limit on the amount of a given instrument that an entity can hold.
Hedging	Hedging is the practice of offsetting an entity's exposure by taking out another opposite position, in order to minimise an unwanted risk. This can also be done by offsetting positions in different instruments and markets.
High frequency trading	High frequency trading is a type of electronic trading that is often characterised by holding positions very briefly in order to profit from short term opportunities. High frequency traders use algorithmic trading to conduct their business.
Inducement	Inducements is a general name referring to varying types of incentives paid to financial intermediaries in exchange for the promotion of specific products

	or flows of business.
Information asymmetry	An information asymmetry occurs where one party to a trade or transaction has more or better information than another party to that trade or transaction, giving it an advantage in that trade or transaction.
Insurance Mediation Directive	EU Insurance Mediation Directive (2002/92/EC), introducing requirements for insurance companies such as registration with a competent authority, systems and controls standards, regulation of handling of complaints, cancellation of products.
Interest rate swap	An interest rate swap is a financial product through which two parties exchange flows; for instance, one party pays a fixed interest rate on a notional amount, while receiving an interest rate that fluctuates with an underlying benchmark from the other party. These swaps can be structured in various different ways negotiated by the counterparties involved.
Intermediary	A person or firm who acts to bring together supply and demand from two other firms or persons. In the context of MiFID, intermediary are investment firms.
Investment services	Investment services are legally defined MiFID (article 4 and Annex I), and covers various activities from reception of orders, portfolio management , underwriting or operation of MTFs.
Indication of interest (IOI)	An indication of interest is where a buyer discloses that he wishes to purchase an instrument, often made before an initial public offering. This can also be called an expression of interest. An IOI does not force the party expressing an interest to act on it i.e. to trade on it.
Junior market	Junior markets are those on which smaller companies with shorter track records are often listed, as opposed to the established markets on which the larger, older companies are traded. Conditions for listing on these markets are usually less stringent and they are often seen as a starting point before eventually moving to a senior market.

Junior trading venue	See junior market.
Latency period	The time an order entered into a trading system stays in it before being executed or withdrawn.
Liquidity	Liquidity is a complex concept that is used to qualify market and instruments traded on these markets. It aims at reflecting how easy or difficult it is to buy or sell an asset, usually without affecting the price significantly. Liquidity is a function of both volume and volatility. Liquidity is positively correlated to volume and negatively correlated to volatility. A stock is said to be liquid if an investor can move a high volume in or out of the market without materially moving the price of that stock. If the stock price moves in response to investment or disinvestments, the stock becomes more volatile.
Lit market	A lit market is one where orders are displayed on order books and therefore pre trade transparent. On the contrary, orders in dark pools or dark orders are not pre trade transparent. This is the case for orders in broker crossing networks.
Lit order, dark order	A lit order is one the details of which can be seen by other market counterparts. A dark order is one which cannot be seen by other market counterparts.
Market Abuse Directive (MAD)	Directive 2003/6/EC of the European Parliament and of the Council of 28 January 2003 on insider dealing and market manipulation (market abuse).
Market abuse	Market abuse consists of market manipulation and insider dealing, which could arise from distributing false information, or distorting prices and improper use of insider information.
Market disorder	General trading phenomenon which results in the market prices moving away from those that would result from supply and demand.
Market efficiency	Market efficiency refers to the extent to which prices in a market fully reflect all the information available to investors. If a market is very efficient, then no investors should have more information than any other investor, and they should not be able to predict the price better than another investor.

Market fragmentation	Market fragmentation refers to the dispersion of business across different trading venues, where in the past there was only one venue. It requires traders to look for liquidity across different places.
Market integrity	Market integrity is the fair and safe operation of markets, without misleading information or inside trades, so that investors can have confidence and be sufficiently protected.
Market maker	A market maker is a firm that will buy and sell a particular security on a regular and continuous basis by posting or executing orders at a publicly quoted price. They ensure that an investor can always trade the particular security and in doing so enhance liquidity in that security.
Market operator	A firm responsible for setting up and maintaining a trading venue such a regulated market or a multi lateral trading facility.
Markets in Financial Instruments Directive (MiFID)	Directive 2004/39/EC that lays down rules for the authorisation and organisation of investment firms, the structure of markets and trading venues, and the investor protection regarding financial securities.
Multilateral Trading Facility	An MTF is a system, or "venue", defined by MiFID (article 4) which brings together multiple third-party buying and selling interests in financial instruments in a way that results in a contract. MTFs can be operated by investment firms or market operators and are subject to broadly the same overarching regulatory requirements as regulated markets (e.g. fair and orderly trading) and the same detailed transparency requirements as regulated markets.
Negative externalities	A negative externality in finance is usually a cost incurred by a party because of another party's decision. It means that not all information is reflected in the price that a party is required to pay.
Opaque market	See dark pool.
Order matching	Order matching is the process by which buying and selling interests of the same security at the same price and size are brought together, which takes

	place in venues such as broker crossing networks, where the orders of one party are matched to the bids of another, allowing them to conclude transactions at mid point, therefore saving on the bid offer spread.
Order resting period	The time an order waits on a trading system before it is executed. Similar to latency period.
Over the Counter (OTC)	Over the counter, or OTC, trading is a method of trading that does not take place on an organised venue such as a regulated market or an MTF. It can take various shapes from bilateral trading to trading done via more organised arrangements (such as systematic internalisers and broker networks).
Organised trading facility (OTF)	Any facility or system operated by an investment firm or a market operator that on an organised basis brings together multiple third party buying and selling interests or orders relating to financial instruments. It excludes facilities or systems that are already regulated as a regulated market, MTF or a systematic internaliser. Examples of organised trading facilities would include broker crossing systems and inter-dealer broker systems bringing together third-party interests and orders by way of voice and/or hybrid voice/electronic execution.
Placing	Placing refers to the process of underwriting and selling an offer of shares.
Position limit	A position limit is a pre-defined limit on the amount of a given instrument that an entity can hold.
Position management	Position management refers to monitoring the positions held by different entities and ensuring the position limits are adhered to.
Post-trade transparency	Post trade transparency refers to the obligation to publish a trade report every time a transaction in a share has been concluded. This provides information that enables users to compare trading results across trading venues and check for best execution.

Pre-trade transparency	Pre-trade transparency refers to the obligation to publish (in real-time) current orders and quotes (i.e. prices and amounts for selling and buying interest) relating to shares. This provides users with information about current trading opportunities. It thereby facilitates price formation and assists firms to provide best execution to their clients. It is also intended to address the potential adverse effect of fragmentation of markets and liquidity.
Pre-trade transparency waiver	A pre-trade transparency waiver is specified in MiFID (article 29) as a way for the competent authorities to waive the obligation for operators of Regulated Markets and Multilateral Trading Facilities (MTFs) regarding pre-trade transparency requirements for shares in respect of certain market models, types of orders and sizes of orders.
Price discovery	Price discovery refers to the mechanism of formation of the price of an asset in a market, based on the activity of buyers and sellers actually agreeing prices for transactions, and this is affected by such factors as supply and demand, liquidity, information availability and so on.
Primary Market Operation	Primary Market Operations are transactions related to the issuance of new securities. They differ from secondary market operations which deal with the trading of securities already issued and admitted to trading.
Principle of proportionality	Similarly to the principle of subsidiarity, the principle of proportionality regulates the exercise of powers by the European Union. It seeks to set actions taken by the institutions of the Union within specified bounds. Under this rule, the involvement of the institutions must be limited to what is necessary to achieve the objectives of the Treaties. In other words, the content and form of the action must be in keeping with the aim pursued. The principle of proportionality is laid down in Article 5 of the Treaty on European Union. The criteria for applying it is set out in the Protocol (No 2) on the application of the principles of subsidiarity and proportionality annexed to the Treaties.

Packaged retail investment products (PRIPS)	Packaged retail investment products are investment products marketed directly to retail customers and typically offer the potential to participate in the return and risk generated by an underlying instrument or index. They are therefore made of several components out of which an option is very often present. This is why they are called "packaged"..
Prospectus Directive	Directive 2003/71/EC of the European parliament and of the Council, which lays down rules for information to be made publicly available when offering financial instruments to the public.
Regulated Market	A regulated market is a multilateral system, defined by MiFID (article 4), which brings together or facilitates the bringing together of multiple third-party buying and selling interests in financial instruments in a way that results in a contract. Examples are traditional stock exchanges such as the Frankfurt and London Stock Exchanges.
Regulation	A regulation is a form of legislation that has direct legal effect on being passed in the Union.
Regulator /Supervisor	A regulator/supervisor is a competent authority designated by a government to supervise that country's financial markets.
Regulatory arbitrage	Regulatory arbitrage is exploiting differences in the regulatory situation in different jurisdictions or markets in order to make a profit.
REMIT	The proposed Regulation on Energy Market Integrity and Transparency, laying down rules on the trading in wholesale energy products and information that needs to be disclosed that pertains to those products.
Repository (Trade)	A mechanism that gathers together information on financial contracts, storing the essential characteristics of those contracts for future reference.
Retail investor/client	A person investing his own money on a non-professional basis. Retail client is defined by MiFID as a non professional client and is one of the

	three categories of investors set by this Directive besides professional clients and eligible counterparties.
Risk premium	The risk premium is the smallest return that investors would accept above the amount that a 'risk-free' asset would return. A risk-free asset is a theoretical asset that would never default. So the risk premium is the amount that an investor wants to be paid for taking risk.
Sanction	A penalty, either administrative or criminal, imposed as punishment.
Securities and Exchange Commission (SEC)	The US regulatory body responsible for the regulation of securities and protection of investors.
Secondary listing	A secondary listing is the listing of an issuer's shares on an exchange other than its primary exchange.
Single rulebook	The single rulebook is the concept of a single set of rules for all Member States of the union so that there is no possibility of regulatory arbitrage between the different markets.
Small cap	Small cap is short for small capitalisation, and refers to the value of the shares in issue, i.e. share price multiplied by the number of shares in issue. Small cap usually refers to listed SMEs.
Small and medium sized enterprises (SMEs)	On 6 May 2003 the Commission adopted Recommendation 2003/361/EC regarding the Small and medium sized enterprise definition. While 'micro' sized enterprises have fewer than 10 employees, small have less than 50, and medium have less than 250. There are also other criteria relating to turnover or balance sheet total that can be applied more flexibly.
Spread	This can refer to the bid offer spread (see separate entry).
Standardised derivative	A standardised derivative is one with regular features based on a standard contract.
Structured bond	A structured bond's value is linked to an underlying index or instrument, so that the bond would pay a

	coupon in the same way as an ordinary bond, but the actual value of the bond to be repaid would depend on the underlying performance that it is linked to.
Structured deposit	A structured deposit's return may be linked to some index or underlying instrument, so that the amount repaid is dependent on this underlying performance.
Supervisor	See regulator.
Swap Execution Facility (SEF)	A swap execution facility is a US trading venue similar but not identical to an exchange, whereby many different buyers and sellers can make bids and offers on swaps, and the SEF must also publish relevant data.
Syndication	Syndication is a process through which a group of banks are providing a loan to a debtor, usually with the division of risk and financing across the different banks which are part of the process (syndicate).
Systematic Internaliser	Systematic Internalisers (SIs) are investment firms which, on an organised, frequent and systematic basis, deal on own account by executing client orders outside a regulated market or an MTF.
Systemic failure	A systemic failure refers either to the failure of a whole market or market segment, or the failure of a significant entity that could cause a large number of failures as a result.
Tied agent	A company or sales person who can only promote the service of one particular provider (generally their direct employer).
Trading venue	A trading venue is an official venue where securities are exchanged. In MiFID, it consists of MTFs and regulated markets.
Transaction reporting	Investment firms are required to report to competent authorities all trades in all financial instruments admitted to trading on a regulated market, regardless of whether the trade takes place on that market or not. It covers all transactions on these instruments, including OTC trades.

	Transaction reporting is not public, and contains more details about the transaction than pre and post trade transparency.
Transparency	The disclosure of information related to quote (pre trade transparency) or transactions (post trade transparency) relevant to market participants for identifying trading opportunities and checking best execution and to regulators for monitoring the behaviour of market participants.
Transparency Directive	Directive 2004/109/EC of the European Parliament and of the Council which lays down rules for the publication of financial information and major holdings.
Undertakings for Collective Investment in Transferable Securities Directives (UCITS)	Undertakings for Collective Investment in Transferable Securities Directives, a standardised and regulated type of asset pooling.
Underwriting	Underwriting can refer to the process of checks that a lender carries out before granting a loan, or issuing an insurance policy. It can also refer to the process of taking responsibility for selling an allotment of a public offering.
Volatility	Volatility refers to the change in value of an instrument in a period of time. This includes rises and falls in value, and shows how far away from the current price the value could change, usually expressed as a percentage.

12. ANNEX 2: PROBLEM DEFINITION – BACKGROUND AND TECHNICAL DETAIL

12.1. Problem 1: lack of level playing field between markets and market participants

The implementation of MiFID has dramatically changed the structure of financial markets across Europe, notably in the equity space. Technological advances have also had a significant impact on the development of equity markets. The conduct of market participants has evolved to reflect these developments. These changes have helped stimulate competition but have also led to the application of different regulatory regimes to similar trading activities, which can distort the level playing field between markets and market participants.

There are **five main reasons** for this situation.

12.1.1. *The uneven operating conditions between Regulated Markets and Multilateral Trading Facilities (MTFs)*[117]

Through the removal of the concentration rule[118], MiFID has facilitated competition between various trading venues, mainly regulated markets and MTFs. Technological innovations have allowed market participants to fully exploit this new competitive environment.

Equities have been the asset class most clearly impacted by the implementation of MiFID as the majority of equity trading takes place on exchanges (total trading in EEA shares amounted to €18.7 trillion in 2010 with OTC trading accounting for 37%[119]) as opposed to non-equity instruments such as bonds and derivatives which predominantly take place OTC. There are currently 231 trading systems (139 MTFs, 92 regulated markets and) and 12 systematic internalisers[120] registered in the CESR MiFID database. Out of these 231 trading systems, 45 Regulated Markets and 50 MTFs are offering trading in cash equities.[121] The growth of the market share of MTFs in equities markets has greatly accelerated since the introduction of MiFID. Altogether, MTFs are now assessed to represent between 25 to 30% of the trading activity on the main listed equities[122] although these figures differ substantially across markets. CESR[123] also explained in one of its reports that this trend is more pronounced for UK shares, Euronext shares and German shares, and less so in the Italian and Nordic markets so far. The differences between national markets are mainly explained by the relative liquidity of these markets. The MTFs that offer pan-European trading (i.e. the shares are admitted to trading on their primary market, usually being the national stock exchange) tend to cover the most liquid shares (UK shares for instance) and get higher market share in the trading of these stocks.

As per Thomson Reuters below the largest MTFs, being Chi-X, BATS Europe and Turquoise, accounted for 23% of the on exchange equity turnover in the EU as of January 2011.

– **TABLE 1:** Market share by venue – all European equities – January 2011

Venue	Group Turnover (€m)	%ge
LSE Group	228.765	22,44%
Euronext	147.315	14,45%
CHI-X	144.044	14,13%
Deutsche Boerse	116.431	11,42%
Spanish Exchanges	98.774	9,69%
SIX Swiss	62.385	6,12%
Nasdaq OMX Nordic	57.658	5,65%
BATS Europe	57.224	5,61%
MICEX	52.463	5,15%
Turquoise	30.891	3,03%
Oslo	18.367	1,80%
All Other Venues (42)	5.335	0,52%
Total on exchange equity turnover	**1.019.652**	**100,00%**

Source: Thomson Reuters website[124]

Under MiFID the two types of multilateral trading venues (i.e. regulated markets and MTFs) are subject to high level requirements in terms of organisational arrangements and market surveillance[125]. Two main concerns have been expressed in that respect: lacks of alignment in both the organisational and the market surveillance requirements for these two types of trading venues when operating similar types of businesses.

First, differences in the details of organisational requirements in MiFID that apply to MTFs and regulated markets may lead, in practice, to the application of a less stringent regime for the former in situations where the venues are providing comparable services[126]. Organizational requirements for investment firms operating MTFs are not specific to this activity but are part of the overall organisational requirements for investment firms irrespective of the investment service or activity carried out, whereas regulated markets are subject to detailed organizational requirements specific to the activity of operating a trading venue. In addition investment firms operating a MTF are required to employ appropriate and proportionate resources and systems to ensure the provision of their services[127]. This concept of "proportionate approach" is identified by CESR as the key source of a potential unlevel playing field between RMs and MTFs[128]. Further the concept of admission to trading only applies to regulated markets in line with the current scope of the Market Abuse Directive ("MAD")[129] which applies to instruments admitted to trading on a regulated market. But with the review of MAD and the extension of the market abuse prohibitions to financial instruments admitted to trading on other organised trading platform such as MTFs, the concept of admission to trading would need to be extended to organised trading platforms beyond regulated markets.

Second, existing obligations on operators of regulated markets and MTFs to monitor trades conducted on their venues in order to identify breaches of rules, disorderly trading and market abuse, are not properly coordinated, given that a financial

instrument can be traded on a number of different platforms (as per above trading in the most liquid shares is spread among several trading platforms).

12.1.2. The emergence of new trading venues and market structures that do not fall within the scope of the definition of either regulated markets or MTFs

They can take various forms and operate under various schemes, especially where the trading of derivatives products is concerned.

Equities markets

One such innovation in the field of equities markets is the development of broker crossing systems (BCSs). On the equity markets, matching of client orders is an activity traditionally carried on by investment firms acting as brokers. While such activities are still carried on manually by some investment firms acting as brokers, in the last few years, some investment firms have increasingly developed automated systems (known as broker crossing systems) to help internally match client orders where possible. The execution of clients' orders is subject to client-oriented conduct of business rules130, but the activity of operating a system to match clients' orders is not regulated as a market unless it meets the criteria for being defined as a multilateral trading facility (MTFs).131 Such electronic systems can be viewed as a hybrid between a facility to assist execution of clients' orders and a multilateral system that brings together orders. These systems are perceived as carrying out similar activities to MTFs or systematic internalisers without being subject to the same regulatory requirements both in terms of transparency and investor protection132. Unlike MTFs these systems are not subject to pre-trade transparency rules133 but only to post-trade transparency requirements, and do not need to have monitoring systems in place in order to identify conduct that may involve market abuse[134].

The fact finding carried out by CESR found that actual trading through these systems was "very low, ranging from an average of 0.7% [of total EEA trading] in 2008 to an average of 1.15% in 2009 (increasing to 1.5% in the first quarter of 2010)"[135]. This means that between 2008 and the 1st quarter of 2010 this % has tripled to reach 1.5% of total EEA trading in shares, or between 4% and 5% of OTC equity transactions[136]. The following table shows the results of the CESR survey.

– **TABLE 2**: Trading executed in brokers' crossing networks

	2008				2009				2010
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Value (in € billions)	38	40	43	40	28	37	48	56	58,9
Crossing as a % of OTC trading	1,5%	1,2%	2,0%	3,0%	2,4%	2,1%	4,4%	4,0%	4,4%
Crossingas a % of total EEA trading	0,6%	0,6%	n.a.	0,7%	0,9%		0,9%	1,4%	1,5%

In the same report CESR acknowledged the concerns expressed by some market participants and regulators about the speed of growth of BCSs and the potential impact of this dark trading (as opposed to lit trading which is subject to pre-trade transparency) on price formation in the future. Pre-trade transparency is key for the price formation process and dark trading (including both broker crossing networks

and dark pools – i.e. platforms operated by a RM or a MTF and benefiting from pre-trade transparency waivers) is expected to increase in the near future following a similar path to the United States where dark trading made up 13.27% of consolidated US equities trading volume at the end of 2010[137] and is expected to still grow further with estimates by the end of 2011 of 15%..

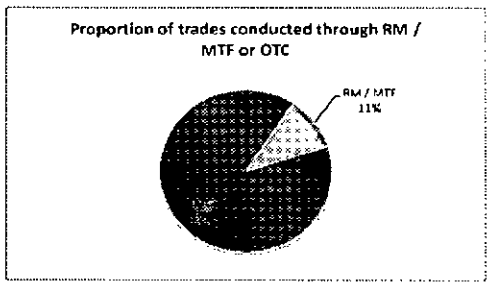
Fixed income markets

Unlike equities, corporate and financial bonds are not as actively traded (fixed income markets seek more long term goals and instruments are generally held to maturity); the trading landscape is therefore dominated by government bonds. Estimates show in the region of 27% of daily traded debt relates to non-government bonds compared to 73% for government bonds[138].

While trading in bonds is dominated by government debt, this is primarily traded OTC and is rarely listed on exchange. Rather, approximately 97% of EU bond listings relate to non-government debt (both on the domestic market and debt issued on the international bond market)[139].

Although non-government debt may be listed, trading does not necessarily occur on exchanges; rather, estimates based on UK FSA transaction reporting data show that approximately 89% of non government debt trading occurs OTC[140].

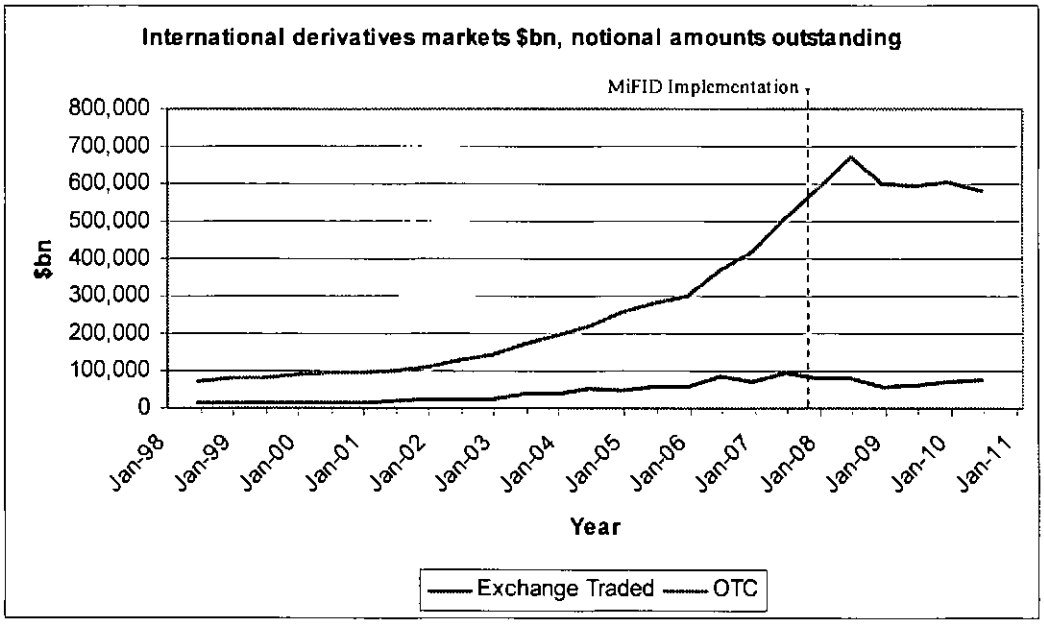
FIGURE 1



Derivatives markets

On the derivatives markets, the OTC portion of the market is largely predominant. As of December 2009, approximately 89% of derivatives contracts were transacted over-the-counter (OTC)[141]. The Bank for International Settlements (BIS) has estimated that the total OTC derivative outstanding as of June 2010 was $583 trillion. This represents a more than doubling in notional outstanding from five years earlier.[142]

– **FIGURE 2.**



Source: BIS Statistics on Exchange Traded Derivatives, and BIS Semi annual OTC Derivatives Statistics.

The EU is a key location for OTC trading with the UK, France, and Germany accounting for almost half of the global daily turnover - a breakdown by country is shown below[143].

- **TABLE 3**: Location of OTC derivatives turnover by average daily turnover

Location of OTC derivatives turnover by average daily turnover			
	2001	*2004*	*2007*
	% share	*% share*	*% share*
UK	*33,7*	*38,0*	*40,9*
US	*15,3*	*19,3*	*18,6*
France	*5,7*	*6,6*	*5,4*
Japan	*7,1*	*6,0*	*4,4*
Singapore	*3,9*	*3,2*	*4,1*
Switzerland	*3,4*	*2,4*	*4,0*
Germany	*8,5*	*4,1*	*3,2*
Hong Kong SAR	*2,8*	*2,6*	*3,1*
Australia	*2,7*	*2,7*	*3,0*
Others	*16,8*	*15,0*	*13,3*

But the OTC markets have seen an increasing take up of electronic trading, i.e. OTC trades that are executed on an electronic platform, next to the traditional voice brokering services.

- **TABLE 4**: Estimated monthly turnover by method of execution for all venues (bilateral and multilateral) for OTC derivatives product classes as of June 2010[144]

	Voice Execution	Electronic Execution
Interest rate derivates	87.7%	12.3%
Credit derivatives	83.3%	16.7%
Equity derivatives	85.7%	14.3%

OTC trades can be executed on bilateral or multilateral platforms.

- **TABLE 5**: Estimated monthly turnover by type of trading platform for OTC derivatives product classes as of June 2010145

	Bilateral Execution	**Multilateral platforms**
Interest rate derivatives	68.9%	31.1%
Credit derivatives	62.6%	37.4%
Equity derivatives	82.9%	17.1%

Various forms of organised trading platforms have been developing. These electronic platforms (e.g. single dealer platform, multi dealer platforms, and inter dealer broker platforms) are operated by investment firms not regulated as trading venues, and hence not subject to the market-oriented rules of organised trading venues such as pre-trade transparency and market surveillance duties.

By location for the 2nd quarter of 2010, BIS found that 50.8% of the total turnover in organised platform traded derivatives took place on North American markets, 42.4% in Europe, 4.0% in the Asia-Pacific region, and 2.9% elsewhere.[146]

Significant efforts are underway to improve the stability, transparency and oversight of OTC derivatives markets. As part of this, it has been agreed globally to ensure that, where appropriate, trading in standardised OTC derivatives moves to exchanges or electronic trading platforms.[147] This is why there is a need to define what type of trading platforms would be eligible for trading of derivatives and to what types of transparency and organizational requirements it would be subject to. Faced with a similar situation, the US authorities, through the recent Dodd Frank Wall Street Reform and Consumer Protection Act[148] has created, for derivatives, the new concept of Swap Execution Facilities (SEFs)[149] that aims at bringing such trading venues or structures within the scope of financial services regulation. A SEF would be a form of organised trading facility, bringing together multiple participants. This platform would be subject to real time post-trade transparency with delays for large trades ("block trade exemptions"). The level of pre-trade transparency is still under discussion and will depend on the type of trading model the SEF definition will encompass.

12.1.3. The rapid technological changes that equity markets have been witnessing over the last few years

Automated trading also known as algorithmic trading can be defined as the use of computer programmes to enter trading orders where the computer algorithm decides on aspects of execution of the order such as the timing, quantity and price of the order. This form of trading is used by an increasingly wide range of market users (including for example funds and brokers). A third of all EU and US stock trades in 2006 were driven by automatic programs, or algorithms, according to Boston-based financial services industry research and consulting firm Aite Group

A specific type of automated or algorithmic trading is known as high frequency trading (HFT). HFT is typically not a strategy in itself but the use of very sophisticated technology to implement traditional trading strategies.[150] HFT traders execute trades in matters of milliseconds on electronic order books, and are getting in and out of positions during the day with little or no exposed position at the end of the day. The scale of HFT in Europe already accounts for a significant portion of equity trading in the EU, and is expected to grow further. According to CESR[151], HFT trading accounts from 13% to 40% of total share trading in the EU. As a comparison, HFT traders account for as much as 70% of all US equity trading volume[152].

– **TABLE 6**. Share of HFT by trading venue (shares of order books)153

Trading venue	High-Frequency Trading [a]
Chi-X	40%
London Stock Exchange	32%
BME	25-30%[b]
NYSE Euronext	23%
Borsa Italiana	20%
Turquoise	19%[b]
Nasdaq OMX	13%[b]

[a] % of total trading value. [b] % of total trading volumes

Existing evidence is inconclusive about the impact of automated trading and HFT on market efficiency and liquidity (see Annex 17 for a literature review of market impact of HFT and automated trading). Some studies suggest that HFT using market making (i.e. orders sent to capture the spread between the bid and ask quote) and arbitrage strategies (i.e. capturing price differences between trading platforms) has added liquidity to the market, reduced spreads and helped align prices across markets. However, there is evidence that the average transaction size has decreased and some participants question the value of the additional liquidity provided[154]. The average transaction size is lower for MTFs than for regulated markets which might be partly explained by the greater use of algorithmic trading by the MTF customers[155]. Some participants argue there may be improved liquidity for investors who trade retail-size orders but it is now more difficult for institutional investors to

execute large orders. Also, there are different views about whether HFT increases or reduces market volatility. Eventually, some argue there may be a link between HFT and the increased use of dark liquidity – i.e. any pool of liquidity which is not pre-trade transparent such as broker crossing networks and dark pools - as opposed to lit markets.[156]

Perhaps the most significant new risk arising from automated trading is the threat it can pose to the orderly functioning of markets in certain circumstances. Such threats can arise from rogue algorithms, from algorithms overreacting to market events or from the increased pressure on trading venue systems to cope with the large numbers of orders generated by automated trading.[157] For HFT there are concerns that not all high frequency traders are currently required to be authorised under MiFID as the exemption in Article 2.1(d) of the framework directive for persons who are only dealing on their own account can be used by such traders. Therefore there is a concern that even if a HFT trader is involved in a significant amount of trading they may not necessarily be subject to MiFID requirements and therefore to supervision by a competent authority.

While HFT represent an increased and substantial share of the transactions on the markets and the liquidity they provide to the market may replace the more traditional market making activities, high frequency traders have no incentive or obligation to continue to provide ongoing liquidity to the market unlike registered market makers. Therefore, they are able to provide or withdraw liquidity at any time which may cause market disruptions as this would mean a sudden increase or drop in the amount of transactions entered into for a particular instrument.

Finally arrangements such as Direct Market Access (DMA) and Sponsored Access (SA) are offered by firms to automated and HFT traders to reduce their latency (i.e. time needed to have access to the order book of these electronic platforms) as speed is crucial for these players. According to CESR[158], Sponsored access (SA) is an adaptation of the concept of direct market access (DMA). Under SA arrangements, clients of firms that are members of an organised trading platform can access the trading platform directly without becoming members themselves. Under such arrangements, clients submit orders to the trading platform by routing them through the firm's internal system. DMA is similar, except clients send orders directly to the trading platform without passing through the firm's internal system. In the absence of proper controls these arrangements may present risks which have been identified by CESR as revolving around the risk of erroneous activity, the possible impact on the integrity and orderly functioning of markets, and the risks for sponsoring firms[159]. IOSCO has also identified similar risks in its report on "Principles for Direct Electronic Access to Markets"[160].

12.1.4. The growth of Over The Counter (OTC) trading.

For equities, OTC trading is perceived by certain market participants to account for a much higher proportion of transactions than initially considered. In 2009, OTC is estimated to have represented 37.8 % of overall European turnover in shares[161] . The

consequences according to some national supervisors, such as the Autorité des Marchés Financiers (AMF)[162], is that it threatens the quality of price formation on exchanges and its representative nature as a substantial part of the transactions are not being taken into account.

As highlighted above under point 2, OTC trading is also an important feature for non equity products such as bonds and derivatives for which it is the main mode of trading. Significant efforts are underway to improve the stability, transparency and oversight of OTC derivatives markets. The legislative proposal by the Commission[163] on financial market infrastructure aims at improving the functioning of derivatives markets by increasing the transparency of these markets for regulators and decreasing counterparty and operational risks while the proposed regulation on short selling[164]will bring more light on the use of certain derivatives such as Credit Default Swaps on sovereign debt.

In addition to these structural measures, it has been agreed globally to ensure that, where appropriate, trading in standardised OTC derivatives moves to exchanges or electronic trading platforms.[165]

There are less than 2,000 standardised interest rate swaps executed globally on an average day. The most liquid swaps (10-year dollar interest rate swaps) trade about 200 times per day, while most swaps trade less than 20 times per day. In the credit default swap (CDS) market, ISDA notes that the most liquid reference entities (all of which were sovereign entities) averaged 20 trades per day, while the average trade size is around US$5 million for single name CDS.[166]

At a minimum this would imply that trading on exchanges and electronic platforms becomes the norm when the market in a given derivative is sufficiently well developed, and when the shift to such platforms furthers the G20 commitment.[167] Benefits of on exchange or electronic platform trading incremental to those brought about by greater standardisation, central clearing and reporting to trade repositories include increased transparency for example of price formation,[168] improved oversight and increased competition between financial services providers. Action to implement the G20 commitments will be discussed in the policy options.

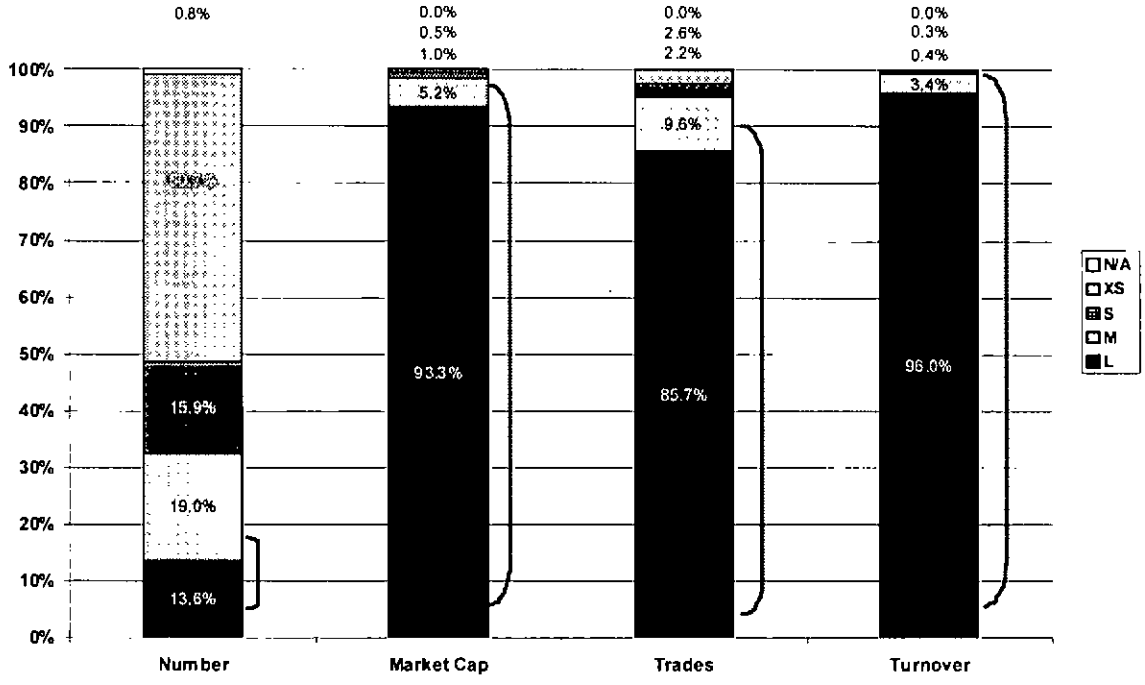
12.2. Problem 2: Difficulties for SMEs to access financial markets

Small and medium enterprises (SMEs) receive a very modest part of total investment in equity capital markets. While they are the majority in terms of listed companies, they are a minority in terms of capitalisation and in particular on volumes of trading. Market liquidity is concentrated on large companies.

Recently collected data by the Federation of European Stock Exchanges (FESE)[169] shows the relative importance of listed companies in the EU stock exchanges by market capitalisation. FESE establishes four categories of companies (see figure below): micro caps (XS $\leq$ €50M)), small caps (S: between €50M and €150M), mid caps (M: between €150M and €1b) and large cap (L: $\geq$ €1b). The first column presents the relative importance (%) by number of listed companies (equity issuers);

the second column by market capitalisation; the third column shows the trades in number, while the fourth column shows the turnover in volume.

– **FIGURE 3:** Share of Market Cap, Trades and Turnover against numbers of SMEs in Markets



Source: FESE.

Although FESE did not utilize the SME definition used in EU legislation[170], it is evident from the data that SMEs being present in markets fail to attract investments or liquidity which is largely absorbed by large companies.

In addition, the shallow liquidity of SMEs tends to lead to more volatility and therefore again prevents further investors from investing.[171] In addition, the related costs for going and being public such as for example cost of compliance with regulatory requirements, costs associated with the intervention of other intermediaries as well as indirect costs are only marginally proportional to the size of the capital raised. As the amount of capital that SMEs can raise on the markets is limited, the related costs may appear too high and SMEs are increasingly reluctant to bear these costs.

Market operators try to tackle this issue by creating trading venues specialized on SMEs, mostly falling under the MiFID MTF category (also known as exchange-regulated, junior, growth or alternative markets). Regular information and disclosure requirements for shares admitted to trading on MTFs are usually lighter than on regulated markets as the disclosure and organisation requirements established in the EU rules do not apply. Instead such markets are subject to higher level transparency

requirements that apply to MTFs. Member States and/or the exchanges themselves may extend the regulated market requirements to companies listed in those markets, but they rarely do so[172].

Currently around 20 trading venues operate across the EU with requirements for listing lighter than on regulated markets (and therefore lower costs) in order to attract smaller companies. In addition to being lighter, the listing requirements which apply are also different between SME markets. For instance, some markets do not ask for application documents or even a prospectus. Moreover, requirements differ concerning a minimum standard for operating history and free floats, trading rules, periodicity of financial reporting, need for external audit or not, and use of international (IFRS/IAS) or local accounting standards etc.

– **TABLE 7**: Summary of Key Listing and On-going Requirements of SME Markets

		Admission process (application of Prospectus Directive; authorisation of admission document)	Requirement for/ role of "key adviser"	Minimum standards (operating history, free float)	Trading rules	On-going financial reporting (annual, semi-annual or quarterly; audited or not)	Use of IFRS (IAS) or accounting standar
CEESEG Wiener Boerse Dritter Markt	Austria	Public offer with prospectus or placement with limited information (subject to acceptance by exchange)	Mandatory "Capital Market Coach". Mix of duties - checks "basic fitness" of firms for Dritter Markt. Also acts as liquidity provider for auction trading.	One year history versus standard three years on the Official Market (and one year on the Second Regulated Market). Main market requires free float of at least 10,000 shares.	Continuous trading, with market makers Single intra-day auction: mandatory market maker or liquidity provider	Audited annual (within 5 months of year-end); unaudited semi-annual (within three months). Time limits are four and two months respectively on Main Market, which also requires quarterly reporting.	National accounting s IFRS (IFRS on Main I
Bulgaria Unofficial Market "A"	Bulgaria	na	na	na	na	na	na
Cyprus Emerging Companies	Cyprus	If the offering is public, greater than €2.5 million and is addressed to over 100 persons, a Prospectus and approval from the Securities and Exchange Commission will be required. Through private placement, if addressed only to institutional investors (strategic or other) or to fewer than 100 persons and less than €2.5 million will be raised, an Admission Document must be submitted to the CSE by Nominated Adviser, without a requirement for approval by the Securities and Exchange Commission.	Nominated adviser required (and changes in the nominated adviser are reportable). Nominated adviser presents admission document to the CES.	Two year history (versus four on the Main Market in Cyprus). No free float minimum (versus 25%, with at least 1000 investors on Main Market). No minimum market capitalisation (versus €17 million on Main Market)	na	Audited annual (four months), unaudited semi-annual report (two months). Main Market requires quarterly reporting.	na
NYSE Euronext Alternext	France, Belgium, Netherlands	Public offer (prospectus approved by AMF) or private placement or direct listing. Latter two responsibility of listing sponsor/issuer.	Listing Sponsor required. Performs due diligence on issuer before and helps with on-going compliance after admission.	Two year track record versus three year track record on NYSE Euronext. No minimum free float if placement (or €2.5m if IPO), versus 25% on NYSE Euronext.	Single daily call auction unless achieving at least 2500 annual trades achieved when option to switch to continuous trading system possible. Trading can be on or off central order book (if on, aided by Liquidity Providers). Of Alternext stocks 86 have designated Liquidity Providers.	Audited annual; unaudited semi-annual. Quarterly reporting required on NYSE Euronext.	IFRS (local GAAP for companies not makir would still require rec table) versus IFRA or NYSE Euronext.
DB Entry Standard	Germany	For public offerings: the prospectus approved and notified by the national regulator, for private placements: memorandum, which is the sole responsibility of the company. On General and Prime Standard a Prospectus is mandatory.	Listing Partner is mandatory in order to assist issuer in its compliance	At least one set of audited accounts (versus three years on General or Prime Standard). No minimum size requirement. At least 30 shareholders (versus initial free-float of 25% on General or Prime Standard).	na	Audited annual in 6 months; unaudited semi-annual in 3 months (no prescribed format to latter) versus time limits of four months and two months respectively on General Standard. Quarterly reporting required on Prime Standard only.	IFRS or national GAA for General or Prime segment.
Boerse Stuttgart bwnt	Germany	na	Listing Expert (Emissionsexpert) appointed by the Munich Stock Exchange assists with compliance at admission and beyond.	Minimum capitalisation €10m. At least 5% free float. Must be based in Baden-Wuerttemberg.	Order-driven supported by Liquidity Provider, EUWAX AG.	na	na
Munich (Bavarian) SE m:access	Germany	MSE approval	na	Minimum capital of €1m.	na	Audited annual versus Audited annual; semi-annual and quarterly reporting on Regular Market.	German accounting s (versus IFRS on Regu
ATHEX EN A	Greece	Prospectus or Information Memorandum versus Prospectus on Main List.	Nominated adviser mandatory pre-admission and for at least two years thereafter. Assesses appropriateness of listing and submits document to ATHEXs Evaluation Committee.	Two years accounts (one year with ATHEX permission), two years tax audit versus three years for Main List (and minimum profit requirements). Free float at 10% (provided at least 50 people) versus 25% (2000 people) on Main List Minimum capital of €1m.	Mostly comparable to main market. Specified that one hour of continuous trading within pre-set fluctuation limits (10 or 20%)	Audited annual; unaudited semi-annual (time limits to report not stated). Main List also requires quarterly reporting.	IFRS or equivalent if I country. Same as Ma
Irish Stock Exchange iEX (Enterprise Securities Marke	Ireland	No pre-vetting of ESM admission documents by the ISE unless Prospectus required.	ESM adviser must be appointed to assess suitability and assist in the admission process.	No specific admission criteria other than the requirement for an applicant to have a minimum market capitalization of €5 million. No trading record required (versus three years on the official list). No minimum number of shares to be held in public hands (versus minimum 25% free float on the official list)	Trading rules are same as for the official market.	Audited annual (within 6 months); unaudited semi-annual (within 3 months).	IAS if EEA; non-EEA from limited choice,
AIM Italia	Italy	Admission document. No vetting by Borsa or by CONSOB (unless public offer prospectus) versus mix of CONSOB and Borsa Italiana vetting on main market.	Must have Nominated Adviser. Nomads are obliged to guarantee information transparency for investors, focus the firm's attention on the rules that apply to it as a publicly quoted company – supporting company to ensure it	No minimum free float (versus 25% on main market). No minimum market capitalisation (versus €40m on main segment). No minimum trading history (versus three years on the main segment)	Choice of continuous trading or volatility auction.	Audited annual; unaudited semi-annual. Main market also requires quarterly reporting.	[IFRS on all,]

		Admission process (application of Prospectus Directive; authorisation of admission document)	Requirement for/ role of "key adviser"	Minimum standards (operating history, free float)	Trading rules	On-going financial reporting (annual, semi-annual or quarterly; audited or not)	Use of IFRS (IAS) or local accounting standards
Borsa Italiana MAC	Italy	na	na	na	na	na	na
Alternative Companies List	Malta	na	na	10-20% free float minimum on ACL.	na	na	na
Warsaw NewConnect	Poland	Private placements for up to 99 institutional and individual investors. In this case, irrespective of the size of the issue, the admission to trading is based on a short and simple information document prepared and approved by an Authorised Advisor. A public offering requires the issuer has to comply with the same admission procedure as that binding in the regulated market with the obligatory issue prospectus approved by the Financial Supervision Commission (KNF). In the case of offerings up to €2.5 million, the admission may be based on an information memorandum subject to KNF's scrutiny.	Authorised Adviser required pre-admission and for at least one year thereafter. Market Maker required for two years (may be same as Authorised Adviser).	na	Choice between continuous, price-driven market or, if order-driven, can be in either in continuous trading system or single-auction system.	Audited annual; non-audited semi-annual reports including only selected information (versus on Main Market the semi-annual reports require an audit and quarterly reporting is obligatory).	Free choice of accounting standards (any internationally recognised standards or standards applicable at the company's base). [IFRS required on Main Market.]
Ljubliana Entry Market	Slovenia	na	na	No operating history requirement (versus three on Prime or Standard Market). Minimum free float of 25% on Standard (with 150 investors).	na	na	National accounting standards.
Bolsa de Madrid, MAB	Spain	MAB approval.	Registered Advisor checks compliance with MAB rules at admission and on a continuing basis. Liquidity Provider also required.	At least €2m free float.	na	Audited annual (four months after year-end); unaudited semi-annual (same form as annual reports, three months after period-end). On main market the half-year reports required within two months; also requires quarterly reporting.	IFRS.
NASDAQ OMX First North	Sweden, Denmark, Finland, Baltic States	Prospectus is needed only when securities are offered to the public (versus on the Main Market a prospectus must be prepared, published and approved by the relevant authorities prior to listing).	Firms must have a Certified Adviser. The Certified Adviser ensures that the company meets the admission requirements and the continuous obligations associated with having shares admitted to trading on First North. Furthermore, the Adviser constantly monitors the company's compliance with the rules and immediately reports to the Exchange if there should be a breach of the rules.	No minimum operating history (versus three years on the Main Market). Sufficient number of shareholders and at least 10% of shares in public hands, or an assigned Liquidity Provider (versus 25% free float on Main Market). No minimum market value €1m on Main Market).	Order-driven through INET. Liquidity Providers on some Helsinki and Stockholm stocks (according to the minimum requirements, the Liquidity Provider must quote prices corresponding to a defined minimum value, on both buy and sell sides so that the prices do not deviate more than 4% from each other. The prices must be quoted at least 85 per cent of the time during continuous trading).	Audited annual (to be within three months of relevant period end); non-audited semi-annual reports (to be within two months); optional quarterly reports. (On "Premier" need at least one report other than annual report to be prepared under IFRS). Quarterly reporting required on Main Market.	Home GAAP (IFRS for "Premier" segment). IFRS required on the Main Market.
Nordic Growth Market	Sweden, Norway	Prospectus (approved by Swedish FSA or NGM dependendent upon circumstances).	Not required	At least 300 shareholders; at least 10% of shares and 10% of votes in public hands.	na	na	na
AktieTorget AB	Sweden	Prospectus or Information Memorandum (latter approved by AktieTorget)	Not required.	At least 200 shareholders with at least 10% of shares in public hands.	Order-driven (INET).	na	na
LSE AIM	UK	Admission document or Prospectus dependent on form of the offer.	Firm seeking admission must appoint a Nominated Adviser (Nomad). Nomads are responsible for advising companies on the interpretation of and compliance with the rules (both for admission and on on-going compliance) - acts as "primary regulator". Firm must also retain broker (can also be Nomad).	No free float requirement (versus 25% on Full List); No minimum trading requirement (versus three years on Full List).	Quote-driven market maker system, mostly using SEAQ (non electronic executable quotation trading platform) although some of more liquid (for AIM) stocks are traded on SETSqx (which is hybrid of order- and quote-driven).	Audited accounts (within 6 months of year-end versus four months on Full List); Half-yearly (three months versus two months on Full List); No Interim Management statement requirement.	FRS or US, Canadian, Japanese or Australian GAAP (versus IFRS or equivalent on Full List).
Investbx	UK	Investbx approval of admission document.	na	na	On-line auction via Sharemark. Auctions are not daily.	na	na
PLUS-quoted	UK	Prospectus or Admission Document.	PLUS Corporate Adviser required to make application for admission.	No quantitative minimums set.	Quote-driven market maker system.	Audited annual (within five months) and half-realy (within three months).	IFRS, UK or US GAAP (others only with PLUS approval).

As presented above, the current market structure of SME markets widely diverges in terms of applicable rules. This variety of different requirements leads to fragmentation and prevents market networks. SME markets often focus on regional or even local capital markets[173] and are not interconnected with each other although stakeholders claim for a pan-European market as a prerequisite for more liquidity[174]. MiFID allows already secondary listings in regulated markets and in MTFs for a security that has already been admitted to trading on a regulated market[175]. However, this is not the case for secondary trading on another MTF as different standards may apply. As a consequence, today these types of networks between SME markets can develop only if there are bilateral private agreements between the MTF market operators. While such a fragmentation limits investments and therefore liquidity, a harmonized framework may enable SMEs and investors to gain access to an international capital pool.[176]

– **TABLE 8**: Overview of SME-focused Markets in the EU

		Reference date	Total number of issuers	Of which foreign	New issuers in 2009 (2010)	Delistings, 2009 (2010)	Total MV, €m	Average MV, €m	Issuance in 2009 (2010), €m
CEESEG Wiener Boerse Dritter Markt	Austria	31-Dec-10	35	9	10	7	1,101.6	30.6	na
Bulgaria Unofficial Market "A"	Bulgaria	31-Dec-10	70	na	na	na	na	na	na
Cyprus Emerging Companies	Cyprus	31-Dec-10	6	na	6	-	na	na	na
NYSE Euronext Alternext	France, Belgium, Netherlands	31-Dec-09	152	na	21*	na	5,199.0	32.1	73.0*
DB Entry Standard	Germany	31-Dec-09	120	na	14	na	9,016.5	75.1	69.6
Boerse Stuttgart bwmit	Germany	31-Dec-10	56	na	na	na	na	na	na
Munich (Bavarian) SE m:access	Germany	31-Dec-10	37	na	8	na	na	na	na
ATHEX EN A	Greece	31-Dec-10	14	na	1	-	187.0	13.4	na
Irish Stock Exchange Enterprise Securities Market	Ireland	31-Dec-09	25	na	2	4	1,613.0	64.5	79.0
AIM Italia	Italy	31-Dec-10	13	na	6*	na	na	na	32.0*
Borsa Italiana MAC	Italy	31-Dec-10	8	na	na	na	na	na	na
Alternative Companies List	Malta	31-Dec-10	1	na	na	na	4.8	4.8	na
Warsaw NewConnect	Poland	31-Dec-10	185	3	86	8	1,297.0	7.0	38.0*
Ljubljana Entry Market	Slovenia	31-Dec-09	54	na	8	na	1,007.8	18.7	na
Bolsa de Madrid, MAB	Spain	31-Dec-10	12	na	10	-	189.7	15.8	48.0*
NASDAQ OMX First North	Sweden, Denmark, Finland, Baltic States	31-Dec-09	103	na	9*	[18]	2,410.2	23.4	22.0*
Nordic Growth Market	Sweden, Norway	31-Dec-10	22	na	na	na	na	na	na
AktieTorget AB	Sweden	31-Dec-10	139	na	na	na	na	na	na
LSE AIM	UK	31-Dec-09	1,306	[204]	30	293	82,918.4	48.2	4,959.7
Investbx	UK	31-Dec-10	3	na	na	na	na	na	na
PLUS-quoted	UK	31-Dec-09	183	na	na	na	2,942.5	16.1	na
			2,557				87,887.5		

Source: Websites of respective exchanges, PwC IPO Watch Europe Survey, EE analysis. The asterix * indicates where the PwC IPO Watch Survey data (for 2010) have been utilised.

The only successful SME market, in terms of number of companies listed is AIM[177], and to a lesser extent and at a smaller scale PLUS-Quoted[178], both in the UK. AIM has indeed been very successful since its creation in 1995 although the current number of listed companies has decreased in recent years. In recent times, few others such as the Entry Standard (Deutsche Börse) and the New Connect (Warsaw Stock Exchange) have been increasing their number of quoted companies.

Last, the general cost of going public (i.e. being admitted to trading) and staying listed are often seen as high and burdensome. [179] In relation to low performance in

capital markets, SMEs' costs of going public and staying listed are often considered to be too high.

– **TABLE 9**: Comparison of Total Flotation Costs (expressed in €m and as a percentage of the proceeds) between Exchange-regulated and Regulated Markets in Selected European States (IPOs, 2005–2008)

	Proceeds					
	€10m	€25m	€50m	€100m	€100m	
NYSE Euronext Alternext	0.82	1.8	3.42	6.57	6.35	NYSE Euronext Eurolist
as % of proceeds	*8.2%*	*7.2%*	*6.8%*	*6.6%*	*6.4%*	
DB Entry Standard	0.89	1.96	3.72	7.18	7.64	DB General Standard
as % of proceeds	*8.9%*	*7.8%*	*7.4%*	*7.2%*	*7.6%*	
LSE AIM	1.33	3.07	5.96	11.65	9.03	LSE Main Market
as % of proceeds	*13.3%*	*12.3%*	*11.9%*	*11.7%*	*9.0%*	

As presented in the table above, capital costs need to be seen in relation to proceeds made: the quota of costs decreases the more capital is collected. However, if financial markets would provide for SMEs' sufficient access to finance including a high level of visibility and liquidity, the cost ratio might be seen as proportionate.

12.3. Problem 3: Lack of sufficient transparency for market participants

The key rationale for transparency is to provide investors with access to information about current trading opportunities, to facilitate price formation and assist firms to provide best execution to their clients. It is also intended to address the potential adverse effect of fragmentation of markets and liquidity by providing information that enables users to compare trading opportunities and results across trading venues. Post trade transparency is also used for portfolio valuation purposes. Transparency is crucial for market participants to be able to identify a more accurate market price and to make trading decisions about when and where to trade. Pre- and post trade transparency serves to address these issues. The transparency regime in MiFID only applies to shares admitted to trading on regulated markets (including when those shares are traded on a MTF or over the counter).

12.3.1. Equity markets

Pre-trade transparency refers to the obligation to publish (in real-time) current orders and quotes (i.e. prices and amounts for selling and buying interest) relating to shares.[180] Pre-trade transparency obligations apply to regulated markets, MTFs and systematic internalisers.

Individual market participants would sometimes prefer not to disclose their own trading interest, while having full access to the trading intentions of everybody else. In that context the growth of electronic trading has facilitated the use of dark orders[181] which market participants apply to minimise market impact costs. An increased use of dark pools - trading platforms operated by regulated markets or MTFs that benefit from the MiFID waivers from pre-trade transparency - does

however raise regulatory and economic concerns as it may ultimately affect the quality of the price discovery mechanism on the "lit" markets. The issue at stake is to balance the interest of the wider market with the interest of individuals by allowing for waivers from transparency in specific circumstances.

Pre-trade transparency waivers[182]

Waivers for pre-trade transparency are provided for in MiFID in relation to regulated markets and MTFs. The exemptions that allow regulated markets and MTFs to operate systems or handle orders or quotes without publishing pre-trade transparency data are as follows:

- "Large-in-scale waiver" refers to orders that are large-in-scale compared with normal market size;

- "Management facility waiver" refers to orders held in an order management facility, waiting to be disclosed to the market;

- "Reference price waiver" refers to systems where the price is determined by a reference price;

- "Negotiated transaction waiver" refers to systems that formalise negotiated transactions, i.e. the terms of the transactions are determined outside the system. In that case the transaction price is required to be within an appropriate price range, or the transaction is subject to conditions other than the current market price of the share.

Dark pools - i.e. trading under the pre-trade transparency waivers is estimated to account for 8.5% of the overall trading in EEA shares taking place on organised trading venues (i.e. regulated markets or MTFs). If we add the broker crossing network turnover to this figure, we end up with more than 10% of the on exchange or electronic platform trading which is dark or not pre-trade transparent.

In terms of overall EEA trading, dark pools and broker crossing networks account for approximately 7%. This % is still expected to rise in line with the level in the US. According to the US SEC, the combine volume percentage of dark pools and broker-dealer internalizers is 20%[183].

In terms of overall EEA trading including OTC, 55% of the trading activity is still "lit" or pre-trade transparent whereas 45% is "dark" or not subject to pre-trade transparency.

TABLE 10: Turnover in EEA shares

Turnover in EEA shares (€ billions)	Q1	2009 Q2	Q3	Q4	2010 Q1
All trading in EEA shares on RMs and M	1.934	2.228	2.290	2.443	2624,8
Trading on RMs and MTFs as a % of tot	*62,0%*	*62,0%*	*62,0%*	*62,0%*	*62,0%*
OTC trading	1.185	1.365	1.403	1.497	1.609
OTC trading as a % of total EEA trading	*38,0%*	*38,0%*	*38,0%*	*38,0%*	*38,0%*
Total EEA trading	**3.120**	**3.593**	**3.693**	**3.940**	**4.234**

Turnover in EEA shares (€ billions)	Q1	2009 Q2	Q3	Q4	2010 Q1
Trading under pre-trade waivers	147	204	207	241	222,6
Dark pools as a % of EEA RMs and MT	7,6%	9,2%	9,0%	9,9%	8,5%
Trading executed in broker crossing net	28	37	48	56	58,9
BCNs as a % of EEA RMs and MTFs tra	1,4%	1,7%	2,1%	2,3%	2,2%
Total dark trading as a % of EEA RMs	**9,0%**	**10,8%**	**11,1%**	**12,1%**	**10,7%**

Turnover in EEA shares (€ billions)	Q1	2009 Q2	Q3	Q4	2010 Q1
Trading under pre-trade waivers	147	204	207	241	222,6
Dark pools as a % of total EEA trading	4,7%	5,7%	5,6%	6,1%	5,3%
Trading executed in broker crossing net	28	37	48	56	58,9
BCNs as a % of total EEA trading	0,9%	1,0%	1,3%	1,4%	1,4%
Total dark trading as a % of total EEA	**5,6%**	**6,7%**	**6,9%**	**7,5%**	**6,6%**
OTC trading as a % of total EEA trading	38,0%	38,0%	38,0%	38,0%	38,0%
Total dark trading - including OTC - a	**43,6%**	**44,7%**	**44,9%**	**45,5%**	**44,6%**

Source: European Commission services' own calculations based on CESR/10-802 and assuming a constant OTC market share of 38%

Post trade transparency refers to the obligation to publish a trade report every time a transaction in a share has been concluded.[184] This obligation applies to regulated markets, MTFs and investment firms and to trades whether executed on or outside a trading venue. This information differs from pre-trade transparency data because it gives historical information about share transactions executed (rather than information on trading opportunities). Post trade transparency is important for efficient price formation and for best execution to show which venues or firms are providing the best prices. It is also useful to enable clients of firms to monitor whether they are receiving best execution (i.e. whether the order has been executed at a reasonable price and on an appropriate venue) and is used for the pricing of portfolios.

Market participants require information about trading activity that is reliable, timely and available at a reasonable cost. Market participants have expressed concerns related to the timing of publication of trade reports. Publication of trade reports must generally take place in real-time, and in any case within 3 minutes, but for large transactions delays between 60 minutes and up to 4 trading days are allowed, depending on the liquidity of the share and the size of the transaction[185]. Publishing a large trade immediately could move the market against the person taking the position and make it more costly to execute large orders. Trades reported with a delay under this deferred publication regime represent approximately one-fifth of all trades on average[186]. The reasoning for allowing exemptions to the general rule of full and immediate transparency for large orders is similar to that of pre-trade transparency. Many supervisors seem to agree that the maximum permitted delays for publishing

trade details could be reduced in order to improve the timeliness of the information for all market participants[187]. This would help to make post trade information available sooner to the market.

The pre and post trade transparency requirements currently only apply to shares admitted to trading on a regulated market. A number of instruments that are similar to shares[188] are outside the scope of MiFID transparency requirements. These instruments from an economic point of view are equivalent to shares and share many characteristics with the equity markets, including liquidity, types of investors, etc. Hence most market participants and regulators are of the view that it would be beneficial to subject these markets to transparency requirements.

The MiFID pre- and post-trade transparency regime applies to shares admitted to trading on a regulated market. The regime covers trading of such shares whether it takes place on a regulated market, on a MTF or OTC. The regime does not apply though if an instrument is only admitted to trading on a MTF or another organised trading facility as outlined in Section 3.3 above. In the former case the higher level transparency obligations for MTFs in the Directive, instead of the more detailed regime[189], apply to the shares. This leaves a potential difference in the level of transparency for shares that are only admitted to trading on a MTF. This concerns essentially MTFs that operate SME markets (see the list of junior markets above).

12.3.2. Non equity markets

Pre and post trade information perform similar functions for non equity markets than for equity markets. But the transparency requirements for these markets are not covered by MiFID and are only regulated at national level. For non-equities, the existing level of transparency is not always considered sufficient[190]. CESR clearly expressed the view that current market-led initiatives by trade associations[191] in the bonds, structured finance product and credit derivatives markets have failed to provide a sufficient level of transparency in terms of scope, content and timing[192]. Market participants have encountered significant difficulties in accessing price information and valuing their positions in the bonds markets following the severe retreat of liquidity during the financial crisis. In addition some market participants, notably retail investors and small market participants have limited access to trading information giving rise to information asymmetries. Prices in several non-equity OTC markets are a function of the willingness of investment firms acting as dealers to provide investors with quotes on request through electronic or manual (telephone) channels and enter into trades with them; not a public interaction of supply and demand. The balance between transparency and liquidity in non-equities (as in equities) is hotly debated[193]. A higher degree of transparency might attract new market participants, increase liquidity and reduce bid-ask spreads. However the increased transparency could also act as a disincentive for dealers to commit capital and as a result have an overall negative impact on liquidity.

12.3.3. Data consolidation

Besides requiring market data to be reliable, timely and available at a reasonable cost, investors also require the information to be brought together in a way that allows comparison of prices across different venues. Experience since the implementation of MiFID shows that the reporting and publication of trade data in shares is not living up to this expectation.[194] The main problems relate to the variable

quality and differences in the format of the information, as well as the cost charged for the information and the difficulty in consolidating the information. If these issues are not fully addressed, they could undermine the overarching objectives of MiFID as regards transparency, competition between financial services providers and investor protection. While a number of initiatives have been put in place to try to address these issues there are practical and commercial obstacles that appear to make regulatory intervention necessary to facilitate the consolidation and dissemination of post trade information.

Similar issues are likely to arise for non equity instruments if these are brought within the scope of a pre and post-trade transparency regime.

12.4. Problem 4: Lack of transparency for regulators and insufficient supervisory powers in key areas

In several areas, regulators are lacking the necessary information or powers to properly fulfil their role.

12.4.1. Commodities markets

As a general background, MiFID applies to all types of commodity derivatives which meet the definition of a financial instrument irrespective of the underlying physical commodity, be it agricultural commodities, energy, or emission allowances.[195] Commodity and commodity derivatives markets are strongly interlinked, and problems in these markets typically extend to both. However, it is beyond the scope of this initiative to consider the regulation of non-financial markets. This is because each underlying commodity market has a different market structure and set of price drivers. Regarding transparency in the underlying physical markets, both in terms of trading activity and fundamental data, further work will be initiated outside this initiative in the respective sectoral legislations as announced in the Communication on commodity markets and raw materials. The Commission has already adopted a proposal on Energy Market Integrity and Transparency for EU wholesale electricity and gas markets (REMIT)[196].

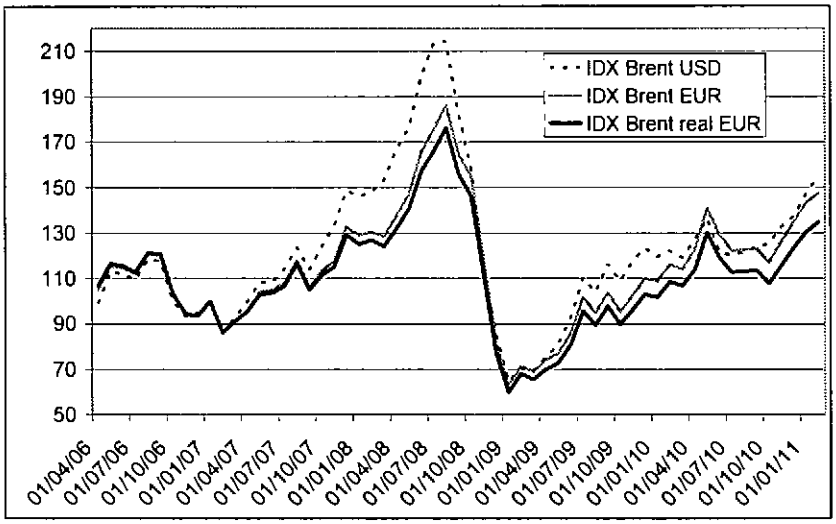
The Commission here seeks to address the issue of increasing financialisation of commodity derivatives markets. This means that a growing number of financial participants use these markets in search of risk management tools and investment opportunities. Commodity derivatives are increasingly seen purely as financial investments by financial institutions as part of their risk allocation strategies. Financial investment flows into commodity derivative markets have grown significantly in recent years. Between 2000 and 2010, for example, institutional investors increased their investments in these markets from less than €10 billion in 2000 to more than € 300 billion in 2010[197]. Index funds have become key players in the market, holding for example about 25-35 percent of all agricultural futures contracts[198]. The volume of financial transactions in the oil markets represent about thirty-five times the oil traded in the physical market[199].

Understanding the price formation process in these markets and the role played by the multiple factors influencing the commodity prices is a complex issue. Some have claimed that the increased presence of financial investors in these markets have contributed to excessive price increases and volatility. Although closely studied, the

impact of this increasing financialisation on prices of the underlying physical commodities is not yet fully understood.

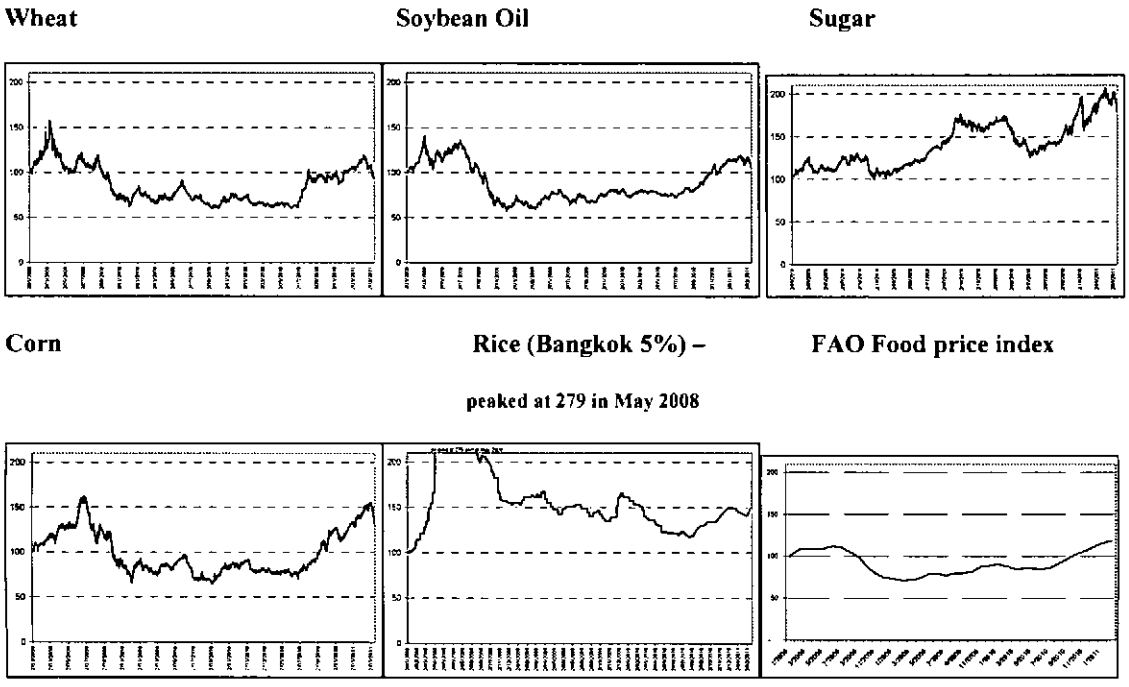
Commodity markets have displayed unprecedented movements of prices in recent years. Prices in all major commodity markets, including energy, metals and minerals, agriculture and food, increased sharply in 2007 to reach a peak in 2008, declined strongly from the second half of 2008 and have been on an increasing trend again since the summer of 2009. To varying degrees, these price swings have been reflected in consumer prices, at times leading to social unrest and deprivation.

– **FIGURE 4**: Brent price development in nominal USD, nominal EUR and real EUR (Jan 2007 = 100)



Source: ICE (Brent), ESTAT (EU27 HCIP), Oanda (exchange rate).

– **FIGURE 5**: Price developments of key foods (January 2008 = 100)



Source: future prices from Ecowin and FAO, own calculations.

Against this backdrop, the G20 agreed "to improve the regulation, functioning, and transparency of financial and commodity markets to address excessive commodity price volatility." In its Communication of 2 June 2010 on "Regulating Financial Services For Sustainable Growth" 200, the Commission announced it is preparing a comprehensive, balanced and ambitious set of policy initiatives which will touch upon commodity derivatives markets. More recently, the Communication of 2 February 2011 on commodity markets and raw materials has called for further action[201]. More specifically on agricultural commodity derivatives markets, the Commission in the 2009 Communication on a better functioning supply chain[202] announced measures to improve oversight and the overall transparency of EU agricultural commodity derivatives, both on-exchange and over-the-counter. The review of MiFID is an integral part of these efforts.

The problems in these markets spring from five sources. First, commodity and commodity derivatives markets are global and strongly interlinked. Second, there is concern that competent authorities cannot adequately assess the price formation process due to a lack of transparency. Third, there is concern that national and divergent means of controlling fair and orderly markets are insufficiently effective. Fourth, that not all important market participants are covered. And finally, that certain contracts which resemble financial instruments are not covered.

First the physical and derivatives markets are increasingly intertwined and influence each other. The very nature of a derivative contract is that its value depends on the value of the underlying market to which it refers. In addition, derivative trading supports price discovery, and thereby also influences commodity prices. In addition to growing interdependence between physical and financial markets, these markets have become increasingly global. For instance, many commodity trading firms are based in Switzerland, where they generate one third of world trade in crude oil.[203] The global nature of commodity markets can also be clearly seen by the volume of trading in agricultural commodity futures on the Chicago Mercantile Exchange (CME), where average daily volumes in maize futures contracts exceed those in Paris (EuroNext) by a ratio of more than 100 to 1.[204]

The interlinked and global nature of commodity and commodity derivatives markets requires reinforcing the cooperation between financial and physical regulators, as well as between financial regulators at international level. Financial regulators have called for enhanced global cooperation.[205] In particular, they have signalled the need to take a greater interest in the physical commodity markets, to cooperate more closely, and share information with physical regulators and other relevant organisations. This cooperation should help promote a better understanding of the price formation process in the derivatives markets and the interaction between physical and financial markets. It should also serve to improve the detection of market abuses which occur across physical and financial markets, and which involve multiple markets in different jurisdictions.

The second problem faced by regulators and market participants is the lack of transparency both in the financial and physical markets. As a result financial regulators at the international level have called for increased transparency in both the financial and the underlying physical markets to better understand the price

formation mechanism of commodity derivatives and the interaction with the underlying physical markets[206].

Under MiFID, there is no position reporting requirement for derivatives, including commodity derivatives. However, most of the commodity derivatives exchanges have already in place some form of position reporting or oversight as part of their organizational requirements to ensure fair and orderly trading on their markets (see Annex 5.2.8 Tables 29 & 30). In thhe European regulation on OTC trading[207] the Commission will improve transparency of these instruments by requiring that information on OTC derivative contracts be reported to trade repositories and be accessible to supervisory authorities[208]. However, the level of granularity of this information will not allow competent authorities to differentiate positions taken by commercial and non commercial entities or for hedging or non hedging purposes, and will not allow them to assess the exact nature and extent of the links between the price formation process on commodity markets and the growing importance of derivatives markets.

The third problem faced by regulators is the lack of harmonised and effective position management oversight powers to prevent disorderly markets and developments detrimental to investors. This includes excessive volatility of derivatives prices and the related commodity prices which could undermine the proper functioning of these markets. Holding large positions in commodity derivatives markets may allow individual market participants to influence the price of the derivative or the underlying in a way that is manipulative or interferes with the fair and orderly working of the market. In addition, the weight of individual or aggregated positions may have an impact on fair and orderly markets.

Derivative markets have grown significantly in recent years.[209] The European Parliament has recently stated that regulators should have harmonised powers to set position limits to reduce systemic risk and combat disorderly trading, especially for certain categories of derivatives[210] echoing various calls to introduce positions limits to curb "financial speculation" in commodity derivatives markets. As highlighted above, the manner in which competent authorities monitor and supervise positions in commodity derivatives is different between jurisdictions. For example French, German, and Spanish commodity exchanges have firm position limits in place for physically settled contracts and/or certain types of commodity derivatives, whereas UK exchanges have a soft position management system in place whereby they have the authority to manage positions at any time throughout a contract's life cycle. They can instruct a member to close or reduce a position with the exchange, if that is necessary, to secure fair and orderly markets[211]. This could give rise to regulatory arbitrage and/or unlevel playing field concerns, especially when contracts on the same commodity are traded on multiple exchanges. Similar concerns could arise at the international level as the existing position limits regime in place in the US will be reinforced with the Dodd-Frank Act (see Annex 14 for a comparison between the US and the EU regime).

Fourth, many important commodity trading firms are currently exempt from MiFID, even though their activities increasingly resemble those of investment firms. Commercial companies active in the commodity derivatives markets may be exempt from MiFID when they deal on own account in financial instruments or provide investment services in commodity derivatives on an ancillary basis as part of their main business and when they are not subsidiaries of financial groups. Specialist

commodity firms whose main business is to trade on own account in commodities and/or commodity may also be exempt when they are not part of a financial group[212] These exemptions were intended to cover commercial users and producers of commodities, under the assumption that commercial firms and specialist commodity firms do not pose systemic risks comparable to traditional financial institutions nor interact with investors. The size and level of activity of some of the exempted commodity firms has developed over the years and the assumption of their limited effect in terms of market disorder or systemic risk may not be as valid as before.

Moreover the G20 has set the objective to improve derivative market transparency and oversight of all players that have a significant activity in trading of derivatives which goes beyond their own hedging needs, including commodity derivatives players. They should be subject to the same regulation as financial players active in these markets. Finally, it has been suggested that commercial companies benefiting from the MiFID exemptions active in the oil market should not provide investment services in commodity derivatives even as an ancillary activity.[213] As these MiFID exempt firms are not subject to any MiFID provisions – including the conduct of business rules – some national regulators and market participants have argued that unsophisticated clients would not be adequately protected. On the other hand, this notion of ancillary activity appears to be an essential provision for agricultural cooperatives, enabling them to provide hedging tools to their farmers while remaining exempt from a regulatory regime ill-calibrated to the small risks they pose to the financial system. The same may be true for some energy companies who manage the energy portfolio of smaller, often affiliated utilities. Both securities and prudential regulators' point of view is that there is a case for providing a more narrow interpretation of allowed exempt activities in line with the overall purpose of MiFID.[214]

A final problem, limited to the carbon market, is that emission allowances, which share many elements in common with derivatives, are not in scope. In addition, there is no general regulatory framework that covers the carbon market. Serious concerns have recently been expressed over the functioning of the carbon market that was recently created by the EU institutions. Emission allowances[215] are an instrument created by the EU Emissions Trading Scheme Directive (the EU ETS Directive)[216], in force since 2005. The ETS system is a cornerstone of the European Union's policy to combat climate change. However, periodic reports of fraudulent trading activity in the physical (non-financial) emission allowances markets have significantly undermined the credibility of this market[217].

This lack of a general regulatory framework entails that spot trading platforms for emission allowances are not required to guarantee standards of soundness, efficiency and market access. Intermediaries operating in the spot secondary market do not need to comply with conduct of business requirements or organizational safeguards, such as capital requirements. Also, financial regulators currently lack a complete overview of trading activity encompassing both financial and spot markets.

The nature and characteristics of the emission allowances (i.e. certificate giving the right to emit 1 metric tonne of CO2) could lend themselves to be classified either as a financial instrument or a physical commodity. As a result their legal classification is not uniform in the Member States.[218] This divergence has triggered some negative knock-on effects with respect to:

- the uneven application of VAT rules to trade in those allowances across the EU, which opened possibilities of VAT carousel fraud[219]

- the possibilities of circumvention of anti-money laundering safeguards which do not extend in full to the access to spot market in emission allowances.[220]

At the moment no EU wide market rules apply to the secondary trading of emission allowances. While MiFID covers derivatives on emission allowances, it does not apply to trading venues or investment firms which trade emission allowances for immediate (spot) delivery. MiFID also applies to some extent to the future primary market (auctions) in those instruments[221]. As a result, the fact that the secondary spot carbon market is not subject to any EU wide comprehensive regulatory framework stands in contrast with the situation in the allowances derivatives market and the regulatory arrangements for the auctioning (primary market). This regulatory gap has led to national divergences as a few Member States have brought the secondary spot activity in the carbon market under the national regimes implementing the MiFID or Market Abuse Directive.[222]

12.4.2. Transaction reporting

Regulators also lack necessary information due to divergent and limited transaction reporting requirements. Investment firms are required to report to competent authorities all trades in all financial instruments admitted to trading on a regulated market, regardless of whether the trade takes place on that market or not.[223]

Transaction reporting under MiFID enables supervisors to monitor for abuses under the Market Abuse Directive (MAD). Transaction reporting is also useful for general market monitoring, as it provides insight into how firms and markets behave. Records of trading activity can be used by supervisors for various purposes, including monitoring market stability, cases of short selling, and analysing market trends including speculation during times of uncertainty.

The existing reporting requirements fail to provide competent authorities with a full view of the market because their scope is too narrow, and because they allow for too much divergence.

First, since transaction reporting enables monitoring the functioning of the market, including its integrity in the perspective of MAD, the requirements under the two directives need to remain aligned, taking also into account the ongoing review of the MAD[224]. In addition, the alignment of these two should also take into consideration the proposal for a regulation on Energy Market Integrity and Transparency for EU wholesale electricity and gas markets (REMIT) with regards to energy transactions. For example, OTC options and credit default swaps do not need to be reported, although they can be used to benefit from abusive strategies, and could also be used to give misleading price signals [225]. Also, financial regulators at the international level have called for increased transparency in commodity derivatives markets[226]. Under the current market abuse rules, the prohibition already extends to orders to trade. In addition, MAD is expected to be extended to prohibit also attempted market manipulation, which could also involve orders to trade. Some exchanges may already retain order data in their own systems for some time. However, there are no reporting or data retention rules for orders to trade at European level. Orders to trade are therefore not available in a common format and according to common standards.

Second, reporting requirements today diverge between Member States. Notably, the directive is insufficiently clear as to what constitutes a transaction, and allows for the reporting of additional fields at national level. This adds costs for firms and limits the use of trade reports for competent authorities to identify market abuse cases. In addition the diverging reporting requirements give rise to additional complexity to exchange transaction reports between national regulators when the same listed instrument is traded in different jurisdictions[227].

Third, investment firms can use third party firms to report their transactions[228]. These entities need to be approved by the competent authority, but there is no provision which ensures adequate ongoing monitoring by the supervisor to ensure these firms provide high quality and consistent transactional data.

Fourth, market participants that are not investment firms do not need to report their transactions. When non-investment firms have direct access to organised markets, this could create substantial gaps between trading activity on the venue and reports sent to the competent authorities.

Last, for cost and efficiency purposes, double reporting of trades under MiFID and the recently proposed reporting requirements to trade repositories should be avoided.[229]

12.4.3. Powers of competent authorities and cooperation at EU and international level

Experience over the past years, and particularly during the financial crisis show that competent authorities' powers[230] need to be strengthened in key areas. Notably, cooperation with regards to general market oversight is insufficient, access to the EU market by firms from third countries is insufficiently harmonised, and the level of sanctions is insufficiently deterrent in a number of jurisdictions.

Regulatory scrutiny of complex products such as certain types of structured products, and of the provision of certain investment services and activities diverges. Currently, national regulators do not have the power to temporarily ban or restrict the trading in or the distribution of a product by one or more investment firms or the provision of an activity where there are exceptional adverse developments which constitute a serious threat to financial stability or to market confidence in their jurisdiction. Further, there is no mechanism at EU level to coordinate such a ban (if they were to be imposed) nor any explicit power granted to ESMA to ban a product at EU level in case of persistent sustained market failure at EU level.[231] Temporary bans put in place during the financial crisis, such as those on short selling in shares and in government bonds, demonstrate that taking such measures on a national level causes compliance problems for firms active in several member states and can result in needless market disruption. In addition, national bans are not necessarily effective, as they may not cover activities that take place in other member states.

Competent authorities cooperate in detecting and sanctioning market abuse. There are also provisions that require them to cooperate when suspending trading.[232] However, there are no provisions that ensure cooperation with regards to general market oversight in order to ensure fair and orderly markets. For instance, the manner in which competent authorities monitor and supervise positions in derivatives on trading venues and OTC varies between EU jurisdictions (see Annex 5.2.6. Table 25). This lack of coordination may mean competent authorities do not

have a full view of the market, or fail to take into account developments in other markets when considering taking action. In addition, as mentioned under the commodity derivatives section, financial regulators might not have at the moment all the necessary information relevant to monitor price formation, nor all trading data needed to monitor trading behaviour in commodity derivatives markets. Finally the exchange of information between competent authorities in Europe and in third countries is insufficient when supervising market participants and markets which are increasingly global. The recent wave of stock exchange mergers (e.g. the collapsed merger between the London Stock Exchange and its Canadian peer TMX, merger between Deutsche Börse and NYSE Euronext, and merger between the 4th largest operator of US equity markets Bats Global and Europe's largest MTF Chi-X Europe Ltd.) has highlighted the need for greater coordination of supervision of market operators expanding in global markets.

Regarding the access of third country firms to EU markets, it is not harmonised under the MiFID but is left to the discretion of Member States as to who may access their markets[233]. Member States may however only authorise firms to access their own State and also must not treat third country firms more favourably than EU firms. But this gives rise to a patchwork of national third country regimes granting access by third country investment firms and market operators to their markets.

On sanctions, not all competent authorities have a full set of powers at their disposal to ensure they can respond to all situations with the appropriate sanction corresponding to the severity of the MiFID violation observed.234

The maximum levels of administrative pecuniary sanctions provided for in national legislation varies widely among Member States235 and in some cases the maximum fine can be considered low and insufficiently dissuasive. For example, in the case of violations of the minimum conditions for authorisation of investment firms such as the need to have adequate organisational arrangements to prevent conflicts of interests from adversely affecting the interests of its clients (Articles 9 to 14 of MiFID), 17 Member States provide for maximum fines of less than 1 million and in 6 of them the maximum amount is 100 000 Euros or less. Violations of investor protection rules (Articles 16 to 24 of MiFID) and market transparency rules (Articles 25 to 30 of MiFID) can be sanctioned with a maximum of less than 15 000 Euros in some Member States. When the gains of a violation are higher than the expected sanctions, the deterrent effect of the sanctions is undermined. This is reinforced by the fact that the offender might consider that his offence could remain undetected. But these maximum fines can also be considered low and insufficiently dissuasive in view of the substantial amount of damage to investors that such violations can cause – in recent cases damages caused by failure to ensure the suitability of investment products for certain customers were estimated at several millions of Euros.

Moreover, some Member States do not have at their disposal important types of sanctioning powers for certain violations. Five Member States do not provide for public reprimands/warnings and seven Member States do not provide for the publication of sanctions, even though it is acknowledged that publication of sanctions has a deterrent effect and is of high importance to enhance transparency and maintain confidence in financial markets.

These divergences and weaknesses may render the sanctions for breaches of EU financial services legislation insufficiently effective, proportionate and

dissuasive.236 They may create distortions of competition in the Internal Market, and financial institutions with cross-border operations could seek to exploit the differences between the legislation in force in different Member States., which may be detrimental to the protection of investors and consumers of financial services products alike. They can also have a negative impact on the trust between national supervisors and hence on cross border financial supervision.

12.5. Problem 5: Insufficient investor protection

A number of provisions in the current MiFID result in investors suffering from insufficient or inappropriate levels of protection. Specific exemptions and unclear demarcation lines between products or services subject to higher levels of protection can lead to investors being sold financial instruments which are not appropriate for them and to make investment choices which are sub-optimal.

12.5.1. Uneven coverage of service providers

First, Member States have the option not to apply MiFID to firms or persons providing reception and transmission of orders and/or investment advice in relation to a broad range of financial instruments (See Annex 5.2.9. Table 32). Member States may only apply this exemption when the activities of the persons are regulated at national level, but MiFID does not specify any details of what this national regulation should consist of.

In view of the complexity of financial markets and products, investors often depend to a large extent on suitable recommendations provided by professional advisers[237]. In this respect they cannot be expected to inquire as to the regulatory status of the adviser but should enjoy the same level of protection irrespective of the nature of the service providers. There are currently over 100 000 individuals or firms (mostly in Germany) covered by the exemption, compared with around 8000 authorised MiFID firms or credit institutions providing the same services (see 5.2.9). Exempting this number of service providers even on a national basis without setting a minimum regulatory framework for investor protection no longer seems appropriate.

Second, in the context of the Communication on packaged retail investment products (PRIPs),[238] the Commission has underlined the importance of ensuring a more consistent regulatory approach concerning the distribution of different financial products to retail investors, which however satisfy similar investor needs and raise comparable investor protection challenges.[239] Specifically, the sale of structured deposits, an activity almost exclusively carried out by credit institutions, is outside the scope of EU regulation. This represents 12% of the combined EU market for PRIPs.[240] The gap in terms of investor protection and regulatory arbitrage is important. Investors in this market with comparable aims to those investing in other PRIPs, i.e. with either underlying securities or insurance are at a disadvantage, while firms can be tempted to avoid rules applicable to the sale of other PRIPs and inflate sales of deposit-based products.

Third, national regulators[241] have raised concerns with respect to the applicability of MiFID when investment firms or credit institutions issue and sell their own securities. As a primary market activity, issuance of financial instruments is not covered by MiFID. However equities and bonds issued by these firms represent a sizeable share of total EU issuance. Issuance by financial services firms (as a proxy

for investment firms and credit institutions) are very significant in the context of issuance in Europe as a whole. Indeed according to Europe Economics, in 2009 over 40 per cent of equity secondary offering issuance within the EMEA region was by financial services firms. This is equivalent to issuance €120 billion. The share of financials in total bond issuance is less clear but is likely to be substantial (financials is the largest segment in terms of outstanding corporate bonds). However the significance of direct, non-advised sales to retail investors within this total is not known. In this respect, CESR has urged clarifying the applicability of MiFID to the direct and non-advised sales of these securities lest investors are unprotected in cases where they would reasonably expect the firm to be acting on their behalf.[242]

12.5.2. Uncertainty around execution only services

MiFID allows investment firms to provide investors with a means to buy and sell so-called non-complex financial instruments in the market, mostly via online channels, without undergoing any assessment of the appropriateness of the given product - that is, the assessment against knowledge and experience of the investor.[243] Individual investors value the possibility to buy and sell (essentially) shares based on their own assessments and understanding.[244] Nonetheless, there are three potential problems with the status quo which should be addressed on precautionary grounds. First, the financial crisis clearly underlines that access to more complex instruments needs to be strictly conditional on a proven understanding of the risks involved. Second, the ability of investors to borrow funds solely for investment purposes even in non-complex instruments, thereby magnifying potential losses, needs to be tightly controlled. Third the classification of all UCITS as non-complex instruments needs to be reviewed in light of the evolution of the regulatory framework for UCITS, notably when assets they can invest in are themselves considered complex under MiFID, for instance derivatives. In all these respects, the exact range of instruments and services covered under the execution-only regime today is not sufficiently clear and could lead to – avoidable – problems for investors.

12.5.3. Quality of investment advice

In the context of the financial crisis and recent debates on the quality of investment advice, including the debate on PRIPs, several possible areas for improvement have emerged. Under MiFID intermediaries providing investment advice are not expressly required to explain the basis on which they provide advice (e.g. the range of products they consider and assess) and more clarity is thus needed as to the kind of service provided by the intermediary and to the conditions attached to the provision of advice on an independent basis. One study indicates that, at present, investment advice is unsuitable roughly half of the time.[245] Compounded by cases of mis-selling amid the financial crisis, the number of complaints regarding the quality of investment advice has also been increasing. Europe Economics has searched the databases and annual reports of financial services-focused ombudsman in selected countries (including Belgium, Czech Republic, France, Germany, Greece, Ireland, Luxembourg, Spain and the UK) in order to investigate the recent prevalence (or even specific cases) of mis-selling or bad advice provided to retail clients:

- The UK's Financial Ombudsman Service opened 22,278 new cases relating to investments and pensions in 2009/10.[246] Of these, 62 per cent related to complaints about sales and advice.

- Germany's Ombudsmann der Privaten Banken reviewed 1,325 complaints relating to the provision of investment advice and asset management in 2008.[247] In the latter case, the number of complaints about advice had quadrupled over 2007, which was attributed to the impact of the financial crisis. The complaints related to inadequate explanation of the specific risks attached to a particular security or the pressure exerted to purchase overly risky assets.

- Similarly in Greece of the complaints received regarding investment business a common one was that the key information regarding a particular product was not adequate.[248]

12.5.4. The framework for inducements

MiFID regulated for the first time the payment of various types of incentives to investment firms which can influence the choice and the promotion of products when firms provide services to clients (inducements). The MiFID rules for incentives from third parties require inducements to be disclosed and to be designed to enhance the quality of the service to the client[249]. These requirements have not always proven to be very clear or well articulated for investors[250]. Further, their application has created some practical difficulties and some concerns, especially with respect to portfolio management and investment advice[251], and may lead to sub-optimal choices on behalf of the investor. This inherent conflict of interest is potentially widespread: over half of all EU investment firms and credit institutions are licensed for the provision of portfolio management and/or investment advice.[252] The problem is partially already recognised in the national law, supervisory or industry practices of some Member States (e.g. UK, Italy).[253]

12.5.5. The provision of services to non retail clients and classification of clients

The MiFID classifies clients in different categories and calibrates protections accordingly. Conduct of business obligations fully apply only to retail clients while they apply partially or do not apply to professional clients and eligible counterparties.

The current crisis and alleged mis-selling practices involving certain categories of non retail clients, notably local authorities and municipalities, have shown that the ability of some non-retail clients to understand the risk they are exposed to, especially in the case of very complex products, may be inadequately reflected in the MiFID. The current framework for clients' classification and the calibration of applicable protections does not reflect their needs accurately.

12.5.6. The execution quality and best execution

MiFID requires investment firms to execute orders on terms most favourable for the client (best execution). This obligation[254] hinges on the availability of data on the quality of execution at different trading venues as well as accurate and timely pre- and post-trade transparency data (addressed in section 3.4 above). This combination enables firms to select the trading venues where they execute orders and to comply with best execution obligations on an on-going basis, as well as to review their execution policies as markets evolve. However, MiFID currently does not require venues to publish harmonised data on execution quality. Potentially relevant information for best execution purposes[255] is thus not systematically available in a readily comparable format to market participants[256]. As a result, investors are

excessively dependent on the assurances of the investment firms they use that best execution has been delivered. This can propagate sub-optimal outcomes, inefficiency, and opportunities foregone.

12.6. Problem 6: Weaknesses in some areas of the organisation, processes and risk controls and assessment of market participants

The problem presents several dimensions.

12.6.1. Insufficient role of directors, weaknesses in the organizational arrangements for the launch of new products, operations and services, and internal control functions

MiFID requires persons who direct the business to be fit and proper, establishes a general framework for organizational requirement and regulates specific internal control functions (compliance function, risk management function, internal audit function).[257] Events during the financial crisis illustrate the importance for firms to have in place robust corporate governance arrangements, including appropriate chains of accountability and involvement of directors, as well as strong internal control functions[258]. Likewise, organisational checks and safeguards around the way investment firms design and launch new products and services should be robust[259]. On the ground, Member State practice may vary, but specific shortcomings in the general framework of MiFID have been exposed in this respect. Notably these concern the degree of experience and engagement of all board members (not just executive directors) and of their direct responsibility regarding the operation of the internal control functions.

12.6.2. Specific organizational requirements for portfolio management, underwriting and placing of securities

Portfolio management on a client-by-client basis requires a specific authorization under MiFID and is subject to the general organizational requirements and conduct of business rules[260] but the area of the actual management of portfolios on a discretionary basis by firms, however, is not covered by any specific provision. Inherently, the discretion enjoyed by the portfolio manager can nonetheless give rise to disputes regarding unsuitable or poor investment choices. Indeed, Member States have recorded numerous complaints where clients have challenged the way in which their portfolio has been managed. The review of the published annual reports of financial services ombudsmen[261] did reveal some problems arising in relation to discretionary portfolio management services. In particular, these were highlighted by the ombudsmen in Belgium, the Czech Republic, France, Germany, Ireland, Luxembourg, Spain and the UK. In the 2010 Annual Report published by the UK Ombudsman, it noted that the complaints made about discretionary portfolio management services typically involved the following issues:[262] (i) A failing of administration of their portfolio; (ii) The portfolio was not managed in a ways that was initially agreed; (iii) A failure by the manager to diversify the investments made in the portfolio; (iv) A manager that made too many, or too few, changes to the portfolio over a certain period of time. Only a few of the ombudsmen identified the number of cases relating to discretionary management. For instance, the German private banking ombudsman identifies 274 cases relating to discretionary portfolio management (9 per cent of the cases it handled in the securities area, 4 per cent of its total cases workload); in Luxembourg seven of the cases settled related to this area (being three per cent of the total).

For underwriting and placing, corporate finance business is covered under different investment and ancillary services in MiFID: underwriting and placing, advice to undertakings, including services related to mergers, services related to underwriting.[263] Firms providing the investment service of underwriting and placing need to be authorised and are subject to MiFID requirements. Nevertheless, some specific practices[264] contrary to firms' obligations to take all reasonable steps to prevent conflicts of interest, such as underpricing or overmarketing of securities to be issued have recently been noted.

12.6.3. Telephone and electronic recording

MiFID gives Member States the possibility of requiring firms to record telephone and electronic communications involving client orders. Most Member States have used this option. However, the wide discretion introduced by MiFID has led to different approaches being adopted by Member States, ranging from the lack of any obligations to the imposition of very detailed rules in this area[265] (see also Annex 5.2.11 Table 35). There is therefore no consistent framework across Europe on this question creating differences in the supervisory tools available to regulators and disparities between firms providing the same services in different Member States

13. ANNEX 3: ANALYSIS OF IMPACTS AND CHOICE OF PREFERRED OPTIONS AND INSTRUMENTS

This table highlights the key initiatives under this review with their respective level of priority, their link with international or other EU initiatives, the impact on market structure and/or business models (i.e. level of transformational impact), the level of execution risks, and the level of costs. Key initiatives are highlighted in grey.

– **TABLE 11**: Key initiatives

Operational objectives	*Level of priority (high/medium)*	*International initiative or link with other EU initiative*	*Level of transformational impact (high/medium/ low)*	*Level of execution risk (high/medium/ low)*	*Level of costs (high/medium/ low)*
Regulation of market structure taking into the needs of SMEs	High	Yes (G20 trading of derivatives; SME financing)	Medium to high (creation of OTFs)	Low to medium	Medium
Set up relevant framework around new trading practices	Medium	Yes (IOSCO direct market access)	Medium	Medium	Low
Improve trade transparency on equities and non equities	High	Yes (G20 transparency of derivatives)	Low (for equities) to high (non equities)	Low to high	Medium
Reinforce powers of regulators and coordination in supervisory practice	Medium	Yes (Larosière Group; sanctions)	Medium	Low	Low
Improve transparency towards regulators (i.e. transaction reporting)	Medium	Yes (MAD review)	Low	Low	Low (costs incurred under EMIR) to high
Improve oversight of commodities markets	High	Yes (G20)	Medium	Medium	Low

Reinforce regulation on products and services	Medium	Yes (PRIPS structured deposits)	Low	Low	Medium
Strengthen conduct of business rules for IF	High	No	Low to medium	Medium	High
Stricter organisational requirement for IF	Medium	Yes (Corporate governance EU work stream)	Low	Low	Medium

13.1. Regulate appropriately all market structures and trading practices taking into account the needs of smaller participants

Option 1 – take no action at EU level.

As explained in the problem definition, there are shortcomings in the current design of MiFID with respect to providing a level-playing field for the different types of trading venues existing in the market and regulating them appropriately. These shortcomings would remain if no action at EU level was taken. In addition, SME financing via securities markets would remain at its current level.

Trading platforms

Option 2 - Introduce a new category of Organised Trading Facilities (OTF) besides RMs and MTFs to capture current (including broker crossing systems - BCS) as well as possible new trading practices while and further align and reinforce the organisational and market surveillance requirements of regulated markets and MTFs

Establishing a new category of organised trading facilities would have the advantage of applying appropriate trading venue specific obligations to a variety of different types of systems that involve the bringing together of multilateral or bilateral orders, for example crossing systems, "swap execution facility"-type platforms, hybrid voice/electronic broking systems and any other type of organised execution systems that are used by firms. An appropriate new regulatory category would be created that is flexible enough to meet the differing nature of these systems. It would also be future-proof as the category would be widely defined to capture new systems that may develop in the future. It would also result in the application of pre-trade transparency requirements and therefore reduce the number of orders that are dark. This could benefit best execution and price formation. This option will also enable full convergence with the US regulation currently being discussed regarding derivatives trading (the Swap Execution Facilities – SEFs under the Dodd Frank Act).

Further aligning the detailed rules applying to regulated markets and MTFs would have the advantage of ensuring that similar rules apply where entities essentially conduct the same type of business. Especially in equities trading there is an intense competition between Regulated Markets and MTFs and would therefore help create a level playing field.

Requiring co-operation and an exchange of information between trading venues would also appropriately reflect the emergence of certain MTFs which nowadays have a sizable market share in particular in the trading of European blue chips. In practice this means that equities are traded intensively on a significant number of trading venues so that a higher degree of co-operation between those trading venues can help reducing the probability of cross venue market abuse strategies. Intensified cooperation and information exchange would therefore improve market integrity in those cases where trading of financial instruments is spread over a number of venues.

A disadvantage of streamlining the rules for regulated markets and MTFs could be that the compliance costs for some MTFs would increase. These costs may be passed

on to users so that this measure may cut into some of the reductions in trading costs stakeholders have experienced following the implementation of MiFID.

There are no obvious disadvantages to requiring an enhanced co-operation and information exchange between different trading venues trading identical instruments. Establishing the initial routines for co-operating and exchanging information will be associated with some costs. However, the organisations affected run highly efficient state of the art IT systems so that liaising with other venues should not be overly burdensome and any costs incurred should be more than mitigated by the positive impact achieved on market integrity.

Disadvantages in relation to establishing the new category of OTF would also be associated with costs. For firms operating the various types of systems that may be an OTF there will be initial costs in determining whether the system constitutes an OTF and how the rules apply to the system. There will then be ongoing costs of complying with the new organisational and transparency requirements.

Option 3 – Expand the definition of MTF so that it would capture trading on broker crossing systems (BCSs) (Alternative to option 2)

This option would have the advantage of applying trading venue specific rules to a specific type of system previously only regulated as an investment firm thus improving market transparency, creating a level playing field among trading venues and promoting legal certainty.

However, a disadvantage could be that indiscriminately applying the MTF rules to BCS may be too inflexible and entirely change their business model. This would fail to recognise the functional differences between a broker crossing its client orders (a traditional and legitimate activity carried on by brokers) and the operation of an exchange. Finally, this approach may not be future proof as if new types of systems emerge in the future that are not broker crossing systems they would not be captured.

Trading of derivative instruments

Option 4 – Mandate trading of standardised OTC derivatives (i.e. all clearing eligible and sufficiently liquid derivatives) on regulated markets, Multilateral Trading Facilities (MTFs) or organised trading facilities (OTFs) (Additional to options 2 3)

One advantage of implementing this option would be that a previously opaque market which entails systemic risk would be moved to more transparent and strictly supervised platforms. In addition, this option would enhance competition between trading venues and improve the quality and reliability of prices quoted for derivatives which are currently traded OTC. Investors looking e.g. for an OTC derivative for hedging purposes of the market may find it difficult to make an informed judgement about the price they are quoted because of the current opacity of the market. By implementing this option reference prices created through trading on electronic platforms would be available improving the bargaining position of investors, especially the smaller institutional ones. This option would also be consistent with the new US rules that allows trading of cleared OTC derivatives to take place on swap execution facilities, while establishing a framework of trading venues suitable for EU markets and respecting the EU treaty and case law as regards the delegation of powers to agencies such as ESMA. Exemptions would be provided for corporate

end-users, in order to avoid imposing central clearing and circumventing the exemptions under the Commission proposal on OTC derivatives, central counterparties and trade repositories.[266]

A disadvantage could be that derivatives traded on electronic platforms may not be sufficiently customised to fulfil the particular needs of certain investors trying to hedge their positions. However, bespoke derivatives would still exist as only those derivatives are moved to platforms where such a move is appropriate, i.e. if there is a high degree of standardisation and also liquidity. The second disadvantage is that this shift of trading on organised venues from previously OTC traded products could dramatically change the business model of the main dealers and possibly lead to a substantial drop in their ability to provide liquidity. This could have a significant detrimental impact for investors and users of these instruments.

Option 5 – Set targets in legislation for trading in standardised OTC (i.e. all clearing eligible and sufficiently liquid derivatives) derivatives to move to organised venues (Alternative to option 4)

The advantages of this option would be that it goes with the trend of market practice (with derivatives increasingly being traded on automated trading facilities) and avoiding the need for protracted negotiations on, first, the range of instruments to which mandates should apply, and second, the range and exact characteristics of venues that could qualify under the G20 characterisation of exchanges and electronic trading platforms.

The disadvantages would be the need to establish suitably ambitious yet attainable target levels per asset class, the need for rigorous monitoring of the targets, as well as a back-up enforcement procedure in case they are not met. Further, the G20 text on trading of derivatives should be read together with the agreement on clearing. That is, where a mandatory approach is chosen on the latter, it is arguably incoherent to be significantly less firm on the approach to trading, i.e. to extend the notion of "where appropriate" beyond the scope of applicable venues and instruments to the choice of regulatory means.

SME markets

Option 6 – Introduce a tailored regime for SME markets under the existing regulatory framework of MTFs (Additional)

The introduction of a tailored regime for SME markets under the existing regulatory framework of MTFs would mean to set up a harmonized standard which market operators may apply when creating a SME segment. However, the EU SME regime would not be a mandatory one, so market operators may decide not to create such a segment.

If market operators decide to make use of the EU regime for SME markets, they would need to comply with organisational and system requirements to be further defined and specified in delegated acts. To build market confidence the SME regime will ensure the high level of investor protection as provided for in regulated markets in order to gain a quality label. For example, market abuse legislation should be applied. This regime will lead to more visibility of SMEs and therefore will attract

more investments. Finally, more investments will provide for more liquidity and make applicable costs proportionate.

Implementing this option would have the advantage of a quality segment providing for more visibility and therefore more liquidity while at the same time reducing the costs of administrative burdens for issuers, such as for instance a proportionate disclosure regime according to the amended Prospectus Directive. In particular, SME markets under such a tailored regime will gain a positive perception due to high regulatory standards notably of investor protection. Based on this a quality label could emerge. This will lead to more visibility of the SMEs listed and, in consequence, will attract more investments. More investments will broaden the capital pool available and therefore reduce volatility while increasing liquidity in markets. This will make it more attractive for SMEs to seek an admission to trading on a MTF thus making it easier for them to access the capital markets to raise finance. Furthermore, harmonized standards will allow a network among SME markets to broaden the capital pool accessible for SMEs. Therefore, it will bring more issuers and above all investors to these markets, which should facilitate their growth and thus the financing of SMEs expansion. The setting up of a harmonised regulatory framework will not be sufficient to guarantee the emergence of a network of markets as national traditions in terms of family ownership or financing mode of SMEs may persist. Therefore, flanking measures such as setting up specific financing schemes at European level for SMEs may be needed to strengthen the establishment of a real network of SMEs markets. Once such connection is achieved, it will allow SMEs to access to a broader capital pool and raise larger amounts of funds which will decrease the relative cost of capital versus bank financing.

A disadvantage could be that market operators do not employ the framework provided. Nevertheless, as the use of the EU tailored framework is not mandatory, flexibility is left to market operators to use a different model. Then no quality label of the new regime may emerge. Furthermore, lacking a common basis, markets would not be able to establish networks among themselves. Finally, the situation for SMEs seeking finance on capital market would stay as difficult as today.

Option 7 – Promote an industry-led initiative to enhance the visibility of SMEs markets. (Alternative to option 6)

Instead of setting up an EU harmonized regulatory framework for SME markets an industry-led initiative could be promoted developing market standards leading to a harmonized appearance of SME markets and finally networks between SME markets across the EU. The industry may, according to SMEs' and investors' demand and needs, create a self-regulated standard model taking into account existing market models and practises. This option could imply the use of some financing tools (e.g. introduction of this type of financing in the Competitiveness and Innovation Framework Programme[267]) helping to develop further this type of industry initiative.

The main advantage of this option would be that it should help SME markets to develop further their networks by agreeing on common exchange-regulated standards and practises. This option provides flexibility for market operators whether and what rules to apply. A framework agreed by everyone has the advantage that it will gain more acceptances by market operators.

However, the downside is that an SME market segment agreed among market operators may not attract the same interest at investor-side. Industry negotiations may lead to a weak framework providing for insufficient provision for instance with regard to investor protection. However, a poor perception will not only expel investors but, in consequence, also may have negative spill over effects on the issuers' reputation.[268] The past experience (in the 1990s) with second-tier markets based on industry developed standards is not positive: all of them disappeared, but AIM[269].

– **TABLE.12**: Rise and Fall of the European New Markets

EUROPEAN NEW MARKETS			
Market	**Country**	**Opening Date**	**Closing Date**
Alternative Investment Market	UK	June 19, 1995	N/A
Nouveau Marché	France	February 14, 1996	Eurolist as of February 21, 2005
EASDAQ (renamed NASDAQ Europe)	Pan-European	June, 1996	November 28, 2003
Neuer Markt	Germany	March 10, 1997	December 31, 2003
NMAX	Netherlands	March 25, 1997	Eurolist as of April 4, 2005
Euro NM Brussels	Belgium	April 11, 1997	October 2000
Nuovo Mercato	Italy	June 17 , 1999	MTAX as of Sept. 19, 1995

Source: Mendoza[270]

Furthermore, as market operators are competitors, they may look for their individual business advantage[271] and may avoid entering into networks with other operators and allowing them access to their market segment. Market operators already today rarely use the possibility to set harmonized industry standards across Europe to create networks enhancing SME markets' visibility and liquidity. Thus an industry-led initiative might need a regulatory framework proposed under option 8 above.

13.2. Regulate appropriately new trading technologies and address any related risks of disorderly trading

Option 1 – take no action at EU level.

As explained in the problem definition, rapid technological advances in the recent past have transformed trading practices in the markets due to the increased use of algorithmic trading with high frequency trading representing one specific type of automated trading. Currently the MiFID framework lacks specific measures to address these and other similar future technological developments. If the regulatory framework is not adapted to address such new developments in the markets risks of market disorder and systemic failure are increased.

Organizational requirements

Option 2 – Narrow the exemption granted to persons dealing on own account to ensure that high frequency traders that are a direct member or direct participant of a RM or MTF are authorised

The effect of this change is that all entities engaging in high-frequency trading that are a direct member or direct participant of a RM or MTF would be required to be authorised as an investment firm under MiFID so that they would be supervised by a competent authority and would be required to comply with

MiFID provides organisational requirements for firms (e.g. systems, compliance and risk management obligations). The application of MiFID requirements and oversight of activities by financial supervisors would decrease the risks of systemic failures and/or disorderly trading potentially arising from these activities.

A disadvantage of such a measure would be that these traders would incur costs for the authorisation process and ongoing compliance with MiFID requirements. However, these costs are also incurred by other participants in the financial markets, so imposing financial supervision on these players who are increasingly significant and active market participants seems appropriate.

Option 3 – Reinforce organisational requirements for firms involved in algorithmic or HFT trading and for firms providing sponsored or direct market access facilities (additional to option 2)

Implementing this option would have the advantage that it would place the onus on firms involved in algorithmic and high frequency trading to have in place specific measures to mitigate some of the main systems risks inherent in algorithmic and high frequency trading. Further, for firms that allow their systems to be used by other traders it would clearly attribute responsibility for any misuse of the access to the investment firm granting access. Having proper risk controls and filters in place would help prevent disorderly trading emanating from entities acting on the markets via such access arrangements. The obligation to disclose details of algorithms to regulators upon request would ensure more rigorous oversight.

This option does not have any obvious disadvantages apart from a possible marginal increase in costs for the relevant firms.

Option 4 – Reinforce organizational requirements (e.g. circuit breakers, stress testing of their trading systems) for market operators (additional to option 2 and 3)

Implementing the option would help mitigate and prevent the risk of potential disorderly trading associated with automated trading and other unforeseen market developments. An additional advantage would be that circuit breakers in particular can protect investors against execution of their orders at a price level not representing the real value of an instrument but rather caused by high volatility due to disorderly trading conditions. This option is very much in line with the measures considered by the US authorities further to the flash crash of 6 May 2010. Significant interconnection between markets in the US means that having adequate circuit breakers and stress testing was of greater importance to prevent widespread system risks. While market infrastructures are not interconnected in the same way in Europe as in the US, there is still significant potential for market disturbances if operators of

venues do not have in place clear circuit breakers and if trading systems have not been properly tested to prevent systems crashing

Implementing this option would increase compliance costs for market operators. However, as these costs would help prevent disorderly trading or system breakdowns which could have negative consequences for market users and the reputation of the market operator, they appear to be a justified and essential investment in the best interests of markets.

Activity of HFT

Option 5 – Submit high frequency traders to requirements to provide liquidity on an ongoing basis (additional to 2, 3 and 4)

The advantage of implementing this option would be to ensure that high frequency traders cannot abruptly enter or leave the market for an instrument resulting in a sudden increase or decline in liquidity for that financial instrument. For example if there were adverse market conditions a withdrawal from the market could cause a sudden drain in liquidity which could exacerbate price movements and volatility for an instrument.

A disadvantage could be that high frequency traders may refrain from participating in the markets as they would not want to take on liquidity provision obligations, especially in adverse market conditions.

Option 6 – Impose minimum resting period for orders (alternative to 5)

Implementing this option would stop high frequency traders and algorithmic traders from testing the depth of order books by submitting and cancelling orders in very quick succession. This would put less stress on the IT systems of market operators reducing the risk of systemic failures. If such practices constitute market abuse imposing a minimum latency period could stop them thus preventing disorderly trading and promoting market integrity.

A disadvantage would be that a minimum latency period would limit market liquidity and efficiency and price discovery. The ability to constantly update orders helps maintain a tight bid-ask spread. In so far as some automated trading practices can be abusive this is an issue that will be addressed in the review of the Market Abuse Directive. This option would also amount to a prohibition of many forms of algorithmic and high frequency trading strategies that are considered to be beneficial to the market (e.g. market making and arbitrage strategies) where constantly updating orders is essential to enable the firm to provide the best prices and mitigate its risk. In addition, this measure could also indiscriminately affect other forms of trading where it is necessary to cancel or update orders. It therefore has the potential to distort the functioning of the market and create various unintended consequences. Finally, defining the minimum period would be highly controversial and sophisticated market participants may find innovative ways to exploit this resting period to their advantage.

Option 7 – Impose an order to executed transactions ratio by imposing incremental penalties on cancelled orders and setting up minimum tick size (alternative to 5 and 6)

The advantages described in option 6 would also be attained by this approach, i.e. the stress on IT systems would be alleviated and high frequency and algorithmic traders would be limited in their attempts to test the depth of the order book. The minimum tick size would also limit the scope of arbitrage for HFT and would also avoid unsound competition between trading venues that may be tempted to lure liquidity by reducing tick size to ridiculous levels.

The disadvantages however, would be less severe than described under option 6. This measure would in all likelihood, provided that the ratio is suitably calibrated, only affect the high frequency traders or algorithmic trading activity it is targeted at. Market liquidity and efficiency and the quality of price discovery should not be adversely affected. Assuming that the ratio and the system of penalties is effectively calibrated then risks would be effectively addressed while minimising the adverse effect on spreads. Market operators would be best placed to calibrate the optimal approach that fits for the particular market concerned.

13.3. Increase trade transparency for market participants

Option 1 – take no action at EU level.

It is described in the problem definition that the current transparency regime for equities has exhibited shortcomings in relation to, for example, the calibration of existing waivers, the timing of post-trade information and the quality in the reporting and publication of trade data. In addition, the MiFID regime currently does not cover non-equities at all where the existing data reporting tools available in the market are not considered sufficient. All of these shortcomings would remain if no action at EU level was taken.

Trade transparency for equity markets

Option 2 – Adjust the pre- and post-trade transparency regime for equities by ensuring consistent application and monitoring of the utilisation of pre-trade transparency waivers, by reducing the delays for post-trade publication, and by extending the transparency regime applicable to equities to shares traded only on MTF or organised trading facilities

The package of measures enrolled in this option would improve the transparency information available in the European markets. More specifically, clarifying and streamlining the rules on pre-trade transparency waivers would ensure that the exemptions to pre-trade transparency are kept to the absolute minimum necessary and divergences in application between Member States would be reduced contributing to a level-playing field. On the post-trade side, the envisaged measures would promote swifter access to data which should facilitate the consolidation of data, make it more useful for market participants and overall improve the efficiency of the price discovery process. Finally, extending the transparency regime to shares only traded on MTFs or organised trading facilities would have the advantage of making the trading in those instruments visible to the market improving overall transparency and also levelling the playing field.

There are no obvious disadvantages to streamlining the rules for the pre-trade transparency waivers. For post-trade transparency reducing the maximum deadline for real-time reporting may require a certain investment by investment firms in IT systems. However, one must bear in mind that already the general rule is that transactions need to be published as close to real time as possible with publication after three minutes being the exception rather than the norm. Therefore firms should already have the necessary infrastructure in place and any adjustments due to this rule change should be of a minor nature. A potential disadvantage of reducing the permissible delays for publishing large transactions could be that liquidity providers refrain from committing capital due to concerns that transactions would be disclosed to the market before they can unwind a large position. However, this concern can be addressed by an appropriate calibration of the delays that, although shorter remain permissible. Also extending the scope of the transparency regime to shares traded only on MTFs or organised trading facilities only could also be met by concerns that this may cause a further drop in liquidity for shares that may not be overly liquid to begin with. However the MiFID equities regime does entail a sufficient degree of detail to cater for illiquid shares by allowing pre-trade waiver and post-trade deferral options.

Option 3 – Abolish the pre-trade transparency waivers and the deferred post trade publication regime for large transactions (Alternative to option 2)

An advantage could be that all trading would be instantly transparent to the investing public as all options for not making orders transparent or executed transactions immediately transparent would be repealed.. Also such a measure would create the ultimate level-playing field as there could be no differences in the national implementation and application of waivers.

However, total transparency does have its drawbacks as market participants will be reluctant to submit large orders to the markets if they are displayed instantaneously. Especially liquidity providers would refrain from committing capital out of fear that the market turns against them and they end up with significant losses because they could not manage the order properly or do not have time to unwind a position while the disclosure is being delayed on the post-trade side. Investors would be tempted to further break orders into smaller sizes but this could multiply execution costs. In addition, such a total transparency regime would reduce investor protection as useful order management facilities, such as stop orders (i.e. a stop order is an order to buy or sell a stock once the price of the stock reaches a specified price, known as the stop price), would not be available anymore. Also this regime would work against market efficiency as the instantaneous display of large orders can cause unexpected market swings and agitation which may lead to a dry up in liquidity and a widening of bid-offer spreads thus reducing the quality of the price discovery process.

Further the benefits in terms of transparency are likely to be limited as a recent CESR has shown that over 90% of trading in EEA shares on organised trading venues are currently pre-trade transparent.

Finally, this option would put EU trading venue at a significant commercial disadvantage to venues outside the EU where such waivers are a common and long established feature of markets (cf. Annex 14 describing the situation in the US).

Trade transparency for non-equities markets

Option 4 – Introduce a calibrated pre and post trade transparency regime for certain types of bonds and derivatives (Additional to option 2 or 3)

Implementing this option would deliver advantages for transparency information available freely, the intensity of competition and potentially market efficiency. Investors would have a better picture of the options available to them due to additional price information available to everybody rather than quality information only being available to a selected few professional players who can then make use of their informational advantages. Therefore this extended access to transparency information across asset classes would level the playing field between investors, including those from the retail side. In the medium-term it may lead to efficiency gains and an improved price discovery process as transparency and an enlarged view of what is available in the market for investors may enforce competition. As an additional advantage, the tailor-made approach envisaged here per asset class and per instrument would ensure that the transparency provisions tie in with the specific characteristics of the market in each particular asset class. This would help avoiding detrimental effects to liquidity and market diversity.

A disadvantage of this option could be that too much transparency may have a detrimental effect on liquidity as market participants and especially market makers may be reluctant to commit capital if their quotes or trades are displayed in public and the market may turn against them. However, this disadvantage can be overcome by carefully calibrating the transparency rules for each specific instrument in each asset class so that an appropriate equilibrium is found between transparency and liquidity. This calibration would be especially important for bonds with small outstanding such as the ones issued by smaller Member States.

Option 5 – Introduce a calibrated post trade only transparency regime for certain types of bonds and derivatives (Alternative to option 4)

The objectives attained by option 4, i.e. increasing market transparency and improving market efficiency would also be achieved by this option, however to a lesser extent as only post-trade information would be covered while the information on present, real-time trading opportunities on the pre-trade side would still not be available to the public on a non-discriminatory basis. A potential advantage could be that the concerns regarding an impact on market liquidity would be diminished. Investors may be less worried about information leakage and more willing to commit capital if their order information pre-trade would remain in the dark.

On the downside, while post-trade information is important for the market the same goes for pre-trade information especially for investors looking to "hit" a quote in a particular moment and in order to remove information asymmetries. Therefore, rather than leaving pre-trade transparency entirely outside the new regulatory approach designing a framework where pre- and post-trade information is custom-designed for each instrument including waivers and delays in disclosure where appropriate appears as the more intelligent, comprehensive and flexible approach to achieve the desired objectives.

Cost and consolidation of trade data

Option 6 – Introduce measures to reduce the costs of data notably by requiring the unbundling of pre and post trade data and provide guidance on reasonable costs of

data, and improve the quality and consistency of post-trade data by the set up of a system of approved publication arrangements (APAs) (Additional to options 2 or 3 and 4 or 5)

Preventing the sale of bundles of pre and post trade data unless the constituent parts of the bundle are also made available separately at a reasonable price would contribute to lower data costs for investors while also facilitating the establishment of a consolidated tape (see options 8 and 9) at an affordable cost. Developing ESMA standards on criteria for calculating what constitutes a reasonable cost for data should further contribute to decreasing the costs of obtaining market data for stakeholders. The standards would introduce a level of transparency to costs previously not available. ESMA standards to further harmonise both the content and format of post trade data would significantly improve the ability of data providers to consolidate post trade data. The establishment of APAs and the requirement for investment firms to use them as a means of publication would improve overall data quality and accessibility. These advantages would be attained as the APAs would be subject to an authorisation and on-going supervision process needing to adhere to strict quality standards. As a consequence they would be obliged to publish market data in a way facilitating the overall consolidation of European market data. Finally, prescribing the release of data free of charge 15 minutes after the trade would improve the overall accessibility of the dealings and movements on financial markets in particular for retail investors.

The primary disadvantage associated with this group of measures for investment firms could be the increase in costs by having to employ APAs. However, this disadvantage could be mitigated as APAs would presumably operate in a competitive environment so that they would offer their services at a reasonable cost. The use of uniform reporting requirements resulting from the establishment of APAs would greatly benefit consumers of financial data products as they would no longer struggle to cross map data from data vendors, making it easier for them to switch between data providers and giving them the freedom to choose the individual data products that best suit their business needs. The other measures under this option do not entail any obvious disadvantages.

Option 7 - Reduce data costs by establishing a system for regulating the prices of data (Additional to option 6)

An advantage of this option would be that costs for investors for getting hold of data could be controlled. Entities consolidating data and investors would have easier access to the data and it could be used more efficiently for best execution purposes and, possibly, more economically by the users of the data.

However, such intervention into the operation of financial markets would be alien to the financial supervisory system which sets the legal framework for market participants but so far does not prescribe prices charged by participants in the financial markets. In practical terms while driving down the costs this measure may have a detrimental effect on data quality. If trading venues are severely limited in their ability to charge for making data available they may put fewer resources into that part of their business and the service they provide to the market may be lacking innovation and the use of state of the art technical equipment.

Option 8 – Improve the consolidation of post-trade data for the equities market by the set up of a consolidated tape system operated by one or several commercial entities for all types of financial instrument. Introduce a consolidated tape for non-equities markets after a period of 2 years under the same set up as for the equities markets (Additional to option 6 or 7)

This option would be complementary to Option 6 as the data pre-managed by the APAs would then be submitted to dedicated consolidators that would need a separate approval. The function of the single or several consolidators would be to collect all information that is published per share at any given time and make it available to market participants by means of one consolidated data stream at a reasonable cost.

An advantage of implementing this option would be that one or several consolidated sources of reliable and comprehensive post-trade information would be available to market participants helping them in achieving best execution for clients, improving market transparency on a non-discriminatory basis and countering the effects of market fragmentation. Thus it would be a step towards the single European market adopting a feature of the integrated US equities market. Also this option should significantly reduce costs for market participants when trying to get a complete picture of the market.

A specific advantage of having several providers would be that the provision of consolidation services would be open to competition so that the consolidators would need to offer reasonable, innovative and state of the art services at a reasonable price to convince the investing public of purchasing the consolidated data from them. Further competition would ensure the providers are responsive to the needs of different data users. In the event that several commercial entities are involved in the process, there is potential that competition on price between such providers may be detrimental to the quality of the data provided. Further, the absence of a uniform proprietary system or data format could also lead to fragmentation of consolidation services, and thereby increase costs for users. Also there could be an issue of independence and conflict of interest if certain APAs were giving preferential treatment to certain consolidators due to them belonging to the same group of entities. However, these disadvantages should be avoided by implementing rigorous quality standards and standardised reporting formats in legislation as a prerequisite for approval as a consolidator and by rigorously enforcing rules to be implemented demanding non-discriminatory access to data for consolidators at a reasonable price.

The one commercial entity approach would have the advantage of establishing a single point of reference for European trade transparency data very much on par with the US approach already in place for equities markets. This single point of reference could strongly convey the picture of an integrated European market to the market participants in- and outside the EU where trading may be fragmented across a significant number of trading venues but where the transparency data is consolidated in one place, easily accessible to every investor. A potential disadvantage of this approach could be that if a consolidated tape is to be operated by a single commercial entity, this would constitute a single point of failure if, for example, for technical reasons the consolidated data would not be available at any point in time. In addition, this option could create a situation of monopoly for the single commercial provider that would have been selected so there is a lack of competition and also potentially innovation and sufficient incentive to cater to the needs of different data users.

Option 9 – Improve the consolidation of post-trade data for the equities markets by the set up of a consolidated tape system organised as a public utility or industry body for all types of financial instruments. Introduce a consolidated tape for non-equities markets after a period of 2 years under the same set up as for the equities markets (Alternative to option 8)

In addition to the advantages of consolidation already described under option 8 this approach specifically could have the added advantage of being run by a not for profit entity which would by design be impartial in the way it handles data from different venues and has got no incentive in giving preferential treatment to any particular player or in the market.

However, there also appears to be a downside to running the consolidated tape as a not for profit entity because it may prove a hindrance to providing an innovative service tailored to the needs of the investing public and to operating at the lowest cost possible. This may in turn prove an obstacle to offering competitive prices for the data as competition is indeed missing. Further, there would be considerable cost in setting up such a system as public entities will not already operate such systems and will need to acquire the necessary systems and expertise. In addition, the considerations under option 9 regarding the constitution of a single point of failure in the case of a single commercial provider also apply here.

13.4. Reinforce regulators' powers and consistency of supervisory practice at European and international levels

Option 1 – Take no action at EU level

This would perpetuate the current patchwork of the scope and nature of supervisory powers with regard to how products or practices involving financial instruments may be restricted, the level of information supervisors can access when they oversee markets, and the way key regulatory and supervisory powers are exercised across Europe. While cost-neutral in the short-term, this would hinder progress towards a single market in financial services and towards even enforcement across the EU. In the medium to long-term, EU supervisory capacity in relation to disruptive market activity or future crises would be impaired with consequences in terms of economic and social costs.

Powers of regulators

Option 2 – Introduce the possibility for national regulators to ban for an indefinite period of time specific activities, products or practices. Give the possibility to ESMA under specific circumstances to introduce a temporary ban in accordance with Article 9(5) of the ESMA regulation N°1095/2010

The creation of dedicated mechanisms at EU level for restricting specific activities or products which give rise to significant concerns in terms of investor protection, market stability or systemic risk would allow for a streamlined and more transparent regulatory procedure, for example in response to disorderly market conditions or warnings issued by the European Systemic Risk Board, improve legal certainty, effectiveness, and ensure equal treatment of EU market participants and investors.

This entails little immediate costs apart from opportunity costs for the users of products and providers of services that would be banned while mitigating possible negative cross-border externalities of disruptive practices in the future, and is fully in line with the design and logic of Europe's new supervisory architecture. If used in an overly restrictive manner, the exercise of this power could restrict financial innovation and prevent market participants from financial opportunities.

Option 3 – Introduce an authorisation regime for new products and practices (Alternative to option 2)

This would substantially reinforce investors' protection by making sure that all new products and services are properly scrutinised by regulators and the most damaging ones are rejected.

This would reduce the chances of new products being introduced into the market, leading to opportunity costs for the developers of new products. It would also lengthen lead times for product development. However, it would restrict innovation and the scope for economic gains to a much larger extent than Option 2. It would also go against encouraging greater responsibility among investment services professionals, as well as the approach of allowing for freedom of movement for investment service providers provided that they perform detailed checks of products and services against their clients' risk profile and experience. An authorisation from the national authority for any activities covered by MiFID would still be needed. Last, it would require considerable means for the entity in charge of this authorisation as financial innovation yields many new types of products.

Option 4 – Reinforce the oversight of positions in derivatives, including commodity derivatives, by granting regulators the power to introduce positions limits, coordinated via ESMA (Additional to option 2 or 3)

Having the power to request information on individual positions will lead to a better dialogue between competent authorities and the market. This will give competent authorities a better understanding of what is happening in the market, and will make market participants more critical of their own behaviour. Venues may have an incentive not to impose position limits, as this will limit liquidity. Competent authorities can be expected to be more independent in exercising this power. Greater coordination at EU level of the exercise of oversight powers in relation to positions in derivatives would ensure a level playing field and convergent application for market participants. It would also increase the effectiveness for derivatives on the same underlying traded on different platforms.

The power to set harmonised hard position limits, amendable over time, across the EU would allow for effective action when the scope for disruptive activity or threat to market integrity cannot be sufficiently addressed in an ad hoc fashion.

There are initial and ongoing costs for supervisors in exercising greater scrutiny as well as for market participants in transmitting positions to regulators. In addition, there could be potential opportunity costs for market participants in limiting their positions. However, at the consolidated level, these are outdone by gains in greater market integrity.

Option 5 – Reinforce the oversight of financial markets which are increasingly global by strengthening the cooperation between EU and third country securities regulators. In addition, reinforce monitoring and investigation of commodity derivatives markets by promoting international cooperation among regulators of financial and physical markets (Additional to option 2 or 3 and 4)

This option would consist in strengthening cooperation between competent authorities with other market supervisors around the world, both bilaterally and through ESMA. It would require them to take market developments on other relevant markets, and the interests of investors in other Member States into account. This will give supervisors a consolidated overview of the market, and allows them to combine their market experience. As a result, market integrity and fair and orderly markets will be improved by reducing risk of cross-market manipulation.

In addition, there will also be ongoing information sharing, assistance in sending information requests, and cooperation in cross-border investigations. This option is complementary to a similar option proposed in the review of the Market Abuse Directive. While MAD is limited to market abuse, this option seeks to promote cooperation in supervising fair and orderly working of markets. It will complement MAD by allowing the monitoring of position limits, and data sharing in order to be able to set appropriate position limits on financial markets.

While bringing considerable benefits in terms of market oversight, this option does not impose any additional obligations on market participants. All costs involved are imposed on competent authorities. This includes costs for transmitting and processing data, and for establishing new (multilateral) memoranda of understanding and cooperation agreements.

Conditions of access to third country firms

Option 6 – Harmonise conditions for the access to the EU of third country investment firms, by introducing a third country regime (a common set of criteria, memoranda of understanding (MoU) between the Member States regulators and the third country regulators under the coordination of ESMA) (Additional to option 2 or 3, and 4 and 5)

This option would allow the national competent authority to register (and thus grant access to the E.U. internal market) and supervise third country investment firms and market operators for the non-retail markets complying with legally binding requirements to the EU securities legislation requirements in accordance with a set of criteria to be further developed in delegated acts. Memoranda of understanding would have to be established between the third country authorities and the Member States regulators under the coordination of ESMA). This would entail a more harmonised and legally clear basis for granting third country investment firms and market operators pan-EU access to EU securities markets. This would replace the current patchwork of national third country regimes granting access to individual Member States. The costs are borne by public authorities, while the benefits would accrue to investors and other market participants, as they will have a wider choice of providers, thus enhancing the competitiveness of EU markets. Any harmonisation of access conditions would have to be compatible with the EU's international commitments, both in the WTO and in bilateral agreements.

Option 7 – Introduce an equivalence and reciprocity regime by which after assessment by the Commission of the third country regulatory and supervisory framework access to the EU would be granted to investment firms based in that third country(Alternative to option 6)

This option would entail the assessment of each third country regulatory and supervisory framework by the Commission to decide on the equivalence of the third country framework to allow for automatic access to the investment firms based in that country subject to reciprocal access for EU firms. The assessment of equivalence would enable third country firms to access EU markets and avoid duplication of rules, notably in the case of relationships between eligible counterparties. However, it could take some time because many rules apply to investment firms when providing investment services and, in many jurisdictions, key applicable rules are now under review to enhance the legal framework due to the financial crisis. In addition, this option could entail political reticence to take an equivalence decision on a given third country. Any limitation of access for third-country market operators would have to be compatible with the EU's international commitments, both in the WTO and in bilateral agreements.

Sanctions

Option 8 – Ensure effective and deterrent sanctions by introducing common minimum rules for administrative measures and sanctions at EU level (Additional to option 2 or 3, 4, 5, 6 or 7)

This option would ensure that administrative sanctions applied across the different Member States are effective to end any breach of the provisions of the national measures and also deter future breach of these provisions. It would also limit the possibility of cross-border infringements from countries with lower standards. In addition, the setting of appropriate whistle blowing mechanisms would help protect persons providing information on infringements and incentivise involved persons to cooperate. There are limited drawbacks to this option.

Assessment of fundamental rights

For this policy option the following fundamental rights are of particular relevance: freedom to conduct business (Article 7), protection of personal data (Article 8), Title VI Justice, particularly the right to an effective remedy and fair trial (Art. 47), presumption of innocence and right of defence (Art 48).

Introducing common minimum rules for administrative measures and sanctions will improve the coherent application of sanctions within the EU which is necessary and proportionate to ensure that comparable breaches of MiFID are sanctioned with comparable administrative sanctions and measures. These rules will particularly ensure that the administrative measures and sanctions which are imposed are proportionate to the breach of the offence. As the rules under this option will introduce minimum rules for administrative measures and sanctions, they will contribute to the "right to an effective remedy and to a fair trial" (Article 47 of the charter of fundamental rights). In addition, the principle of innocence and right of defence (Article 48) will be preserved. In view of the above, this policy option is considered in compliance with the charter of fundamental rights.

Regarding the introduction of "whistle blowing schemes", this raises issues regarding the protection of personal data (Art 8 of the EU Charter and Art. 16 of the TFEU) and the presumption of innocence and right of defence (Art. 48) of the EU Charter. Therefore, any implementation of whistle blowing schemes should comply and integrate data protection principles and criteria indicated by EU data protection authorities[272] and ensure safeguards in compliance with the Charter of fundamental rights.

Option 9 – Ensure effective and deterrent sanctions by harmonising administrative measures and sanctions (Alternative to option 8)

This option would entail harmonising, across Member States, the range of administrative measures and amount of administrative fines that could be imposed. The advantage would be a significantly harmonised playing-field in EU financial markets in terms of threat of sanctions. While this option is highly effective in achieving the policy objectives of deterrence, it is not sure that this option is efficient as market situations, legal systems and traditions differ among Member States. To have exactly the same types and levels of sanctions might not be reasonable and proportionate to ensure deterrent sanctions. Therefore this option is considered less efficient then introducing minimum rules for administrative sanctions.

Assessment of fundamental rights

For this policy option the following fundamental rights are of particular relevance: freedom to conduct business (Article 7), protection of personal data (Article 8), Title VI Justice, particularly the right to an effective remedy and fair trial (Art. 47), presumption of innocence and right of defence (Art 48).

This option would ensure that the same offence would be subject to the same type and level of administrative sanction across the EU. This option will contribute to "right to an effective remedy and to a fair trial" (Article 47 of the charter of fundamental rights) as rules will be uniform across all Member States and the principle of innocence and right of defence (Article 48) will be preserved. In light of the above, this policy option is considered in compliance with the charter of fundamental rights. However, designing uniform administrative measures and sanctions against the breach of MiFID across all Member States with different sized markets is disproportionate.

Regarding the introduction of "whistleblowing schemes", this raises issues regarding the protection of personal data (Art 8 of the EU Charter and Art. 16 of the TFEU) and the presumption of innocence and right of defence (Art. 48) of the EU Charter. Therefore, any implementation of whistle blowing schemes should comply and integrate data protection principles and criteria indicated by EU data protection authorities[273] and ensure safeguards in compliance with the Charter of fundamental rights.

13.5. Reinforce transparency towards regulators

These options will be assessed primarily against their effectiveness in achieving the specific objective of allowing supervisors to monitor compliance with MiFID and MAD. These policy options will also be assessed for their efficiency in achieving these objectives for a given level of resources or at least cost while avoiding unduly

negative effects on market efficiency. However, options will also be assessed against other objectives where appropriate.

Option 1 - take no action at EU level.

Under this option, information on trading that does not occur on regulated markets will continue to be available only in a fragmented way. This means that competent authorities do not have a complete picture of trading activity in the market, and that the available data are difficult to analyse. Also, certain forms of abusive trading, such as manipulating commodity prices through the use of derivatives, manipulating the price of a financial instrument through an OTC instrument, and benefiting from inside information through OTC derivatives, will remain largely invisible. The absence and accessibility of data together make it difficult to detect and investigate market abuse. Also, the differing reporting requirements will continue to lead to needless compliance costs for firms.

Nevertheless, the above consequences would not apply for wholesale electricity and gas markets since REMIT provides for an effective EU level reporting framework for all wholesale energy products (including derivatives) which are not reportable under the current reporting provisions of MiFID or EMIR. Such data would be instantly available for competent financial and energy regulators alike and enable them a comprehensive view of all relevant physical and derivatives energy transactions.

Scope of transaction reporting

Option 2 - Extend the scope of transaction reporting to regulators to all financial instruments (i.e. all financial instruments admitted to trading and all financial instruments only traded OTC). Exempt those only traded OTC which are neither dependent on nor may influence the value of a financial instrument admitted to trading. This will result in a full alignment with the scope of the revised Market Abuse Directive. Lastly regarding derivatives, harmonise the transaction reporting requirements with the reporting obligations under EMIR

Extending the scope of transaction reporting to such instruments will bring the reporting requirements in line with the existing provisions of MAD, as well as with those of the revised MAD. The extension will also be useful for systemic purposes, as it gives insight into trading patterns and resulting concentrations of risk.

Even if many of these instruments, i.e. derivatives, will already need to be reported under EMIR, the equity instruments that are admitted on OTFs will not be covered by this regulation. In addition, the content of transactions reported to trade repositories will not necessarily be the same than the one required under MiFID. This would make the data consolidation of these reports very difficult. Therefore, the extension of MiFID is needed to make sure that all instruments are covered and that the reports sent to trade repositories meet MiFID requirements.

Commodity derivatives may be used for market abuse purposes, notably to distort the underlying market. The value of commodity derivatives does not depend on that of a financial instrument, but on the underlying physical commodity. Commodity derivatives will therefore need to be brought into scope separately

The disadvantage of this option is that it leads to higher compliance costs for financial firms. This is notably due to the inclusion of instruments which are admitted to trading on OTFs. Also, the extension overlaps with the requirement to send information about OTC derivatives trading to trade repositories under EMIR.

Last, for cost and efficiency purposes, double reporting of trades under MiFID and the recently proposed reporting requirements to trade repositories, and under REMIT should be avoided. This entails fully harmonising the reporting requirements under MiFID, EMIR, and REMIT. Almost all of the additional compliance costs associated with introducing this option will be avoided if reporting under EMIR is fully aligned with the requirements under MiFID.

Option 3 – Extend the scope of transaction reporting to all financial instruments that are admitted to trading and all OTC financial instruments. Extend reporting obligations also to orders (Alternative to option 2)

This option entails that investment firms would need to report all transactions in financial instruments which they have carried out, regardless of whether an instrument is admitted to trading or not. This extension would ensure that the reporting requirements are aligned with the provision of investment services and activities under MiFID. In addition, reporting parties will have to transmit to their competent authorities not only the transactions that they have done but also the orders that they have received or initiated

It would mean that all trading in derivatives would be reported. Also, all equity and bond market trading, including all OTC instruments, will be transparent to competent authorities. This will give them a full picture of the performance of MiFID activities on a daily basis. Overall such an extension would give a complete picture of all trading in financial instruments by financial firms. A broad approach would be robust to financial innovation with regards to trading practices. The disadvantage of this approach is that it brings into scope instruments that are not susceptible to or used for market abuse. Also, there may be practical problems to report instruments that are only traded infrequently, and are thereby difficult to capture in standard formats.

The main advantage of the reporting of orders is that it will allow competent authorities to monitor order book activity. This is in line with the extended scope of the Market Abuse Directive, which forbids attempts to manipulate the market and submitting orders that would give distortive price signals can be a form of market abuse. In addition, the reporting of order would allow the establishment of a full audit trail, from the moment where a client or trader decides to place an order until the execution of the order and transformation into a trade. On the downside, this option will dramatically increase the volume of the reporting that market participants will have to do. It will also extend the obligation to firms not currently caught under the transaction reporting regime. This will require them to make extensive investment to cope with this new obligation. The cost of this option is therefore likely to be very high. In addition, the reporting of orders will generate a lot of data that competent authorities will need to be able to analyse to extract meaningful information.

Option 4 – Require market operators to store order data in a harmonised way (Additional to option 2 or 3)

Requiring market operators to keep these records in a standardised way will allow competent authorities to conduct automated searches. This will allow them to monitor for attempted market abuse, as well as for order book manipulation. Also, the market operators are well placed to maintain the volume of data involved. ESMA would set the appropriate standards.

The disadvantage of this approach is that it will impose costs on market operators. Also, order information will not be stored in the same database as transaction information, making it harder for competent authorities to get a complete picture of the market.

Reporting channels

Option 5 – Increase the efficiency of reporting channels (i.e. third parties reporting on behalf of investment firms) by the set up of a system of Approved Reporting Mechanism (ARM), and allow for trade repositories authorised under EMIR to be approved as an ARM under MiFID (Additional to option 2 or 3, and 4)

The advantage of this approach is that it ensures consistency of data reporting through requirements on the reporting firms. By allowing trade repositories to serve as ARM's, this option would also limit the risk of double reporting by firms. Trade repositories are likely to have all the data required to be reported under MiFID. If data requirements are not the same under MiFID and EMIR, firms would have to send additional data fields to enable trade repositories to report on their behalf.

ARMs are to be distinguished from APAs. Third party transaction reporting is already being conducted through ARMs, notably in larger Member States (Germany or United Kingdom for instance). This option will seek to harmonise the framework under which they operate and ensure clear oversight.

The main disadvantage of this approach is that it will impose additional costs on reporting firms, as the ARM's may charge a fee for the transmission of data on their behalf, notably when additional systems investments are necessary. However, this fee may be lower than the costs incurred by the firm when it chooses to report its transactions itself. As reporting via ARMs is not made mandatory, investment firms can still report directly leaving the issue relating to the consistency of reported trades unresolved. However, this disadvantage will need be addressed in implementing measures by further harmonising the content of reporting.

Option 6 – Require trade repositories authorised under EMIR to be approved as an ARM under MiFID (Alternative to option 5)

The main advantage of this approach is that it will ensure all transaction data are sent to competent authorities, so that they will not need to access multiple databases to analyse transaction data. It also means that, although there will legally be two separate reporting obligations on firms, in practice there will be no double reporting.

The main disadvantage with this option is that, when trade repositories are not able to report on behalf of firms in a cost efficient manner, this will impose higher than

normal market costs on firms. Mandating the use of trade repositories might bearer higher risks and costs than simply allow their use as under option 4.

13.6. Improve transparency and oversight of commodities markets

Option 1 – Take no action at EU level.

If nothing is done at the EU level, we will have less transparent and efficient commodity derivatives markets and leave the door open to regulatory arbitrage between Member states, and between the EU and other third country jurisdictions like the US. Competent authorities will not be able to assess the linkages between commodity and commodity derivatives markets, there will be no tools to ensure that increasing financialisation does not hurt the functioning of commodity markets, and certain derivative like instruments will remain outside the scope.

Evolution of commodities markets

Option 2 – Set up a system of position reporting by categories of traders for organised trading venues trading commodity derivatives contracts

This option would significantly increase the transparency of these markets by making available to the regulators (in detail) and the public (in aggregate) meaningful information on the activities of the different markets participants. This increased transparency would improve the price formation mechanism and enable regulators as well as market participants to better assess the role of financial speculation and its impact on the prices and volatility of the underlying physical markets. As the public information is at aggregate level, this will not impact individual companies' trading behaviour. Another advantage of this measure would be to align the EU regulatory framework with the US where a position reporting by categories of traders is already in place and covers all contracts listed on US commodity regulated exchanges.

The disadvantage of this obligation is the cost for organised commodity derivatives trading venues. On the other hand some of these trading venues have already taken initiatives in this field[274].

Option 3 – Control excessive volatility by banning non hedging transactions in commodity derivatives markets (Additional to option 2)

While one could argue that it would decrease volatility and price spikes in these markets, a total ban would most probably dry up liquidity and further increase volatility, as well as be difficult to administer. It would thus not be effective to address the stated goal. There is some evidence that commodity markets for which there is no liquid derivatives market are more, or no less, volatile than other commodity markets.[275] Another main key risk with such a measure would be to move financial speculation from the derivatives or financial markets to the underlying physical markets.

Exemptions for commodities firms

Option 4 – Narrow exemptions for commodity firms to exclude dealing on own account with clients of the main business and delete the exemption for specialist commodity derivatives trading houses (Additional to option 2 and 3)

The main advantage of this option would be to limit the scope of the exemptions to the intended business of hedging physical and price risks by commercial companies. It would also ensure that companies whose main activity is trading on own account would be authorised and duly supervised as any other entity trading on own account in other financial instruments, and approximate the approach in the US regarding the regulation of major swap participants, only from a qualitative not quantitative angle. Finally investor protection would be reinforced as the possibility to provide investment services by exempt firms, which are by definition not subject to any MiFID provisions including conduct of business rules would be narrowed down.

The disadvantage of this option is the costs for companies which were previously exempted to comply with the MiFID rules. The capital requirements these firms would be subject to will be dealt with as part of the forthcoming review of the existing exemptions for commodity firms under the Capital requirements Directive[276]. This review will take place before the expiry of these exemptions end of 2014.

Option 5 – Delete all exemptions for commodity firms (Alternative to option 4)

The advantage of option 5 compared to option 1 would be to capture under the MiFID regulatory regime all firms active in trading in commodity derivatives markets, either for financial investment or hedging purposes, including market makers.

The main shortcoming of this option would be to potentially capture under MiFID entities that widely use financial instruments and commodity derivatives for hedging the risks linked to their underlying physical commercial activity, as well as various non-investment firm entities providing investment services on an ancillary basis to the clients of their main business, and subject these to potentially disproportionate obligations compared to the risks they pose to the financial system. This might as a result undermine the ability of these companies to properly hedge their commercial risks, and of some clients in obtaining the special ancillary services performed by specialist non-investment firm intermediaries.

Secondary spot trading of emission allowances

Option 6 – Extend application of the MiFID to secondary spot tradingof emission allowances (Additional to option 2, 3 and 4 or 5)

This option would bring the carbon market under a comprehensive regulatory regime, which is consistent with financial markets regulation. This would enhance market transparency and investor protection, establishing a level playing field and uniform standards for the services of intermediaries active in the various parts of the carbon market (primary and secondary, spot and derivatives).

With such extension of MiFID, entities providing such services would be required to hold a MiFID licence and comply with all MiFID organisational and operational requirements in the course of that activity. Similarly, trading venues specialising in

spot trade in emission allowances and thus not currently subject to the MiFID, would be expected to obtain a MiFID authorisation (as a regulated market, an MTF, or an organised trading facility).

Under this option, the issue of suitability and proportionality might potentially arise, especially with regard to those intermediaries that so far limited their activity to secondary spot trade and/or have a fairly restricted and specific pool of clients (e.g. industry associations providing intermediation services for their members). Where appropriate, such situations could be mitigated by application of exemptions or proportionality clauses envisaged for intermediaries under MiFID or by taking into account their specificities in the revision of implementing measures (Level 2) within the powers conferred upon the Commission.

Option 7 – Develop a tailor made regime for secondary spot trading(Alternative to option 6)

This option would probably offer more flexibility in terms of developing a regime suited to the specificities of the spot carbon trade. At the same time, that flexibility would be limited by the need to conform to the overall approach to market regulation set out in the MiFID and applicable to the other segments of the carbon market.

Even if the overall consistency with the MiFID were secured, the introduction of a dedicated framework for spot trading of allowances and its autonomous evolution over the years would give rise to the risk of (excessive) segmentation in how the different parts of the carbon market are regulated, which would be an impediment to a sound development of that market. Finally, a replication of most of the general principles of the MiFID in any new instrument for spot carbon market could also be inefficient.

13.7. Broaden the scope of regulation on products, services and providers under the directive when needed

Option 1 - Take no action at EU level.

If no action is taken at the EU level, it is very likely that all the issues that the policy options described below would persist and possibly get more serious. In some cases Member States would react at national level, in others they wouldn't. The result would be that, in the area of investments - where the EU framework is already quite broad and harmonised - a few products and entities could not be subject to any or to very different legislation. An unlevel playing field would continue both for investors receiving similar services based on different rules in different jurisdictions and for certain products which would compete unevenly with other more regulated products (for instance: structured deposits versus structured bonds) or would be treated differently in different Member States.

Optional exemptions for certain investment providers

Option 2 - Allow Member States to continue exempting certain investment service providers from MiFID but introduce requirements to tighten national provisions applicable o them (particularly conduct of business and conflict of interest rules)

This option is a middle ground option between deleting the optional exemptions under Article 3 and leaving the situation as it is. As such, it presents the advantages of setting up a minimum and consistent level of standards for the providers to be

exempted while preserving some flexibility at national levels for catering for the specificities and constraints of these providers for which a full implementation of MiFID could be detrimental, mostly because of their small size. This option would allow to strengthen investor protection standards and to level them irrespective of the entities providing the services (whether subject to MiFID or not). This would also make the rules easier to understand by investors because their increased uniformity.

The downside of this option is that a number of areas (notably organisational requirements) will remain at the discretion of Member States, which presents residual risks of deficiency and inconsistency at European level.

Option 3 - Delete the optional exemptions under Article 3 and subject these investment firms to the full MiFID regulatory regime (Alternative to option 2)

This option is an extension of the previous one. By deleting the optional exemptions, all these firms will be subject to all MiFID obligations. This would ensure a consistent and high quality framework across Europe. This would also make the rules easier to understand by investors because their uniformity.

Nevertheless, this line of action could also be considered disproportionate in the light of the purely national dimension of the business of these entities (which do not enjoy the possibility of providing services in other Member States) and their limited size[277] exposing them to additional implementation costs and possibly forcing some of them out of business.

Conduct of business rules for unregulated investment products

Option 4 - Extend the scope of MiFID conduct of business and conflict of interest rules to structured deposits and other similar deposit based products (Additional to option 2 or 3)

In line with Commission's approach on packaged retail investment products (PRIPs) which identified MiFID as clear benchmark for selling practices involving PRIPs, this option would ensure proper and homogeneous selling rules for these products which are currently unregulated at EU level but which have very similar characteristics to other categories of investment for investors and are actively marketed to them often by the same intermediaries providing investment services in other financial products.

On the downside, this option could raise the cost of distribution of these products by banks which could transfer some of these costs to investors making them less appealing.

Option 5 – Apply MiFID conduct of business and conflict of interest rules to insurance products (Additional to option 2 or 3, and 4)

This would ensure a fully consistent regulatory environment for all similar investment products whatever the nature of the distributor is. This could lead to easier possibilities of choice and safer investment by investors, especially retail ones.

Nevertheless, such a solution presents also drawbacks. The first one lies with the fact that the insurance industry presents specificities in the organisation of its distribution of products compared to banks which could make more complex the automatic

extension of MiFID and would require technical adaptations. The second drawback is that the insurance distribution is already covered under the Insurance Mediation Directive, which covers aspects and products other than PRIPs. The objective to ensure consistency in the PRIPs context by adopting the MiFID standards for insurance PRIPs will be achieved in the context of the Insurance Mediation Directive (IMD), the revision of which is due in 2011. ;

13.8. Strengthen rules of business conduct for investment firms

Option 1 - Take no action at EU level.

The application of certain EU requirements for the provision of investment services exposed some shortcomings. If no action is taken at the EU level, it is very likely that all the issues described below would persist and possibly get more serious. In a highly harmonised context as the one in MiFID, Member States would probably not react sufficiently at their level (or even could not because of constraints in adopting additional requirements). On the other hand, if they reacted, this would lead to new fragmentation, to different treatment of the same service providers and products in different jurisdictions and, finally, to a scaling back of the results obtained so far in pursuing a single market for financial services.

Execution only services and investment advice

Option 2 – Reinforce investor protection by reviewing the list of products for which execution only services are possible and strengthening provisions on investment advice

The revision of the definition of non complex products will allow clarifying the uncertainty around this concept and better defining certain categories of financial instruments, especially in view of the increasing sophistication of investment products. The second measure will substantially reinforce the rules surrounding advice, one of the key services offered by investment firms.

A disadvantage of the first aspect of this option is that, in the context of ever growing financial sophistication, non complex products will remain difficult to clearly identify. A drawback of the second proposal is that entities providing investment advice would continue to be able to offer advice based on a more limited range of financial instruments. On the other hand, the option would provide further clarity and better choice to investors and would preserve the current, broad definition of investment advice, which allows providing simpler and less costly forms of advice while imposing in any case high MiFID standards of conduct of business obligations (strong suitability test and rules concerning inducements in addition to the further improvements to be introduced in implementing measures).

Option 3 – Abolition of the execution only regime (Alternative to option 2)

The main advantage of this solution is to provide clients with the protection of the "know-your-customer" rule for any transaction (even if only based on the limited assessment of appropriateness).

Nevertheless, on the downside, it could be detrimental to certain types of investors who are interested in receiving execution only services and are not willing to pay for additional services they do not need. This is the case for instance of customers who

have a sufficient knowledge of financial markets or are even highly sophisticated and are able to make their own investment choices.

Customers' classification

Option 4 – Apply general principles to act honestly, fairly and professionally to eligible counterparties resulting in their application to all categories of clients and exclude municipalities and local public authorities from the list of eligible counterparties and professional clients per se (Additional to option 2 or 3)

By clarifying the principles of this regime, limiting the availability of this regime in terms of products and/or institutions, this option will contribute to limit the risk of mis-selling and excessive risk taking by institutions that has appeared during the crisis. This option has to be read in conjunction with option 6, insofar as it refers to non-retail clients.

The drawback of this option is that it may make it more rigid the provision of services to certain clients and does not fully solve the issues of the diversity of the eligible counterparty category which encompasses a wide range of participants.

Option 5 –Reshape customers' classification (Additional to option 2 or 3, and 4)

This option is the extension of the previous one. It would consist in reviewing the overall customers' classification of MiFID with a view of sub dividing them into more refined categories in order to match more closely the diversity of existing market participants.

There are certain drawbacks to this option. First, except for a few categories (notably, municipalities and local administrations) there are few clear-cut criteria to make distinctions in the context of certain categories of clients (for instance, between entities authorised as credit institutions or investment firms). Second the current regime is already flexible, in that it does not foresee the category of eligible counterparties for certain services (e.g. advice) and allows entities to require a different classification. Third, it would require changing a harmonized classification system introduced just in 2007/2008 and was costly to implement, without clear and univocal evidence of broad malfunctioning.

Complex products and inducements

Option 6 – Reinforce information obligations when providing investment services in complex products and strengthen periodic reporting obligations for different categories of products, including when eligible counterparties are involved (Additional to option 2 or 3,and 4 or 5)

This would allow investors to have a better understanding of the products and the risks attached to them prior to investing in them and to have better monitoring of their investment in these products over the whole tenor of the product. Some of these obligations should also benefit eligible counterparties.

These new obligations could increase the costs of the firms when trading these products. They could pass these costs on to the investors or refrain from marketing such products which could take away some investment opportunities for investors.

Option 7 – Ban inducements in the case of investment advice provided on an independent basis and in the case of portfolio management (Additional to option 2 or 3,4 or 5 and 6)

This would avoid the risk of conflicts of interest for portfolio managers who are allowed in discretionary portfolio management to make decision without involvement of the client and reinforce the objectivity of the selection of products provided by investment firms in case of independent advice.

The drawback of this option is the possible cost for intermediaries, at least at the initial stage, to change the structure of their incomes and of the modalities for the provision of these services. This could lead to increased costs for investors. Nevertheless, these costs might be absorbed in the longer term and would be balanced by a better quality of these two services for which the client may expect the highest degree of independence.

Option 8 – Ban inducements for all investment services (Alternative to option 7)

This would aim at ensuring that investment firms are not influenced at all in their product selection by the reward that they can extract on the side from these products. On the other hand, this option would dramatically impact of the current business model of investment firms and could actually result in a reduction in the range of services and products offered to clients and significant increase of costs for clients receiving any investment services.

Best execution

Option 9 – Require trading venues to publish information on execution quality and improve information provided by firms on best execution (Additional to option 2 or 3, 4 or 5, 6, and 7 or 8)

The positive effects of such change would be to allow firms to improve compliance with best execution obligations as they will have more information to use to adapt their execution policy. In addition, this should lead to additional information provided by investment firms and to more precise and concrete execution policies to be disclosed by investment firms to their clients, including professional clients.

Option 10 – Review the best execution framework by considering price as the only factor to comply with best execution obligations (Alternative to option 9)

Such a move would allow a simplification of the criteria that could benefit investors which are especially sensitive to the criteria to be retained. On the negative side, the relative importance of the various criteria varies according to the type of clients and type of orders (for instance, speed of execution may be relevant for certain clients). It is therefore very difficult to come up with one unique criterion that would fit all types of investors and orders. Furthermore, in a fragmented environment such as the European one, the impact of costs could largely exceed any positive effect on price.

13.9. Strengthen rules of organisational requirements for investment firms

Option 1 – Take no action at EU level

The crisis has shown the relevance of appropriate corporate governance principles, including the responsibility of boards and role of internal functions. If no action is taken at the EU level to improve the framework for organisational requirements under MiFID, it is very likely that all the issues described below would persist and possibly get more serious. In a highly harmonised context as the one in MiFID, Member States would probably not react sufficiently at their level (or even could not because of constraints in adopting additional requirements). On the other hand, if they reacted, this would lead to new fragmentation, to different treatment of the same service providers in different jurisdictions and, finally, to scaling back some of the results obtained so far in pursuing a single market for financial services.

Corporate governance

Option 2 – Reinforce the corporate governance framework by strengthening the role of directors especially in the functioning of internal control functions, and when defining strategies of firms and launching products and services. Require firms to establish clear procedures to handle clients' complaints in the context of the compliance function.

This option emphasizes the relevance of choices at the highest level of the firm in shaping the overall compliance of the financial institution with requirements for the provision of investment services and activities. It provides internal functions with further authority and improves, inter alia, the treatment of complaints received from any type of clients.

On the negative side, in certain cases this option may introduce a level of rigidity in areas currently covered by a flexible framework (for instance fit and proper criteria).

Option 3 – Introduce a new separate internal function for the handling of clients' complaints. (Additional to option 2)

While this option would further stress the relevance of proper treatment of complaints, it may lead to unnecessary standardisation of complaints handling which does not recognize the possible differences in terms of complexity and type of problems raised in concrete cases. The establishment of a separate function could lead to fragmentation of internal functions and risks of inefficient communications between parts of the firm dealing with controls on the proper provision of services by the firm and some possible additional costs.

Organisational requirements for portfolio management and underwriting

Option 4 – Require specific organisational requirements and procedures for the provision of portfolio management services and underwriting services (Additional to option 2 and 3)

This option aims at introducing a more detailed – while still general – framework for the provision of services (notably portfolio management and underwriting) which are already in the scope of the directive but are insufficiently regulated. In particular this option will require firms to formalize their investment strategies when managing

clients' portfolios. Relating to underwriting services, firms would be required to provide information concerning the allotment of financial instruments, and to have specific procedures for the management of conflicts of interest situations.

On the negative side, in certain cases this option might introduce a level of rigidity in these areas (for instance, information requirements covering the allotment of the financial instruments in the process of underwriting).

Telephone and electronic recording

Option 5 – Introduce a completely harmonized regime for telephone and electronic recording of client orders (Additional to option 2, 3 and 4)

This option implies the deletion of the current option for Member States to introduce requirements to record telephone conversations or electronic communications involving client orders and the introduction of a fully harmonized regime.

The advantage would be the delivery of a common regime across the EU. Since telephone recording is first of all a tool for supervisors, the drawback is that Member States would not retain flexibility in modifying the scope of this obligation in terms of services covered, retention period and technical means to be recorded according to local market conditions.

Option 6 – Introduce a common regime for telephone and electronic recording of client orders but still leave a margin of discretion to Member States (Alternative to option 5)

This option aims at introducing a common regime for telephone recording (for instance, execution and reception and transmission of orders, dealing on own account) while still leaving a margin of discretion to Member States in applying the same obligation for services not covered at EU level (for instance portfolio management). The retention period at EU level could be set at 3 years, i.e. less than the ordinary 5 years period required for other records, while leaving the option to Member States to apply the ordinary period also for these records.

This option would address the drawbacks of the previous one. On the negative side, it would leave margins for some differentiations at national level, but this would be consistent with the diversity of supervisory methods and techniques that exist across the EU.

Fundamental rights assessment of options 5 and 6

This requirement entails an interference with the fundamental right to privacy and the protection of personal data (Articles 7 and 8 of the EU Charter), in particular, with regard to the access to recorded communications by third parties, namely supervisory authorities. However limiting this right is proportionate and necessary as competent authorities need this information in order to ensure market integrity and enforcement of compliance with business of conduct rules. However any measure should respect EU data protection rules laid down in Directive 95/46/EC. The retention period to be set should take account of existing EU legislation on retention of data generated or processed in connection with the provision of publicly available electronic communications for the purposes of fighting serious crime. The retention period has been set at a maximum of three years, as it has been found proportionate

and necessary to meet the legitimate objective pursued. Accordingly the proposed retention period is no longer than three years as this would not comply with the principles of necessity and proportionality necessary to make it lawful an interference with a fundamental right.

14. ANNEX 4: OVERVIEW OF THE PREFERRED OPTIONS

Policy options	Summary of policy options
1 Regulate appropriately all market structures and trading places taking into account the needs of smaller participants, especially SMEs	
1.2 Introduce a new category of Organised Trading Facilities (OTF), besides Regulated Markets (RM) and MTFs to capture current (including broker crossing systems - BCS) as well as possible new trading practices while further align and reinforce the organisational and surveillance requirements of regulated markets and MTFs	Under this option a new category called organised trading facility would be established capturing previously not regulated as a specific MiFID trading venue organised facilities such as broker crossing systems, "swap execution facility" type platforms, hybrid electronic/voice broking facilities and any other type of organised execution system operated by a firm that brings together third party buying and selling interests. This new category would ensure that all organised trading is conducted on regulated venues that are transparent and subject to similar organisational requirements. The different types of trading venues will be clearly distinguished based on their characteristics. Regulated markets and MTFs are characterised by non-discretionary execution of transactions and non-discriminatory access to their systems. This means that a transaction will be executed according to a predetermined set of rules. It also means that they offer access to everyone willing to trade on their systems when they meet an objective set of criteria. By contrast, the operator of an organised trading facility has discretion over how a transaction will be executed. He has a best execution obligation towards the clients trading on his platform. He may therefore choose to route a transaction to another firm or platform for execution. An organised trading facility may also refuse access to clients he does not want to trade with. An important constraint on OTFs is that the operator may not trade against his own proprietary capital. This would mean that firms operating internal systems that try to match client orders or that enable clients to execute orders with the firm will have to be authorised and supervised under the respective provisions of a MTF or OTF or Systematic Internaliser. The OTF category would not include ad hoc OTC transactions. It would also not include systems which do not match trading interests such as: systems or facilities used to route an order to an external trading venue, systems used to disseminate and/or advertise buying and selling trading interests, post-trade confirmation systems, etc. The organisational requirements applying to regulated markets and MTFs, as well as OTFs would be further aligned where businesses are of a similar nature especially those requirements concerning conflicts of interest and risk mitigation systems. Operators of the various trading venues trading identical instruments would be required to cooperate and inform each other of suspicious trading activity and various other trading events.
1.4 Mandate trading of standardised OTC derivatives (i.e. all clearing eligible and sufficiently liquid derivatives) on RM, MTFs or OTFs	This option picks up on the G20 commitment to move trading in standardised derivatives to exchanges or electronic trading platforms where appropriate. All derivatives which are eligible for clearing and are sufficiently liquid (the criterion of sufficient liquidity would be determined via implementing measures) would be required to be traded on regulated markets, MTFs or OTFs. These venues would be required to fulfil specifically designed criteria and fulfil similar transparency requirements towards the regulators and the public.
1.6 Introduce a tailored regime for SME markets under the existing regulatory framework of MTF	Under this option a special category of SME market would be established in MiFID, under the existing regulatory framework MTF, specifically designed to meet the needs of SME issuers. Such a regime would entail more calibrated elements in relation to the eligibility of SME issuers facilitating access of SMEs to MTFs while still creating a unified European quality label for SMEs providing for more visibility and therefore more liquidity in SME stocks.
2 Regulate appropriately new trading technologies and address any related risks of disorderly trading	
2.2 Narrow the exemptions granted to dealers on own account to ensure that High Frequency Traders (HFT) that are a direct member or direct participant of a RM or MTF are authorised	Under this option, all entities that are a direct member or a direct participant of a RM or MTF, including those engaging in high-frequency trading, would be required to be authorised as an investment firm under MiFID so that they would all be supervised by a competent authority and required to comply with systems, risk and compliance requirements applicable to investment firms.
2.3 Reinforce organisational requirements for firms involved in automated trading and/or high-frequency trading and firms providing sponsored or direct market access	Under this option specific obligations would be imposed targeted specifically at algorithmic and HFT trading ensuring that firms have robust risk controls in place to prevent potential trading system errors or rogue algorithms. Information about algorithms would also be required to be made available to regulators upon request. In addition, firms granting other traders direct or sponsored access to their systems would need to have stringent risk controls in place as well as filters which can detect errors or attempts to misuse their facilities.

2.4 Reinforce organisational requirements (e.g. circuit breakers, stress testing of their trading systems) for market operators	This option would address automated trading from the perspective of the market operators. Operators of organised trading venues would be obliged to put in place adequate risk controls to prevent a breakdown of trading systems or against potentially destabilising market developments. These operators would be required to stress test and encode so-called circuit breakers into their systems which can stop trading in an instrument or the market as a whole in adverse conditions when orderly trading is in danger and investors need to be protected. Operators would also be obliged to put in place rules clearly defining circumstances in which trades can be broken following trading errors and procedures to be followed if trades can be broken.
2.7 Impose an order to executed transaction ratio by imposing incremental penalties on cancelled orders and setting up minimum tick size	Under this option market operators would need to ensure that their market participants maintain an adequate order to transaction executed ratio. It would impose that market operators impose a system of incremental penalties for cancelled orders. This would limit the number of orders that can be placed and then cancelled by high frequency traders. This would reduce stress on trading systems as it would prevent excessively large numbers of orders from being sent and then withdrawn and updated. It would also prevent behaviour where participants submit a multitude of orders withdrawing them almost immediately just to gauge the depth of the order book. In addition, the obligation for market operators to set up minimum tick size (i.e. a tick size is the smallest increment (tick) by which the price of exchange-traded instrument can move) on their trading venues would prevent excessive arbitrage by HFT as well as unsound competition between trading venues that could lead to disorderly trading.
2.5 Introduce requirements for automated traders to provide liquidity on an ongoing basis	This option would require algorithmic traders to both trade on the venues they connect to on an ongoing basis and to provide meaningful liquidity at all times. Requiring this as an integral part of the trading strategy of an algorithm would contribute to more orderly and liquid markets and mitigate episodes of high uncertainty and volatility.
3 Increase trade transparency for market participants	
3.2 Adjust the pre and post trade transparency regime for equities by ensuring consistent application and monitoring of the utilisation of the pre-trade transparency waivers, by reducing delays for post trade publication and by extending the transparency regime applicable to shares admitted to trading on RMs to shares only traded on MTFs or OTFs	This option would focus on strengthening a number of features of the existing trade transparency regime for equities. The current waivers from pre-trade transparency obligations would be further harmonised as to their application and their monitoring would be improved giving ESMA an enhanced role in the process. In the post-trade section the maximum deadline for real-time reporting would be reduced down to one minute (from three) and the permissible delays for publishing large transactions would be significantly reduced. Furthermore, the scope of the transparency regime would be extended to instruments only traded on MTFs and organised trading facilities.
3.4 Introduce a calibrated pre and post trade transparency regime for certain types of bonds and derivatives	This option would entail extending the MiFID trade transparency rules (both pre- and post-trade) from equities to certain types of other financial instruments such as bonds, structured products and derivatives eligible for central clearing and submitted to trade repositories. As non-equity products are very different from equity products and very different one from another, the detailed transparency provisions would need to be defined for each asset class and in some cases for each type of instrument within that asset class. This calibration will need to take into account several factors including: (i) the make-up of market participants in different asset classes, (ii) the different uses investors have for the instruments, and (iii) the liquidity and average trade sizes in different instruments. The detailed provisions will be laid down in delegated acts.
3.6 Reduce data costs notably by requiring unbundling of pre and post trade data and providing guidance on reasonable costs of data, and improve the quality of and consistency of post trade data by the set up of a system of Approved Publication Arrangements (APAs)	Under this option, measures would be implemented reducing the costs of data for market participants: - organised trading venues would be required to unbundle pre- and post-trade data so that users would not be required to purchase a whole data package if they are only interested in, for example, post-trade data; - Standards by ESMA determining criteria for calculating what constitutes a reasonable cost charged for data would be envisaged; - Introduce further standards regarding the content and format of post trade data; - Investment firms would be required to publish all post-trade transparency information via so-called Approved Publication Arrangements (APAs). These APAs would need to adhere to strict quality standards to be approved ; and - Trade data would be required to be provided free of cost 15 minutes after the trade.
3.8 Improve the consolidation of post trade data for the equities markets by the set-up of a consolidated tape system operated by one or several commercial providers. Introduce a consolidated tape for non-equities markets after a period of 2 years under the same set-up as for	This option would be complementary to option 3.6 as the data pre-managed by the APAs would then be submitted to dedicated consolidators (i.e. one or several commercial providers) that would need a separate approval. The function of these consolidators would be to collect all information that is published per share at any given time and make it available to market participants by means of one consolidated data stream at a reasonable cost. The set-up of a consolidated tape by one or several commercial providers would be required for non-equities markets after a transitional period of 2 years depending on the type of financial instrument. This

equities markets	differed application would ensure that the consolidation of trade data would take place after the implementation of the new trade transparency requirements for non-equities markets by market participants.
4 Reinforce regulators powers and consistency of supervisory practice at European and International level	
4.2 Introduce the possibility for national regulators to ban for an indefinite period specific activities, products or services under the coordination of ESMA. Give the possibility to ESMA under specific circumstances to introduce a temporary ban in accordance with Article 9(5) of the ESMA regulation N°1095/2010[278]	This option would consist in giving national regulators the power to ban or restrict for an indefinite period the trading or distribution of a product or the provision of a service in case of exceptional adverse developments which gives to significant investor protection concerns or poses a serious threat to the financial stability of whole or part of the financial system or the orderly functioning and integrity of financial markets. The action taken by any Member State should be proportionate to the risks involved and should not have a discriminatory effect on services or activities provided by other Member Sates. ESMA would perform a facilitation and coordination role in relation to any action taken by Member States to ensure that any national action is justified and proportionate and where appropriate a consistent approach is taken. ESMA would have to adopt and publish an opinion on the proposed national ban or restriction. If the national Competent Authority disagrees with ESMA's opinion, it should make public why. In addition to the powers granted to national competent authorities under the coordination of ESMA, ESMA would have the power to temporarily ban products and services in line with the ESMA regulation. The ban could consist in a prohibition or restriction on the marketing or sale of financial instrument or on the persons engaged in the specific activity. The provisions would set specific conditions for both of these bans on their activation, which can notably happen when there are concerns on investor protection, threat to the orderly functioning of financial markets or stability of the financial system. Such a power would be complementary to the national powers in the sense that a ban by ESMA could only be triggered in the absence of national measures or in case the national measures taken would be inappropriate to address the threats identified.
4.4 Reinforce the oversight of positions in derivatives in particular commodity derivatives, including by granting regulators the power coordinated via ESMA to introduce positions limits	This option has several layers. First trading venues on which commodity derivatives trade would be required to adopt appropriate arrangements to support liquidity, prevent market abuse, and ensure orderly pricing and settlement. Position limits are a possible measure to this effect, i.e. hard position limits are fixed caps on the size of individual positions that apply to all market participants at all times. Position management is another, i.e. the possibility for the venue operator to intervene ad hoc and ask a participant to reduce its position. Second, national competent authorities would also be given broad powers to carry out position management with regard to market participants' positions in any type of derivatives and require a position to be reduced. They would also be given explicit powers to impose both temporary (i.e. position management approach) and permanent limits (i.e. position limits) on the ability of persons to enter into positions in relation to commodity derivatives. The limits should be transparent and non-discriminatory. ESMA would perform a facilitation and coordination role in relation to any measure taken by national competent authorities. Finally, ESMA would have temporary powers to intervene in positions and to limit them in a temporary fashion consistent with the emergency powers granted in the ESMA regulation. In other words, ESMA would be equipped with position management powers in case a national competent authority fails to intervene or does so to an insufficient degree, but no position limit powers.
4.5 Reinforce the oversight of financial markets which are increasingly global by strengthening the cooperation between EU and third country securities regulators. In addition reinforce monitoring and investigation of commodity derivatives markets by promoting international cooperation among regulators of financial and physical markets	This option would consist in strengthening cooperation between competent authorities with other market supervisors around the world, possibly through ESMA. In the specific case of commodity derivatives markets this option would in addition reinforce the cooperation between financial and physical regulators both within the EU and at international level. This entails establishing new memoranda of understanding and cooperation agreements. In addition, there will also be ongoing information sharing, assistance in information requests, and cooperation in cross-border investigations. This option is complementary to a similar option proposed in the review of the Market Abuse Directive. While MAD is limited to market abuse, this option seeks to promote cooperation in supervising fair and orderly working of markets.
4.7 Harmonise conditions for the access to the EU of third country investment firms, by introducing a third country regime (based on equivalence and reciprocity and memoranda of understanding (MoU) between the Member States regulators and the third country regulators under the coordination of ESMA)	This option would create a harmonised framework for granting access to EU markets for firms based in third countries. The provision of services to retail clients would always require the establishment of a branch in the EU territory; the provision of services without a branch would be limited to business for eligible counterparties. This option would entail the assessment of equivalence and reciprocal access of the third country regulatory and supervisory regime in relation to the EU regime and to EU-based operators. This assessment would be formalised by a decision of the Commission. Memoranda of understanding (MoU) between the Member States regulators and the third-country regulators should be concluded. Investment firms established in third countries for which equivalence has been granted would have access to the EU market, with the provision of services to retail clients would always requiring the establishment of a branch in the EU territory and compliance by the firm with key MiFID operating and investor protection conditions.

4.8 Ensure effective and deterrent sanctions by introducing common minimum rules for administrative measures and sanctions	This option would require Member States to provide for administrative sanctions and measures which are effective, proportionate and dissuasive byintroducing minimum rules on type and level of administrative measures and administrative sanctions. Administrative sanctions and measures set out by Member States would have to satisfy certain essential requirements in relation to addressees, criteria to be taken into account when applying a sanction or measure, publication of sanctions or measures, key sanctioning powers and minimum levels of fines. This option would also entail establishing whistleblowing mechanisms.
	5 Reinforce transparency to regulators
5.2 Extend the scope of transaction reporting to regulators to all financial instruments (i.e. all financial instruments admitted to trading and all financial instruments only traded OTC). Exempt those only traded OTC which are neither dependent on nor may influence the value of a financial instrument admitted to trading. This will result in a full alignment with the scope of the revised Market Abuse Directive. Lastly regarding derivatives, harmonise the transaction reporting requirements with the reporting requirements under EMIR	This option entails that investment firms report the details of transactions in all instruments which are traded in an organised way, either on a RM, a MTF or an organised trading facility to regulators. Notably the extension to OTFs would bring a whole set of derivatives products into scope (e.g. part of equity derivatives, credit derivatives, currency derivatives, and interest rate swaps). All transactions in OTC instruments which are not themselves traded in an organised way will also have to be reported, except when the value of those does not depend to some extent on or may not influence that of instruments which are admitted to trading. Extending the scope of transaction reporting to such instruments will bring the reporting requirements in line with the existing provisions of MAD, as well as with those of the revised MAD, and corresponds to existing practice in some Member States (e.g. UK, Ireland, Austria, and Spain). Commodity derivatives may be used for market abuse purposes, notably to distort the underlying market. Commodity derivatives will need to be brought into scope separately. This extension overlaps considerably with the scope of reporting requirements to trade repositories under EMIR.
5.4 Require market operators to store order data in an harmonised way	This option entails that all market operators keep records of all orders submitted to their platforms, regardless of whether these orders are executed or not. Such records need to be comparable across platforms, notably with regard to the time at which they were submitted. The information stored should include a unique identification of the trader or algorithm that has initiated the order. ESMA will set the appropriate standards.
5.5 Increase the efficiency of reporting channels by the set up of Approved Reporting Mechanisms ("ARMs") and allow for trade repositories under EMIR to be approved as an ARM under MiFID	This option entails that all entities involved in reporting transactions on behalf of investment firms are adequately supervised. Under this option, competent authorities' powers to monitor ARM's functioning on an ongoing basis will be clarified. Also, the standards that ARM's need to comply with will be harmonised.
	6 Improve transparency and oversight of commodities markets
6.2 Set up a system of position reporting by categories of traders for organised trading venues trading commodities derivatives contracts	Under this option organised trading venues which admit commodity derivatives to trading would have to make available to regulators (in detail) and the public (in aggregate) harmonised position information by type of regulated entity. A trader's position is the open interest (the total of all futures and option contracts) that he holds. The trader would have to report to the trading venue whether he trades on own account or on whose behalf he is trading including the regulatory classification of their end-customers in EU financial markets legislation (e.g. investment firms, credit institutions, alternative investment fund managers, UCITS, pension funds, insurance companies). If the end beneficiary of the position is not a financial entity, this position would by deduction be classified as non-financial. The focus of this obligation will be commodity derivatives contracts traded on organised trading venues (contracts traded either on regulated markets, MTFs or organised trading facilities) which serve a benchmark price setting function. The objective of this position reporting would be to improve the transparency of the price formation mechanism and improve understanding by regulators of the role played by financial firms in these markets.
6.4 Review exemptions for commodity firms to exclude dealing on own a/c with clients and delete the exemption for specialist commodity derivatives	Specialist commodity firms whose main business is to trade on own account in commodities and/or commodity derivatives would not be exempt any more. Commercial entities would not be allowed any more to trade on own account with clients and the possibility to provide investment services to the clients of the main business on an ancillary basis would be applied in a very precise and narrow way. This option would not by itself affect capital requirements imposed on firms.
6.6 Extend the application of MiFID to secondary spot trading of emission allowances	This option would involve coverage under the MiFID of emission allowances and other compliance units under the EU Emissions Trading Scheme. As a result, all MiFID requirements would apply to all trading venues and intermediaries operating in the secondary spot market for emission allowances. Venues would need to become regulated markets, MTFs, or OTFs. Financial market rules would apply to both spot and derivative markets for emissions trading, establishing a coherent regime with overarching rules. This would replace the need to devise a tailor made regime for secondary spot emission allowances markets.
	7 Broaden the scope of regulation on products, services and service providers when needed
7.2 Allow Member States to continue exempting certain investment service	This option leaves Member States the possibility to exempt certain entities providing advice from the Directive but requires that national legislation includes requirements similar to MiFID in

providers from MiFID but introduce requirements to tighten national requirements applicable to them (particularly conduct of business and conflict of interest rules)	a number of areas (notably proper authorization process including fit and proper criteria and conduct of business rules). Member States would maintain discretion in adapting organizational requirements to the exempted entities based on national specificities
7.4 Extend the scope of MiFID conduct of business and conflict of interest rules to structured deposits and deposit based products with similar economic effect	This option would aim at extending MiFID conflicts of interest and conduct of business rules (particularly information to and from clients, assessment of suitability and appropriateness, inducements) to structured deposits, products which currently are not regulated at EU level
	8 Strengthen rules of business conduct for investment firms
8.2 Reinforce investor protection by narrowing the list of non-complex products for which execution only services are possible and strengthening provisions on investment advice	This policy option combines two measures which will have complementary effects. The first measure consists in the limitation of the definition of non-complex products which allows investment firms to provide execution only services i.e. without undergoing any assessment of the appropriateness of a given product. The second measure consists in reinforcing the conduct of business rules for investment firms when providing investment advice, mainly by specifying the conditions for the provision of independent advice (for instance, obligation to offer products from a broad range of product providers). Further requirements concerning the provision of investment advice (reporting requirements and annual assessment of recommendations provided) would be mainly introduced via implementing measures to complement these changes in the framework directive.
8.4 Apply general principles to act honestly, fairly and professionally to eligible counterparties resulting in their application to all categories of clients and exclude municipalities and local public authorities from list of eligible counterparties and professional clients per se	This options aims at reinforcing the MiFID regime for non-retail clients by narrowing the list of type of entities that are de facto eligible counterparties or professional clients. Further requirements would be modified in the implementing measures (deletion of the presumption that professional clients have the necessary level of experience and knowledge).
8.6 Reinforce information obligations when providing investment services in complex products and strengthen periodic reporting obligations for different categories of products, including when eligible counterparties are involved	This option aims at increasing the information and reporting requirements to clients of investment firms, including eligible counterparties. In the case of more complex products, investment firms should provide clients with a risk/gain and valuation profile of the instrument prior to the transaction, quarterly valuation during the life of the product as well as quarterly reporting on the evolution of the underlying assets during the lifetime of the product. Firms holding client financial instruments should report to clients about material modifications in the situation of financial instruments concerned. Most of these detailed obligations would be introduced in implementing measures and should be calibrated according to the level of risk of the relevant product.
8.7 Ban inducements in the case of investment advice provided on an independent basis and in the case of portfolio management	The objective of this option is to strengthen the existing MiFID inducement rules by banning third party inducements in case of portfolio management and independent advice. These measures that would affect the Level 1 Directive would be complemented by changes in the Level 2 implementing acts where inducements are currently regulated; this will include the improvement of the quality of information given to clients about inducements.
8.9 Require trading venues to publish information on execution quality and improve information provided by firms on best execution	This option consists in improving the framework for best execution by inserting in the MiFID an obligation for trading venues to provide data on execution quality. Data would be used by firms when selecting venues for the purpose of best execution. The implementing directive would clarify technical details of data to be published and would reinforce the requirements relating to information provided by investment firms on execution venues selected by them and best execution.
	5.9 Strengthen organisational requirements for investment firms
9.2 Reinforce the corporate governance framework by strengthening the role of directors especially in the functioning of internal control functions and when defining strategies of firms and launching new products and services. Require firms to establish clear procedures to handle clients' complaints in the context of the compliance function.	This option strengthens and specifies the overall framework for corporate governance in the design of firms' policies, including the decision on products and services to be offered to clients (clear involvement of executive and non-executive directors), in the framework for internal control functions (reinforced independence, further definition of role of the compliance function including handling with clients' complaints) and in the supervision by competent authorities (involvement in the assessment of the adequacy of members of the board of directors at any time and in the removal of persons responsible for internal control functions). In addition it will explicitly require that within the compliance function clear procedures have been developed to deal with clients' complaints.
9.4 Require specific organisational requirements and procedures for the provision of portfolio management services and underwriting services	This option introduces a more detailed, while still general framework for the provision of the services of portfolio management (formalization of investment strategies in managing clients' portfolios) and underwriting (information requirements concerning allotment of financial instruments, management of conflicts of interest situations).

9.6 Introduce a common regime for telephone and electronic recording but still leave a margin of discretion for Member States in requiring a longer retention period of the records and applying recording obligations to services not covered at EU level.	This option aims at introducing a common regime for telephone and electronic recording in terms of services covered (for instance, execution and reception and transmission of orders, dealing on own account) and retention period (two years) while still leaving a margin of discretion to Member States in applying the same obligation for other services (for instance portfolio management) and in requiring a longer retention period (up to the ordinary 5 years period required for other records). This common regime would focus on the services which are the most sensitive from a supervisory point of view in terms of market abuse or investor protection and would be fully complaint in terms of retention period with the Charter of EU Fundamental Rights.

15. ANNEX 5: OVERVIEW OF COMPLIANCE COSTS

15.1. Consolidated overview of compliance costs

Detailed breakdown of compliance costs (€ millions)	TOTAL INCREMENTAL COSTS			
	one-off		on-going	
	low	high	low	high
Market structures				
Alignment and reinforcement of MTF / RM organisational and market surveillance requirements	1,0	10,0	0,0	0,0
Broker crossing networks & Organised Trading Facilities	4,2	11,3	0,6	3,2
Information pack to be provided to the Competent Authority	*0,5*	*0,5*	*0,0*	*0,0*
Monitoring of trading	*3,7*	*10,8*	*0,6*	*3,2*
Trading of OTC derivatives on organised trading venues	4,7	9,3	8,7	17,3
SME markets	0,0	0,0	0,0	0,0
Total market structure costs	**9,9**	**30,6**	**9,3**	**20,5**
New trading technologies ("automate trading")				
All HFT firms to be authorised	0,0	0,0	0,9	0,9
Reinforce organisational requ. of firms involved in automated trading	1,0	1,0	0,0	0,0
Requirement for sponsoring firms to have robust risk controls	0,1	0,1	0,0	0,0
Reinforcement of organizational requirements for market operators	0,0	0,0	0,0	0,0
Total automated trading costs	**1,1**	**1,1**	**0,9**	**0,9**
Pre and post-trade transparency and data consolidation				
Equity markets	0,0	0,0	0,0	0,0
Equity transparency regime for MTF/OTF	2,0	2,0	0,4	0,4
Non equities markets	5,5	9,2	8,9	12,7
Pre trade for MTFs/OTFs	*0,4*	*0,8*	*0,2*	*0,3*
Pre trade for market participants OTC	*0,6*	*1,0*	*4,1*	*5,3*
Post-trade for MTFs/OTFs	*0,4*	*0,8*	*0,2*	*0,3*
Post-trade for market participants	*4,1*	*6,6*	*4,5*	*6,8*
Total transparency	**7,5**	**11,2**	**9,3**	**13,1**
APAs, single formats and consolidated tape	30,0	30,0	3,0	4,5
Total reporting channels and data consolidation	**30,0**	**30,0**	**3,0**	**4,5**
Total transparency	**37,5**	**41,2**	**12,3**	**17,6**
Reinforce regulatory powers				
Position oversight	0,0	0,0	2,0	4,0
Trading platforms			*1,6*	*3,1*
Market participants			*0,4*	*0,9*
Setting and monitoring position limits	8,2	12,9	7,5	16,3
Trading platforms with existing market surveillance in place	*2,2*	*2,9*	*3,7*	*7,3*
Trading platforms without existing market surveillance in place	*6,0*	*10,0*	*3,8*	*9,0*
Total regulatory powers costs	**8,2**	**12,9**	**9,5**	**20,3**
Transparency to regulators				
Total transaction reporting costs	65,4	84,1	1,6	3,0

Extension to MTFs	*0,7*	*1,1*	*0,1*	*0,1*
Extension to OTC derivatives, excl. commodity derivatives	*48,2*	*62,0*	*0,6*	*0,9*
Extension to commodity derivatives	*16,0*	*19,9*	*0,4*	*0,7*
Extension to depositary receipts	*0,7*	*1,1*	*0,5*	*1,3*
Storage of orders			1,0	1,9
Total transparency to regulators costs	**65,4**	**84,1**	**2,6**	**4,9**
Commodity derivatives markets				
Position reporting by categories of traders	0,8	1,0	3,3	3,8
Publishing costs for regulated markets	*0,0*	*0,0*	*0,3*	*0,3*
MTFs	*0,1*	*0,2*	*1,8*	*2,4*
Traders	*0,6*	*0,8*	*1,1*	*1,1*
Extension of MiFID to secondary spot trading in EUAs	1,5	1,8	0,4	0,5
Platforms offering spot trading	*1,5*	*1,8*	*0,4*	*0,5*
Compliance buyers				
Market intermediaries				
Total commodity derivatives costs	**2,3**	**2,8**	**3,7**	**4,3**
Broaden the scope of regulation				
Harmonisation of Article 3 exemption - authorisation process	15	30		
Extension of MiFID to structured deposits	31	44	9	15
Total	**46**	**74**	**9**	**15**
Strengthening of conduct of business rules				
Reduction in the list of non complex products	0,1	0,2	0	0
Strengthening conduct of business rules for investment advice	5,6	12,5	1 34,3	279,0
Extended suitability report			*29,1*	*59,0*
Training	*5,6*	*12,5*		
Reporting every 6 months			*40,0*	*67,5*
Annual request to update client's information			*23,5*	*52,5*
Advice in changed circumstances			*41,7*	*100,0*
Adjustments to the eligible counterparty and professional client classification	2,3	2,9	16,0	16,0
Information on complex products	83,2	145,9	11,6	36,6
Risk-gain profiles	*50,6*	*86,7*	*10,1*	*28,9*
Marketing materials	*25,0*	*45,0*		
Quarterly reporting			*1,5*	*7,7*
Material change systems	*1,7*	*2,7*		
Material change review	*6,0*	*11,6*		
Banning of inducements in rel. to independent investment advice	41	41	24	28
Banning of inducements in relation to portfolio management	130,8	130,8	3,7	3,7
Trading venues - Execution quality	18,0	18,0	6,0	6,0
Total COB rules costs	**280,9**	**351,2**	**195,6**	**369,3**
Organizational requirements for investment firms				
Strengthening the role of the internal control functions	5,0	5,0	24,0	32,0
Internal control functions - Reporting to the Board			*24,0*	*32,0*
Launch of new products	*5,0*	*5,0*		
Organizational requ. - Portfolio management	2,8	4,2		
Organizational requ. - Underwriting	11,0	26,0	0,3	0,3
Review of existing procedures	*9,0*	*22,0*		

New system	*2,0*	*4,0*		
Ongoing compliance monitoring			*0,3*	*0,3*
Harmonisation of the telephone and electronic recording regime	41,7	99,2	45,2	101,2
Total organizational requ. costs	**60,5**	**134,4**	**69,45**	**133,45**
TOTAL MiFID REVIEW COSTS	**511,8**	**732,4**	**312,3**	**586,2**
Total operating costs of investment firms	500.000,0	500.000,0	500.000,0	500.000,0
Total MiFID review costs as a % of total operating costs	0,10%	0,15%	0,06%	0,12%
Costs of the introduction of MiFID as a % of total operating costs	**0,56%**	**0,68%**	**0,11%**	**0,17%**

Administrative burden costs are highlighted in grey.

15.2. Detailed analysis of compliance costs

15.2.1. Introduce a new category of Organised Trading Facilities (OTF), besides Regulated Markets (RM) and MTFs to capture current (including broker crossing systems - BCS) as well as possible new trading practices while further align and reinforce the organisational and surveillance requirements of regulated markets and MTFs

A number of MTFs consider that they are already complying with organisational requirements that are functionally equivalent (even if they are not identical per se) to those of regulated markets, and regulated markets believe that regulations are similar. This view was not held by a regulated market in the UK taking the view that to be considered equivalent requirements should be the same. On this basis, we can conclude that further aligning organisational requirements between MTFs and RMs would have a negligible one-off and on-going cost impact on MTFs.

Greater costs would be incurred in complying with a reinforcement of the surveillance obligations. The onus were on trading venues to establish methods of communication between themselves, costs would be substantially greater. In such a scenario, trading venues may incur infrastructure costs as well as on-going costs but the magnitude of such costs would be heavily dependent on any amendments that would need to be made to data storage/sharing technologies in light of the fact that trading venues may need to communicate sensitive data to each other. We estimate the range of potential incremental costs to be between €1 and €10 millions.

They are nine crossing networks currently operating in Europe which would fall under the new definition of organised trading facility[279]. Three of them also operate a dark MTF. The full size of the other electronic trading platforms that are not MTFs and might fall under the scope of the OTF definition is not completely clear. However market participants interviewed by Europe Economics have identified 10–12 as a reasonable population estimate.

We expect the compliance with the requirements of the OTF definition would lead to one-off aggregate costs of €4.2–€11.3 million for the nine crossing system operators and the estimated 10 to 12 other electronic platforms, with ongoing costs of €0.6-€3.2 million. The main costs would arise from the development of tools to monitor trading considering the six crossing networks that do not have or are not yet seeking MTF status[280]. The remaining costs relate to the provision of required information to regulators. This is unlikely to exceed €0.5 million across all affected entities as this information is usually already available for clients.

15.2.2. Mandate trading of some OTC derivatives on Regulated Markets (RM), MTFs or OTFs

Before turning to cost estimates, we describe briefly here what might be required by marker participants to engage in electronic trading.

Depending on the platform model, it could be relatively straightforward for buy-side participants to connect to electronic trading platforms. They could access these through the internet or through trading screens provided by the platform, and be enabled with dealers of their choice (this would be easier if the buy-side firm already has a relationship with the dealers). The firm would be able to see prices in real time through a request for quote system and would be able to trade easily. The costs of this access may be relatively significant, and could range from €50,000 to €100,000 for access per year, with a one-off cost of developing the links of between €4,000 and €9,000.

Buy-side firms can also establish more detailed links with the electronic platform (for example if they undertake a large amount of trading). Many large buy-side firms currently connect their internal order management and accounting systems to trading platforms as this increased efficiency and can lead to cost savings Trades are sent from the firm's order management system to the platform, where they are executed with an appropriate counterparty, and then passed on for confirmation by the counterparties. Setting up these links involves substantial infrastructural requirements, estimated at between €1 million and €2 million in one-off costs and approximately €100,000 in on-going costs.

The costs for dealers could be significantly more involved, as they would have to connect their whole trading system (including pricing engines and risk systems) to the platform which involves significant IT infrastructure investment. However, we assume that the majority of large and medium dealers are already connected to electronic trading platforms, and that these costs would only be incurred by smaller dealers not currently undertaking electronic trading. Costs for these are likely to be smaller than for large firms, as are estimated at between €100,000 and €200,000 in one-off costs per firm, and between €10,000 and €20,000 in on-going costs.

If we assume that the majority of existing electronic platforms will be able to adapt to the requirements of an organised trading facility, then it is unlikely that a significant number of market participants will have to link up to new trading platforms. However, as many platforms offer trading in only limited range of derivatives, it may be the case that a market participant currently operating electronically in one market will be required, as a result of the policy, to link up to a new platform to trade a different type of product. We assume that the infrastructure linking dealers to new platforms will be similar to that required for existing platforms (estimated at one third of the original cost), but that for the buy-side there will be less interoperability and thus costs of linking to new platforms will be three quarters of the original cost.

There will also be costs to market participants who currently do not engage in any electronic trading at all. For sell-side participants this is estimated to be a relatively small number (40 smaller dealers across the EU), and for buy-side customers this is estimated at 150.

- **TABLE 13: Background assumptions for costs estimates of trading of OTC Derivatives**

Background assumptions

Number of buy-side firms **not** currently trading electronically	150
Number of large buy-side firms currently trading electronically	50
Number of smaller buy-side firms currently trading electronically	450
Number of large dealers	14
Number of medium dealers	36
Number of smaller dealers **not** currently trading electronically	40
IT costs (staff per year)	€ 100.000
Number of weeks in year	46
Proportion of buy-side costs in linking to new platforms	0,75
Proportion of sell-side of linking to new platforms	0,3

	Low	High
One-off costs for large buy-side of linking whole trading systems to platform	€ 1.000.000	€ 2.000.000
Ongoing costs for large buy-side	€ 100.000	€ 200.000
One-off costs to smaller buy-side of internet/trading access - establish data feed	€ 4.348	€ 8.696
Ongoing- yearly subscription or access	€ 50.000	€ 100.000
Ongoing maintenance	€ 5.000	€ 10.000
One-off costs to larger dealers of linking systems to platform	€ 300.000	€ 500.000
Ongoing costs for large dealers	€ 30.000	€ 50.000
One-off costs to smaller dealers of linking systems to platform	€ 100.000	€ 200.000
Ongoing costs for smaller dealers	€ 10.000	€ 20.000

The table below presents our cost estimates for a range of assumptions. Buy-side firms not already connected to electronic platforms are assumed to be smaller firms that would adopt the model of accessing electronic platforms remotely (i.e. through trading screens, and not linking up their whole systems). One-off costs to these firms would range from €0.6 million to €1.3 million. On-going costs are significantly higher due to annual costs of accessing the systems, and range from €8.2 million to €16.5 million. One-off costs for sell-side firms not currently engaging in electronic trading range from €4 million to €8 million, and on-going costs range from €400,000 to €800,000. One-off costs in this case are higher due to more significant investment in infrastructure to link all systems to the platforms.

If we assume that firms currently engaged in electronic trading and those new to this method would be required to link to more than one trading platform, costs would increase significantly. Costs for new firms now include the cost of accessing two platforms, and costs to 'old' firms include the cost of accessing one additional platform. If this assumption is held the total one-off costs for all market participants range from €47.6 million to €94.9 million, and on-going range from €37.5 million to €74.9 million.

These costs represent an upper-bound as they assume that all firms currently not engaging in electronic trading will be required to do so under the new policy. However, it may be the case that some firms currently trade derivatives that will remain purely OTC.

– **TABLE 14: Costs of electronic trading**

Costs to different market participants (€000s)	Only one platform		Two platforms	
	Low	High	Low	High
Buy-side firms not connected				

One-off costs	€ 652	€ 1,304	€ 1,141	€ 2,283
On-going costs	€ 8,250	€ 16,500	€ 14,438	€ 28,875
Sell-side firms not connected				
One-off costs	€ 4,000	€ 8,000	€ 5,200	€ 10,400
On-going costs	€ 400	€ 800	€ 520	€ 1,040
Buy-side firms already connected				
One-off costs			€ 38,967	€ 77,935
On-going costs			€ 22,313	€ 44,625
Sell-side firms already connected				
One-off costs			€ 2,340	€ 4,260
On-going costs			€ 234	€ 426
Total one-off costs	€ 4,652	€ 9,304	€ 47,649	€ 94,877
Total on-going costs	€ 8,650	€ 17,300	€ 37,504	€ 74,966

In conclusion, we assume that the majority of existing electronic platforms trading derivatives do already meet or will be able to adapt to the requirements of an organised trading facility. But this option would entail incremental costs to both dealers (sell-side) and investment firms (buy-side) who currently do not engage in any electronic trading at all, or who have to connect to more than one platform. Under the assumption that firms would have to connect only to one platform, this would give aggregated one-off costs of €4.7 to €9.3 million and ongoing costs €8.7 and €17.3 million.

15.2.3. Introduce a tailored regime for SME markets under the existing regulatory framework of MTF

Regarding the development of a tailor made regime for SME markets, the main objective would be to facilitate the access of SMEs to capital markets at a proportionate cost by improving visibility and therefore liquidity in SME stocks. However, to gain more visibility and increase liquidity would need a high level of investor protection avoiding – for instance – any market abuse such as insider dealing and market manipulation. Therefore, cost burdens cannot simply be reduced but could feed into a SME market quality label. This should reduce the ratio of cost against the capital gained in financial markets. All in all the impact would be that seeking equity in capital markets should become more attractive. The broader economic impact would be increased access to capital for SMEs leading to a reduction of their cost for capital.

15.2.4. Regulate appropriately new trading technologies

The overall costs impact of the above preferred policy options will be marginal given that we will essentially enshrine existing practice into legislation.

There are at present between 25 and 50 firms involved in HFT in Europe with approximately a 50/50 split between HFT undertaken by firms that are authorised and non-authorised under MiFID[281]. A far greater number of firms are involved in automated trading since all large bank brokers and broker dealers have algorithmic trading suites which are widely used by their customers. This implies that there may be hundreds of firms involved in automated trading. We have assumed that 250 firms are active automated traders.

We assumed that 25 HFT would require authorisation (so that senior management were judged fit and proper and capital adequacy tests were passed). We estimate the on-going cost implication would be €0.9 million per annum in total.[282]

Based on feedback from market participants, firms involve in automated trading already have in place robust risk management controls to mitigate potential trading errors. The reinforcement of organisational requirements of investment firms involved in automated trading would mainly be codifying existing practice and hence would have little cost impact. However there might be additional documentation costs, notably if firms are required to notify their competent authority of the computer algorithm they employ, including an explanation of its design, purpose and functioning. These costs would be marginal and would amount to a total one-off cost of €1 million.[283]

Firms that permit sponsored access require more sophisticated systems of filters and risk controls than do those that do not. Based on interviews carried out by Europe Economics with sponsoring firms with robust risk controls we estimate that 4–6 working weeks would be required in order to develop a suitably robust and sophisticated system. At an estimated annual cost of €100,000 per IT professional this works out at about €8,888–€13,333 per firm. An on-going cost below this level, at 1–2 working weeks per firm per annum equates to €2,222–€4,444 per firm. If we assume that ten firms permit sponsored access, the aggregate cost implication of these proposals would be one-off costs of €88,888–€133,333 and on-going costs would be approximately €22,222–€44,444.

Trading venues already have systems of risk controls in place, including stress testing and circuit breakers, and hence the impact of these proposals is likely to be limited. The Federation of European Stock Exchanges (FESE) has conducted a survey of its members to gather information on the use of stress testing and circuit breakers. A total of 20 FESE members responded to the survey, all of whom operate a regulated market and 11 of whom operate an MTF. One respondent was an Exchange located outside the European Union. The results of this survey were included in their answer to our public consultation and led FESE to state that "a large portion of existing RMs and MTFs already have such risk controls in place (such as circuit breakers and stress testing). You will find below the FESE table summarising the current risk controls in place in the trading venues having responded to its survey:

- **TABLE 15: Trading venues – Risk controls in place**

Name of trading venue(s)	Type of trading venues		Circuit Breakers		Stress Testing	
	RM	MTF	RM	MTF	RM	MTF
Athens Stock Exchange (ATHEX-ASE) operated by Athens Exchange S.A	Yes	Yes	YES	No	Yes	No
Bolsas y Mercados Españoles	Yes	Yes	Yes	Yes	Yes	Yes
Börse Berlin Equiduct	Yes	Yes	Yes	Yes	Yes	Yes
Bulgarian Stock Exchange	Yes	-	No	-	No	-
Budapest Stock Exchange	Yes	-	Yes	-	No	-
Cyprus Stock Exchange	Yes	Yes	No	No	No	No
Deustche Boerse: • Frankfurter Wertpapierbörse • Eurex Deutschland	Yes	Yes	Yes	Yes	Yes	Yes
Irish Stock Exchange	Yes	Yes	Yes	Yes	Yes	Yes
Istanbul Stock Exchange	Yes	-	Yes	-	Yes	-
Istanbul SE: Automated Trading System (OTASS) [in the Bonds and Bills Market]	Yes	-	No	-	No	-
Ljubljana Stock Exchange –Trading on Xetra® System (Xetra® backend Vienna)	Yes	-	Yes	-	No	-
Luxembourg Stock Exchange Euro MTF	Yes	Yes	Yes	Yes	Yes	Yes
Malta Stock Exchange	Yes	-	Yes	-	No	-
NASDAQ OMX: • NASDAQ OMX Nordic • First North	Yes	Yes	Yes	Yes	Yes	Yes
NYSE Euronext	Yes	Yes	Yes	Yes	Yes	Yes
Oslo Børs: Oslo Axess, Oslo ABM, Oslo Connect	Yes	Yes	Yes	No	No	No
SIX Swiss Exchange	Yes	-	Yes	-	No	-
Warsaw Stock Exchange	Yes	-	Yes	-	No	-
Wiener Boerse: Xetra Vienna	Yes	Yes	Yes	Yes	No	No

Of those that responded to the survey, 16 (80 per cent) stated that circuit breakers are used on the regulated market and 8 stated that circuit breakers are used on its MTF (73 per cent of MTFs). A lower proportion of respondents stated that stress testing is used on regulated markets and/or MTFs. In particular, 9 (45 per cent) stated that stress testing is used on regulated markets and 7 stated that it is used on MTFs (63 per cent of MTFs).

Lastly it is noteworthy that some trading venues also have fee structures in place that discourage market participants from maintaining very high order-to-execution ratios. The driving force behind these fee structures appears to be the additional bandwidth requirements that are associated with high levels of cancelled orders rather than specific concerns about the potential adverse impact on the market and other market participants of high order-to-execution ratios. However, to the extent that high order levels could create infrastructure challenges to the market's data handling capabilities such levies are a useful tool to ameliorate this form of systemic risk.

In the following paragraphs, we describe arrangements that are currently in place at the London Stock Exchange and Euronext LIFFE.

London Stock Exchange

The current London Stock Exchange (LSE) Trading Services Price List specifies an "order management surcharge" that applies in certain circumstances.[284] The surcharge applies if the number of order events (defined as order entry, order modification and order deletion) per executed trade exceeds specified limits. The applicable limits depend on the index in which a

security is listed and a different limit applies for Exchange Traded Funds (ETFs) and Exchange Traded Products (ETPs). The following table shows the applicable limits.

– **TABLE 16: Order events per trade limits at LSE**

Security	Number of order events per electronic trade permitted before order management surcharge payable
FTSE 100 and FTSE 250 Index securities	500
Exchange Traded Funds and Exchange Traded Products	200
All other securities	No order management surcharge

Source: LSE (2011), "Trading Services (On- Exchange and OTC) Price List with Effect From 1 April 2011", Page 4

The surcharge is 5p, except for qualifying order events in ETFs or ETPs which have a charge of 1.25p. To qualify for the lower surcharge available for ETFs and ETPs, "order book trading by the member firm must exceed £500 million by value or 10 per cent of the order book value traded in the product group over the billing period".[285]

The surcharge is assessed separately for each member firm in each segment (i.e. each division of the market) on a daily basis, with the exception of ETFs and ETPs which are assessed daily for each member firm in each product group (i.e. ETFs or ETPs).

NYSE LIFFE

NYSE LIFFE applies an order-to-trade ratio based bandwidth usage charge in relation to Euribor, Short Sterling and Euroswiss Interest Rate Futures Contracts. The charge applies to all Individual Trading Mnemonics ("ITMs") with the exception of Designated Market Making ITMs.

Charges do not apply to the first 5,000 order entries, modifications or deletions made by an ITM in each of the contracts. If this limit is exceeded in a single trading day, an order-to-trade ratio of 2:1 applies and any order events that exceed the 2:1 ratio are charged at 17.5p.

For all other products, NYSE LIFFE allocates bandwidth limits to each Member. If these daily individual limits are exceeded the per-message charges shown in Table are applied.

– **TABLE 17: NYSE LIFFE charges for exceeding bandwidth limits**

Up to message allocation	No charge
Between 100% and up to 110% of message allocation	£0.070
Above 110% and up to 120% of message allocation	£0.140
Above 120% of message allocation	£0.175

Source: NYSE LIFFE "European Markets Subscriptions, fees and charges 2011", Page 17

15.2.5. Increase trade transparency for market participants

Concerning the costs and benefits associated with the preferred options in the area of equity pre-trade transparency, the proposals mainly clarify the status quo and seek to ensure uniform application of the waivers via a reinforced process involving ESMA. No incremental costs are

thus expected except for possible unquantifiable costs in terms of reduced information flows and a potential loss of liquidity from the obligation to make actionable indications of interest (IOIs) pre-trade transparent on a par with other orders, as market participants could choose to use IOIs with less information, so as to avoid their IOI being classed as actionable. Regarding post-trade transparency, system costs related to shorter publication delays seem to be insignificant according to the majority of market participants. However, costs caused by firms having a shorter time to unwind a risky position might be substantial and would be passed on to clients.

The costs of extending the equities-transparency regime to shares traded only on MTFs or organised trading facilities is not expected to generate significant costs as MTFs are already expected to possess and disclose this information. In addition some of the primary MTFs (e.g. AIM and First North) already apply the equity transparency regime to their market. However we have taken a prudent approach and derived the possible cost impact from the overall one-off implementation costs of the equity transparency regime when MiFID was first introduced. As per their past work on the FSAP Cost of Compliance study, Europe Economics estimated the one-off cost of the IT and systems necessary to support transparency requirements cost the financial services industry about €100 million in respect of equity trading under MiFID. The population of shares traded only on MTFs is dwarfed by the trading of shares on regulated markets. Europe Economics estimates that the volume of trading of shares only admitted to trading on MTFs is substantially below one cent of the existing volume of equity traded[286]. As a result, we consider a further one-off cost of around €2 million to be a reasonable estimate (2% of the one-off costs of the introduction of the initial equity regime). The incremental on-going cost is estimated at about €0.4 million (being 20 per cent of the one-off cost).

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Concerning wholly new pre- and post-trade transparency requirements for non-equities, it is not possible to make complete cost-benefit assessments at this stage, as these will largely depend on the detailed requirements in terms of delays and content by type of instrument and venue to be developed in implementing legislation. However, some presumptive assessments can be made.

The introduction of a transparency regime for non-equities is expected to generate overall one-off costs of €5.5 million to €9.2 million with yearly ongoing cots of €8.8 million to €12.7million.

– **TABLE 18: Summary of estimated compliance costs to increase trade transparency for MTFs and market participants**

Costs (€000s)	Pre-trade	Post-trade	Total
MTFs			
One-off	€400 - €800	€400 - €800	€800 - €1,600
On-going	€160 - €320	€160 - €320	€320 - €640
Market participants			
One-off	€597 - €1,029	€4,124 - €6,574	€4,721 - €7,603

On-going	€4,056 - €5,256	€4,518 - €6,838	€8,574 - €12,094
Total			
One-off	€997 - €1,829	€4,524 - €7,374	€5,521 - €9,203
On-going	€4,216 - €5,576	€4,678 - €7,158	€8,894 - €12,734

Overall, the indirect benefits of improving pre-trade data flows in non-equity markets in terms of more efficient price formation, increased competition among dealers and greater certainty for investors in contrast to the present context of available data across non-equity products is difficult to judge. Concerning the requirement to publish pre-trade information on available and actionable trading interest in a continuous manner, significant compliance costs are not expected for venues which operate order-driven trading systems which publish or at least possess the data in the required sense already. Costs for venues which operate request-for-quote or similar systems are estimated at between €400,000 and €800,000 in terms of total one-off costs and on-going costs of between €160,000 and €320,000 per year for all of the 46 MTFs active in non-equities today in terms of extending data publication systems to meet the more stringent requirements. As for requirements for investment firms to make their OTC quotes public, this implies market participants will be required to connect to a platform through which such prices can be disseminated. Hence it is likely that the main costs to market participants will be either in linking their automated pricing engines to the platform, or establishing manual feeds. One-off costs would range from €597,000 to €1 million and include the cost of developing feeds for dealers with automated pricing systems (estimated at between one and two weeks IT time per firm, for 88 firms)[287] and setting up secure connections for smaller firms with manual pricing (estimates at between three days and 1 week per firm, for 176 firms).[288] It should be noted that these figures refer only to dealers in bond and derivative markets (as they are the ones affected by pre-trade transparency), ignoring the buy-side. We estimate that in there are 54 large and medium dealers in bond markets and 34 in derivatives (giving 88), and 100 smaller dealers in bonds and 76 smaller dealers in derivatives markets (including commodities). On-going costs would range from €4 million to €5.2 million and include maintenance and support of data feeds for large firms, and costs of manually entering pricing information for smaller firms (estimated at between 1 and 1.5 hours a day per firm, across 176 firms).

– **TABLE 19: Costs to MTFs of increasing pre-trade price transparency**

Costs to MTFs (€000s)	Low	High
Building on RFQ regime		
One-off costs	€400	€800
On-going costs	€160	€320

– **TABLE 20: Costs to market participants trading in bonds and derivatives OTC of a central RFQ pre-trade regime**

Costs of RFQ system for whole OTC market (€000s)	Low	High
Dealers with automated pricing systems		
One-off costs	€191	€383
On-going	€1,856	€1,951
Dealers with manual pricing		
One-off costs	€405.57	€647
On-going	€2,200	€3,305
Total one-off	€597	€1,029
Total on-going	€4,056	€5,256

Increasing post-trade transparency requirements for regulated markets is unlikely to be significant in cost terms. Post-trade transparency requirements for MTFs would be somewhat different as these platforms in general do not currently disseminate post-trade information on a multilateral basis (very often only the parties to the trade are able to access such information). Costs to market participants vary according to whether they would be large enough to link their trading systems directly to reporting platforms, of if they will have to enter trade information manually. Whilst infrastructure needed for different products will be similar (e.g. bonds, structured finance products and derivatives), it is likely that separate systems will have to be developed for each. Furthermore, reporting of derivatives is likely to be more complex, leading to higher costs. The table below summarises the potential costs to both trading platforms and market participants in the three different product markets.

In terms of compliance costs arising from post-trade transparency requirements, one-off costs across all 46 MTFs[289] offering trading in non equity instruments are expected to range between €400,000 and €800,000 and on-going costs of IT maintenance to range between €160,000 and €320,000 per year.

For market participants required to develop data feeds from their front office systems to data platforms, one-off cost estimates for the whole industry for all types of non-equity instruments (bonds, structured products, and derivatives) range from €4.1 million to €6.6 million with on-going costs estimated at €4.5-6.8 million per year.

- **TABLE 21: Summary of estimated post-trade transparency compliance costs for MTFs and market participants**

Costs (€000s)	Bonds	Structures products	Derivatives	Total
MTFs				
One-off	€226 - €452		€174 - €348	€400 - €800
On-going	€90 - €181		€70 - €139	€160 - €320

Market participants

One-off	€1,208 - €1,967		€1,208 - €1,967	€1,708 - €2,640	€4,124 - €6,574
On-going	€1,476 - €2,330		€1,476 - €2,330	€1,566 - €2,178	€4,518 - €6,838

One-off costs across MTFs offering trading in bonds (approximately 26) are expected to range between €226,000 and €452,000 and on-going costs of IT maintenance to range between €90,000 and €181,000 per year. One-off cost estimates for MTFs offering trading in derivatives (approximately 20) would range from between €174,000 and €348,000, with on-going costs of between €70,000 and €139,000 per year.

In the case of bonds, one-off cost estimates for market participants range from €1.2 million to €1.9 million[290], with on-going costs ranging from €1.4 to €2.3 million per year.

– **TABLE 22: Costs to market participants of post-trade reporting**

Costs to market participants (€000s)	Low	High
Firms with automated reporting		
One-off costs	€975	€1,599
On-going	€226	€452
Firms with manual reporting		
One-off costs	€233	€367
On-going[291]	€1,250	€1,878
Total one-off	€1,208	€1,967
Total on-going	€1,476	€2,330

We assume that similar additional one-off and ongoing costs to market participants would be required for structured finance products as for bonds.

In the case of derivatives, we assume that the process for post-trade reporting will be similar as for other non-equity products (in terms of time required to develop data feeds or manually enter trades), but that the time required would be greater due to the additional complexity of derivative products. Estimates obtained from a post-data publishing service for equities entail between 1 and 1.5 years of project time across the major firms to develop the data feed, as well as costs to the wider industry of adapting the feed protocols to their own systems (between 3 and 6 weeks IT time). On-going costs include IT maintenance and the costs to smaller dealers of manually entering trade details (assumed at between 1.5 and 2 hours a day per firm).[292] One-off costs range from €1.7 to €2.6 million, with on-going ranging from €1.5 to €2.1 million per year.

– **TABLE 23: Costs to market participants trading in derivatives of post-trade reporting**

Costs to market participants (€000s)	Low	High
Firms with automated reporting systems		
One-off costs	€1,530	€2,361
On-going	€139	€278
Dealers with manual systems		
One-off costs	€177	€279
On-going	€1,427	€1,900
Total one-off	€1,708	€2,640
Total on-going	€1,566	€2,178

As mentioned above, the introduction of a transparency regime for non-equities is expected to generate overall one-off costs of €5.5 million to €9.2 million with yearly ongoing cots of €8.8 million to €12.7million. This is significantly lower than the overall one-off implementation costs of the equity transparency regime when MiFID was first introduced (as per Europe Economics past work on the FSAP Cost of Compliance study). The main difference is the difference in the step change from existing practice implied. Request For Quote systems and the automated pricing systems to support RFQ are already in place (at least for larger dealers) making incremental costs low. If continuous pricing was being adopted in pre-trade transparency for non-equities then this would imply a much higher estimate. Another main difference is the lower number of participants affected is the non-equities markets compared to equities markets.

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The one-off compliance costs for EU authorised firms and APAs of conforming with and providing a fully standardised reporting format and content for post-trade data should note exceed one quarter of the original investment in transparency systems when MiFID was implemented and are estimated at €30 million. Maintenance may be €3–€4.5 million per year, or 10-15% of this. Finally, compliance and operational costs for a commercial consolidator are considered to be entirely manageable (they already provide similar solutions for the equities markets).

Requiring venues and vendors to sell pre-and post-trade data in unbundled form, provided that the format and content of trade reports are fully standardised, may be expected to reduce the cost of a European consolidated post-trade data feed by 80%, i.e. from €500 to €100 a month per user.

Market data providers have estimated that a total fee for a full data set of pre- and post-trade data of all EU venues would cost about €500 per user per month. This is confirmed by the analysis conducted by PricewaterhouseCoopers of the current cost of real time data across Europe. The table below shows that the sum of monthly fees per user and per device in order to get a complete view of all European equity markets is €497 at present. In comparison, the

cost of consolidated post-trade data in the US is US$ 70 (around €50) per user per month although it should be noted that there are significant differences between the European and US market data regime (e.g. a competitive model in Europe compared to a monopoly in the US, a much higher number of trading venues and shares traded in Europe).

- **TABLE 24: Cost of Real-time data per user per month**

Trading Venue	Cost of Real-time L1	
BOAT	€ 40.00	€ 40.00 (for Systematic Internalisers and Investments firms reporting to BOAT, see Question 1)
LSE	€ 30.00	£ 26.51 = € 29.50
ENX Paris	€ 66.00	€ 59.00 + € 7.00 for MiFID OTC = € 66.00
Xetra	€ 56.00	€ 56.00 for Xetra and all German Regionals
Chi-X	€ 0.00	€ 0.00
Mercado	€ 13.00	€ 13.51
Italy	€ 12.00	€ 12.00
ENX Amsterdam	€ 0.00	Covered by Euronext fee above
Stockholm	€ 22.00	€ 22.00 for Nasdaq OMX Nordic Data
BATS	€ 0.00	€ 0.00
Turquoise	€ 0.00	€ 0.00
Stuttgart	€ 0.00	Included in the package for Xetra and German Regionals data
Helsinki	€ 0.00	Included in the package for Nasdaq OMX Nordic data
Copenhagen	€ 0.00	Included in the package for Nasdaq OMX Nordic data
ENX Brussels	€ 0.00	Covered by Euronext fee above
Nasdaq OMX Eur.	€ 0.00	€ 0.00
Frankfurt	€ 0.00	Included in the package for Xetra and German Regionals data
Athens	€ 7.00	€ 7.00
Warsaw	€ 30.00	€ 30.00
Vienna	€ 33.00	€ 33.00
ENX Lisbon	€ 0.00	Covered by Euronext fee above
Plus	€ 17.00	£ 15.00 = € 16.68
SIX Swiss	€ 10.00	CHF 15.00 = € 10.00
Liquidnet	€ 0.00	Included in BOAT data
TLX	€ 4.00	€ 4.00
Irish	€ 12.00	€ 12.00
Budapest	€ 10.00	€ 10.00
Johannesburg	€ 16.00	$ 22.25 = € 16.00
Prague	€ 10.00	€ 10.00
POSIT	€ 0.00	Included in BOAT data
NYSE Arca	€ 0.00	€ 0.00
Burgundy	€ 0.00	€ 0.00
Duesseldorf	€ 0.00	Included in the package for Xetra and German Regionals data
Oslo	€ 42.00	NOK 342.00 = € 42.00
Smartpool	€ 0.00	Included in Euronext OTC data
Nomura NX	€ 0.00	Included in BOAT data
Munich	€ 0.00	Included in the package for Xetra and German Regionals data
Hamburg	€ 0.00	Included in the package for Xetra and German Regionals data
Xetra Intl Mkt	€ 0.00	Included in the package for Xetra and German Regionals data
Bucharest	€ 10.00	€ 10.00
Cyprus	€ 0.00	€ 0.00
Berlin	€ 0.00	Included in the package for Xetra and German Regionals data
Tallinn	€ 19.00	Nasdaq OMX Baltic € 19.00
Equiduct	€ 0.00	€ 0.00
Ljubjana	€ 0.00	€ 0.00
Vilnius	€ 0.00	Already included in Nasdaq OMX Baltic
Hannover	€ 0.00	Included in the package for Xetra and German Regionals data
Nordic Growth	€ 0.00	€ 0.00
Bulgaria	€ 0.00	€ 0.00
Luxembourg	€ 30.00	€ 30.00
BlockCross	€ 0.00	€ 0.00
Riga	€ 0.00	€ 0.00
Bratislava	€ 8.00	€ 8.00
Total	**€ 497.00**	

Source: PwC (2010), based on Thomson Reuters data

If consolidated trade data were unbundled, we would expect that the post-trade bundle would be available at less than half of the cost of the full consolidated tape. The rationale for this view is a comment reported in the PwC report that from an exchange perspective "the value of a post-trade piece of the bundle is a smaller percentage than the pre-trade". The view is further supported by the fact that NYSE Euronext, one of the few exchanges to offer unbundled data, charges €90 per month for its full order book bundled data.[293] If this

difference held across trading venues, consolidated post-trade data would be available at approximately 18 per cent of the cost of the full consolidated tape. This means that requiring venues and vendors to sell pre-and post-trade data in unbundled form, provided that the format and content of trade reports are fully standardised, may be expected to reduce the cost of a European consolidated post-trade data feed by about 80%, i.e. from €500 to €100 a month per user. However, the number of users and the extent to which each is buying multiple data feeds are not known. An aggregated figure for this potential saving is not therefore calculable. However, by way of an illustration only, if each firm authorised to conduct execution activities on average had one user buying all tapes (or enough users each buying one tape to achieve the same effect) this would mean 5,700 buyers of the consolidated tape now — on these heroic (but not wholly unreasonable) assumptions, the potential saving would be €27.9 million per annum.

15.2.6. Reinforce regulators' powers and consistency of supervisory practice at European and international levels

The oversight of positions in derivative markets takes place in a number of jurisdictions both within and without the EU. Although position management is largely limited to commodity derivatives, some exchanges dealing with other derivatives also have the ability to set limits.[294] Regulatory oversight of positions is mandated by the competent authority but usually carried out either wholly or partially by the exchanges or MTFs that offer derivative contracts.

The table below summarises Europe Economics research into the use of position oversight among exchanges within and without the EU, indicating whether firm position limits or more flexible management is used, and whether the main rationale behind the oversight is the orderly functioning of the market (e.g. preventing settlement squeeze and market abuse) or controlling excessive speculation.

– **TABLE 25: Position oversight in EU and Third Country Jurisdictions**

Country	Main exchange and derivative products	Position oversight	Rationale
Belgium	NYSE Euronext. Liffe: agriculture, ETF and stocks	Firm position limits and flexible management.	Market functioning
France	NYSE Euronext. Liffe: stocks and stock indexes	Firm position limits and flexible management.	Market functioning
Germany	Eurex: agriculture, precious metals, energy and financial products; European Energy Exchange: natural gas, coal, power.	Firm position limits for physically settled contracts. Position management for cash-settled.	Market functioning
Italy	Borsa Italiana: stock and stock index futures and options	No firm limits; flexible management.	Market functioning

Spain	Mercado Español de Futuros Financieros: government bonds, stocks and stock indexes	Firm position limits	Market functioning
UK	NYSE Euronext. Liffe: agricultural; LME: metals; ICE Futures: mainly energy; EDX: equity and deposit receipt options and futures; European Climate Exchange: CO2	No firm limits; flexible management. EDX has provision for the use of limits but does not apply them.	Market functioning
Argentina	ROFEX: agriculture, foreign exchange and interest rate	Firm position limits for all contract types (e.g. financial as well as agricultural derivatives)	Market functioning
Australia	Australian Securities Exchange: equity, interest rate, energy and agriculture	Firm limits for options only	Market functioning
Brazil	Brazilian Mercantile and Futures Exchange: agricultural, precious metal and financial products	Firm limits	None given
Canada	ICE Futures Canada: agriculture	Firm limits. Exemptions based of CFTC regulations.	None given
China	Shanghai Futures Exchange: metals, rubber and oil	Firm limits on speculative positions	Market functioning and excessive speculation
Japan	Tokyo Commodity Exchange: precious metals, rubber, aluminium and oil.	Firm limits	Excessive speculation
US	ICE US, Chicago Mercantile Exchange, NYSE Liffe, CBOT,	Position limits imposed by CFTC in agriculture markets. To be extended to energy and metals	Market functioning and excessive speculation

Source: Desk-based research of regulator and exchange websites and interviews with EU exchanges

The use of market surveillance for preventing market abuse and ensuring orderly markets among other trading platforms is less widespread. Research conducted by PwC and Europe Economics suggests that multilateral trading facilities (MTFs) are required to undertake some trade monitoring to combat market abuse, but that position limits are not used, not is any

regular position reporting on the part of traders required. Other electronic trading platforms that are not authorised MTFs (and which represent OTC trades) do not appear to apply any market monitoring.

The table below presents a summary of the main MTFs and electronic trading platforms offering trading in derivatives. According to PwC research, there are 29 derivative MTFs (13 offering trading in commodity derivatives and 16 in financial derivatives). The same research estimates approximately ten electronic platforms that are not regulated as MTFs (although this figure could be larger if all larger banks' electronic trading facilities are considered as electronic platforms).

– **TABLE 26: Market surveillance by MTFs and electronic platforms**

MTF/Electronic platform	Country	Instruments	Position reporting	Trading oversight
Euronext Liffe Bclear Equities	UK	Equity derivatives	Yes	Same as Liffe exchange
Euronext Liffe Bclear Commodities	UK	Commodity derivatives	Yes	Same as Liffe exchange
ICE Creditex (MTF)	UK	CDS	None	Monitoring of unusual trades
ICE Energy	UK	Energy derivatives	Yes	Position oversight similar to ICE exchange
Powernext (MTF)	France	Energy derivatives	None apparent	None apparent
Bluenext OTC (MTF)	France	CO2	None apparent	None apparent
Tradeweb (MTF)	UK	Equity, interest rate and credit derivatives	Trade logs available to the FSA but no official reporting obligation.	Monitoring of unusual trades
Bloomberg SwapTrader	US	Interest rate derivatives	None apparent	
ICAP ETC/Brokertec platform (MTF)	UK	CDS	None apparent	None apparent

Source: PricewaterhouseCoopers (2010) and Europe Economics research

Given the current level of position oversight within the EU taking place through exchanges as per noted above, the additional impact of competent authorities being empowered to perform additional oversight is unlikely to be significant. All Member States that authorise the main derivative exchanges, both those offering contracts in commodity derivatives[295] and financial derivatives[296], mandate a degree of position oversight, either through setting and monitoring position limits, or operating more flexible position management that requires traders and end clients to provide continuous information about position levels.

Stronger position oversight by competent authorities of trading undertaken away from regulated markets, such as on MTFs and over the counter, is likely to have a greater impact, as it appears that the reporting of information is not currently mandated through these trading venues or practices. For these MTF platforms that do not, we estimate on-going costs to be between €1.6 million and €3.1 million per year across the EU[297].

If all members of MTFs and electronic platforms are required to submit additional information about the contracts they enter into then the on-going costs of doing so could range between €444,000 and €889,000 per year.[298] Note that we only consider traders in non-commodity derivative markets, as those in commodity markets will already be subject to position reporting under the section relation to commodity derivatives markets.[299] [300].

The costs of implementing a system of ex ante hard position limits will depend on the nature of what is currently undertaken by exchanges and other trading platforms. We assume that the incremental costs to exchanges of a requirement to set position limits will be negligible. This is because many exchanges already apply limits, and those that do not already have sophisticated position management systems which could adapt to the introduction of limits. However, costs for other trading platforms, such as MTFs and electronic platforms, will be higher. The costs to trading platforms of setting and monitoring position limits would depend on whether existing market surveillance systems are in place. We know that MTFs already undertake some monitoring of trades to combat market abuse. Additional costs of monitoring position limits would therefore include one-off costs of setting up automated warning systems to monitor and warn against position levels, and on-going costs of IT support and staff oversight. In the case of MTFs we estimate one-off cost to range from €2 million to €3 million, and on-going costs to be between €3.7 million to €7 million a year[301]. In the case of electronic platforms where no surveillance systems are currently in place costs will be significantly higher, with one-off costs ranging from €6 million to €10 million, and on-going costs from €3.8 million and €9 million a year across the EU.[302] This gives us for both MTFs and other electronic platforms consolidated one-off costs ranging from €8.2 million to €12.9 million, and on-going costs to be between €7.5 million to €16.3 million a year.

The table below summarises the costs of stronger position oversight (including the setting of position limits) for trading platforms other than exchanges and market participants:

– **TABLE 27: Costs of stronger oversight of positions**

Costs to MTFs, EP*s and market participants (€000s)	Low	High
Requesting information on positions		
On-going costs for platforms	€1,560	€3,120
On-going costs for market participants (reporting traders only)	€353	€588

On-going costs for market participants	€444	€889
Setting and monitoring positions limits (MTF)		
One-off costs	€2,175	€2,900
On-going costs	€3,698	€7,250
Setting and monitoring position limits (Eps)		
One-off costs	€6,000	€10,000
On-going costs	€3,800	€9,000
Total one-off costs	€8,175	€12,900
Total on-going costs	€9,502	€20,259

* Electronic platforms

In conclusion, the costs of stronger oversight of positions, including the setting up of position limits, for both trading platforms and market participants are estimated to be between €8.2 million and €12.9 million for one-off costs, and on-going costs to be between €9.5 million to €20.2 million a year.

15.2.7. Reinforce transparency towards regulators

The scope of transaction reporting currently varies across the EU[303]. Only four countries collect OTC derivatives data (UK[304], Ireland, Austria and Spain)[305]. In terms of instruments traded only on MTFs various Member States apply transaction reporting already: Belgium, Denmark, Germany, Greece, Finland, Ireland, Romania and the UK.

Based upon the above, and combined with estimates of the number of transactions currently within the transaction reporting regime, Europe Economics estimates the current annual recurring cost to firms of transaction reporting to be in the order of €55–€90 million.[306] Breaking this down, they estimate that about 20 per cent of this relates to on-going IT expenditure and about 55 per cent being the labour input (put another way, they believe that about 300–390 FTEs work on transaction reporting activity across the EU at present). The remaining costs relate to data cleaning, payments to ARMs and so on. Again, based on their past work on the FSAP Cost of Compliance study, they believe that the cost of originally implementing the MiFID transaction reporting regime may have been at least €100 million across the EU.

The extension of transaction reporting to instruments only traded on an MTF or an organised trading facility would not significantly increase the volumes of transactions processed, because the population of instruments traded only on an MTF is dwarfed by the trading of instruments traded on a regulated market anyway and in some Member States, in particular the UK, have already mandated that instruments only traded on an MTF are transaction reported. On this basis, Europe Economics estimates the incremental change in volume of transactions to be less than 0.2 per cent of that currently processed[307]. As a result they calculate that the incremental recurring costs would be relatively trivial, perhaps as low as €0.1 million across the EU. The one-off cost should be reasonably low assuming that firms

would be able to achieve the necessary implementation changes using internal IT department resources and would involve building upon existing systems rather than developing new ones. They expect that the one-off cost for set-up would be €0.7–1.1 million across the EU[308]

The costs for including OTC instruments and commodity derivatives would be more substantial. Notwithstanding that these are captured for transaction reporting purposes by some Member States already (notably the UK and Spain which are estimated to account for 76% of OTC trades within the EU[309]). This change could give rise to an estimated one-off cost of €43.8–€53.9 million, based on total number of derivatives dealers of 250 and an investment of between €60,000 and €1.75 million depending on the size of the dealer.[310]After taking into account those transactions already reported, the volume change of transactions to be processed would again not be very significant[311]. However but we understand that OTC derivatives may have additional complexities and (to the extent that transaction reporting is not everywhere yet) may have higher error rates (e.g. due to the front-office) relative to equities. Hence we estimate the on-going cost to be €0.5–€0.7 million. If foreign exchange derivatives and credit derivatives that are related to an index (rather than a single issuer) are also brought within the scope of transaction reporting, we estimate the incremental set-up cost of this to be 10–15 per cent of the one-off costs described above, i.e. €4.4–€8.1 million. This is a little below the proportion of trades of this type relative to those captured above — we assume some positive learning effect from the implementation of single issuer credit derivatives. In this case, the on-going cost would increase by a further €0.1–€0.2 million per annum[312].

Turning to commodity derivatives, we apply comparable assumptions to those for OTC derivatives. We estimate that there are about 3.1 million commodity derivative transactions in the EU per annum.[313] This gives us on-going costs of €0.4–€0.7 million.[314] We have assumed that the one-off investment required would be: that 400 (this is higher than the assumed participants on financial derivatives to reflect the specialist firms active in only some commodity markets) smaller market participants would invest €20–€25,000, 36 would invest €75,000-€100,000 and the largest around €0.4–€0.5 million. The product of these would be incremental one-off costs of €16.0–€19.9 million. This is about 40 per cent of the equivalent figure for other (non-commodity) derivatives.

However, it should be borne in mind that these costs result from a straightforward extension of existing MiFID provisions. However, these costs will virtually disappear when reporting requirements under EMIR meet the requirements of transaction reporting under MiFID. As a result, trade repositories can be approved as Approved Reporting Mechanism. In that case, the waiving of a MiFID reporting obligation where an OTC trade has already been reported to a trade repository would allow the saving of the majority of the costs that would be associated with a straightforward extension of the transaction reporting regime to OTC derivative trades described above (and indeed savings related to OTC derivative reporting that is already conducted in the UK and elsewhere).

Data on the number of transactions in depositary receipts are not readily available. However, the number of depositary receipts traded (i.e. which is clearly a higher figure than the number of transactions in depositary receipts, since each transaction will include at least one depositary receipt) per annum in the EU and the value of that trading is better established,[315] being about 1 to 1.5 per cent of the equivalent figures for equity trading. With this as our guide we estimate the recurring cost of extending the regime to depositary receipts to be €0.5—€1.3 million (i.e. about 1-1.5 per cent of the current cost of transaction reporting). Again, we assume that one-off cost for set-up would be relatively low, and we estimate the costs as being equivalent to those required to bring MTF-only financial instruments into

scope: we believe €0.7–€1.1 million across affected firms to be a realistic estimate (again, we assume that this would involve building on existing systems rather than developing new ones).

Overall the extension in scope of transaction reporting is estimated to generate incremental one off costs ranging from €65.4 to €84.1million and yearly ongoing costs from €1.6 to €3.0 million:

- **TABLE 28: Costs for extending the scope of transaction reporting**

Transaction reporting (€ millions)	TOTAL INCREMENTAL COSTS			
	one-off		on-going	
	low	high	low	high
Extension to MTFs	0,7	1,1	0,1	0,1
Extension to OTC derivatives, excl. commodity derivatives	48,2	62,0	0,6	0,9
Extension to commodity derivatives	16,0	19,9	0,4	0,7
Extension to depositary receipts	0,7	1,1	0,5	1,3
Total transaction reporting costs	**65,4**	**84,1**	**1,6**	**3,0**

The bulk of these costs relates to the extension to OTC instruments and commodity derivatives. However these costs will virtually disappear when reporting requirements under MiFID and EMIR are harmonised and trade repositories will be approved as Approved Reporting Mechanism.

The costs associated with introducing a transaction reporting obligation on regulated markets, MTFs and any organised trading facilities that offer access to firms not authorised as investment firms or credit institutions (see Annex 9.4.(a)) have been subsumed within the above figures. We do not have data on the sub-set of trades that this group of firms are responsible for.

The cost of a requirement to store order data for five years cannot be easily estimated. However, it appears to be standard practice for such data to be stored for some period. Indeed, interviews carried out by Europe Economics with some trading platforms indicate that they have already in place order data storage capability in place. However we cannot assume this is universal practice and the retention period might differ as well. Hence, some marginal data storage cost could be implied. If we assume that a transaction has a storage size of 15–20kb (say equal to a small Microsoft excel spreadsheet, which appears a conservative estimate) then the cost of storing for five years all the transactions (note: transactions are used as a proxy for orders) that would be within the new scope of transaction reporting would be €1.2–2.3 million per annum.[316] However, as we have noted, some storage is standard practice already so the incremental would be below this level. We adopt additional four years storage as a guiding assumption, giving €1–€1.9 million as the implied on-going incremental cost.

Third party transaction reporting is already being conducted through ARMs, notably in one large Member State i.e. the UK. This option will seek to harmonise the framework under which they operate and ensure oversight. The costs are therefore likely to be limited.

15.2.8. Increase transparency and oversight of commodity derivatives markets

Set up a system of position reporting by categories of traders for organised trading venues trading commodities derivatives contracts

The introduction of position reporting by categories of traders would entail costs for both the trading venues and the market participants which overall are estimated at between €0.8 and €1.0 million for one-off costs and between €3.3 and €3.8 million as yearly ongoing costs. Europe Economics estimates there to be in total 15 commodity derivative exchanges in the EU, with those not listed below being smaller exchanges in countries such as Romania, the Czech Republic, Hungary and Slovakia).[317] The main commodity derivatives regulated markets in the EU have already some form of position reporting and/or oversight in place (see table 29). The degree of trading and position oversight, including position reporting, among MTFs (see table 30), is less clear. However, it is likely that the majority do undertake some level of general trading oversight to combat market abuse.

– **TABLE 29: Main commodity derivative exchanges and position reporting requirements**

Exchange	Country	Position Monitoring	Members regularly submit position reports	Respond to requests for information, including positions
Bluenext - CO2	France	Position management	Not explicit	Yes
Eurex - agriculture, precious metals, energy and financial products.	Germany	Firm position limits for physically settled contracts. Position management for cash-settled.	Yes	Yes
European Energy Exchange	Germany	Firm position limits for physically settled contracts. Position management for cash-settled.	Yes	Yes
ICE Futures Europe-energy, CO2*	UK	No firm limits except for contracts linked to US; otherwise flexible management.	Yes	Yes
LME - metals	UK	No firm limits; flexible management.	Yes	Yes
Mercado Español de Futuros Financieros - energy, government bonds, stocks and stock indexes	Spain	Firm position limits	Yes	Not explicit
NYSE Euronext Liffe London - agricultural	UK	No firm limits; flexible management.	Yes	Yes

NYSE Euronext Liffe Paris - Agricultural; stocks and stock indexes	France	Firm position limits and flexible management.	Yes	Yes

* Note: CO2 derivatives formally traded through the European Climate Exchange, now owned by ICE

Source: Research into websites and rulebooks of regulators and exchanges, and interviews with LME, ICE, Liffe and Eurex

The degree of trading and position oversight, including position reporting, among other trading platforms such as MTFs is far less clear. Interviews with MTFs and research into websites and rule books presents (conducted both by Europe Economics and PwC[318]) suggests that these trading platforms do not require any position reporting by members and traders. However, it is likely that the majority do undertake some level of more general trading oversight to combat market abuse. PwC research presents a list of the 29 main MTFs trading derivatives in Europe. Of these, 25 are based in the UK where general monitoring of trades for market abuse is required.[319] The table below presents a summary of the main derivative MTFs and electronic platforms and their level of position and trading oversight. Note that this table includes all main derivative MTFs and electronic platforms, not just those trading commodity derivatives. In addition, we do not list all MTFs trading commodity derivatives (only the main ones for which information about position reporting and market oversight is readily available). According to the PwC report there are a total of 13 MTFs offering trading in commodity derivatives.[320]

– **TABLE 30: Position oversight on MTFs and electronic platforms**

MTF/Electronic platform	Country	Instruments	Position reporting	Trading oversight
Euronext Liffe Bclear Equities	UK	Equity derivatives	Yes	Position oversight similar to main exchange
Euronext Liffe Bclear Commodities	UK	Commodity derivatives	Yes	Position oversight similar to main exchange
ICE Creditex (MTF)	UK	CDS	None	Monitoring of unusual trades
ICE Energy	UK	Energy derivatives	Yes	Position oversight similar to ICE exchange
Powernext (MTF)	France	Energy derivatives	None apparent	None apparent

Bluenext OTC (MTF)	France	CO2	None apparent	None apparent
Tradeweb (MTF)	UK	Equity, interest rate and credit derivatives	None	Monitoring of unusual trades
Bloomberg SwapTrader	US	Interest rate derivatives	None apparent	
ICAP ETC/Brokertec platform (MTF)	UK	CDS	None apparent	None apparent

Source: PwC (2010) and Europe Economics research

If position reporting already takes place (as in the majority of commodity derivatives exchanges) then the additional costs of including client categorisation will be negligible. The only cost that would be incurred would be on the part of the exchanges in compiling a COT report, estimated at about a quarter of a full-time equivalent employee per year. Applying this to the 15 commodity regulated markets across the EU[321] gives an on-going cost of €340,000 per year[322]. For the members of the regulated markets (reporting traders), including detail about the client categorisation in the existence of a position-reporting regime will be trivial, as this will only entail an extra field or two in the submission.

For MTFs it is assumed that systems of position management or monitoring already exist, but that position reporting is not included. Additional one-off costs of setting up reporting mechanisms for MTFs and electronic platforms are estimated at between €130,000 and €195,000 across the EU[323]. On-going costs will be greater, given the staff costs required to collate and analyse position information as well as on-going IT maintenance costs, estimated at between €1.8 million and €2.4 million per year across the EU[324].

Costs to market participants (such as the reporting traders) will include the time taken to prepare position reports, which will depend on how automated their systems are. We estimate that there are approximately 52 traders[325] across the various commodity derivative MTFs in the EU who would be required to report positions on behalf on their clients. One-off costs for these traders are estimated at between €624,000 and €780,000, based on a cost of developing reporting feeds of between €12,000 and €15,000 per trader. On-going costs of IT maintenance and a small staff cost are estimated at approximately €1.1 million per year.[326]

– **TABLE 31: Costs of position reporting and client categorisation**

One-off and on-going costs (€'000)	Low	High
MTF costs		
One-off costs	€ 130	€ 195
On-going costs	€ 1,833	€ 2,360
Traders		

One-off costs	€ 624	€ 780
On-going costs	€ 1,102	€ 1,118
Publishing costs (exchanges that already require position reporting)		
On-going costs	€ 340	€ 340
Total one-off	€ 754	€ 975
Total on-going	€ 3,275	€ 3,818

Review exemptions for commodity firms to exclude dealing on own a/c with clients of the main business and delete the exemption for specialist commodity derivatives

Regarding the review of the exemptions, the number of firms benefiting from the MiFID exemptions under Articles 2(1)(i) and 2(1)(k) is usually not known to regulators because they are not usually required to be authorised.

However, in the UK the boundaries of regulation are wider than those under MiFID. Therefore some of the MiFID exempt firms in the UK - essentially trading arms of commercial firms who are acting as agent for the group - are authorised by the FSA and subject to a national regulatory regime. But there are UK firms dealing on own account in commodity derivatives that are inside the MiFID exemptions and exclusions from UK regulation and therefore not authorised by the FSA.

According to the UK FSA, the number of authorised firms in the UK which undertake commodity derivatives business is about 90. Out of these 90 entities approximately 50 are regulated as financial firms as they undertake other investment services or are active in other financial instruments and 40 are specialist commodity derivatives firms, i.e. their main activity is in relation to commodity derivatives. The 40 specialist commodity derivatives firms consist of 20 MiFID regulated firms and 20 MiFID exempt firms subject to the UK "super equivalent" regime. The MiFID exempt firms are entities owned by oil and energy companies. In most cases they have authorisations covering investment advice, receiving and transmitting and execution of client orders. These services are provided to companies within their group who are hedging their underlying commercial risk. The companies who are hedging their risk do not have to be authorised in the UK for dealing on own account because their trading is done through the regulated entity in the group. This superequivalent UK regime for MiFID exempt commodity firms consists of prudential requirements (although softer than the Capital Requirements Directive – some firms are only subject to a requirement to hold adequate financial resources), similar MiFID organizational requirements and light conduct of business rules (reflecting the fact that they do not deal with retail clients) .

The deletion of the exemption under Article 2(1)(k) for trading on own account and the narrowing down of the notion of trading on own account under Article 2(1)(i) should not impact most of the MiFID exempt commodity firms the FSA regulates. These are mainly exempt by virtue of Article 2(1)(b) because they provide services within their group. Commercial firms dealing on own account through MiFID exempt firms authorised in the UK would need to rely on either the exemption under Article 2(1)(i) and/or Article 2(1)(d) if they were to remain exempt from MiFID. The same is true for the small number of cases where the currently MiFID exempt firm is part of a larger commercial entity rather than being a separate

entity within the group. The impact in practice would depend upon how narrow the exemption for dealing on own account as an ancillary activity in Article 2(1)(i) became.

The number of commercial entities providing investments services to the clients of their main business on an ancillary activity is not know to the UK FSA as these MiFID exempt entities benefit from a domestic exemption as well and do not fall under the scope of the UK super equivalent regime. Hence the number of firms possibly impacted by a strict application of the notion of ancillary activity cannot be assessed.

Discussions with industry associations led by Europe Economics were inconclusive in this matter. Due to the uncertainties regarding the number of firms which might be affected, we have only estimated the costs on a per firm basis. Firms benefitting from exemption under Article 2(1)(k) would be most affected by the proposals, as they would not have the possibility of reorganising to reduce or avoid the burden of authorisation under MiFID, such as may be the case with firms benefitting from exemptions under Article 2(1)(i). These commodity specialist firms would have to ensure they are authorised under MiFID and fulfil transaction reporting, record keeping and best execution requirements. Firms which also provide ancillary investment services would also have to comply with Conduct of Business rules. Cost estimates for firms complying with MiFID for the first time from the FSA (2006)[327] reached median one-off costs of MiFID of around €12,000 for a small firm (defined as having up to 100 employees); around €295,000 for a medium-sized firm (100-5,000 employees); and just over €8 million for a large firm (over 5,000 employees). The cost to commodity or commodity derivatives trading houses will be lower than this if they do not provide any investment advice but will be a non-trivial nonetheless.

Extend the application of MiFID to secondary spot trading of emission allowances

Three categories of market players might be impacted by this measure: trading platforms offering spot trading in emission allowances, compliance buyers (i.e. energy and industrial companies which have a regulatory obligation to surrender emission allowances per emitted CO2 ton) and market intermediaries offering intermediation services in emission allowances.

The first category impacted would be trading venues. At present, three major carbon exchanges offering spot trading in emission allowances have a status of a regulated market and conform to the corresponding requirements set out in the MiFID. A few other platforms are also making preparations to apply for authorisation as a regulated market in accordance with the MiFID – these efforts are made in the context of the Auctioning Regulation[328] and the conditions for eligibility that Regulation establishes for candidate exchanges seeking appointment as an auction platform. As a result, in the next few years most leading carbon exchanges active in the spot segment would anyhow take steps to become a regulated market – irrespective of any changes foreseen to the scope of MiFID. Thus, the application of the MiFID to spot trading in emission allowances would predominantly affect smaller trading venues like national or regional energy or commodity exchanges which consider emissions trading as complementary to their main lines of business. The application of the revised MiFID in their case would mean that in order to continue spot trading activity they would need to make necessary adaptations to their organisation and operations in order to be in position to seek a MiFID authorisation. For the one-off adaptation costs and ongoing compliance costs to be proportionate to the scale of their activity in the carbon markets, the applicant trading venues could consider between different types of MiFID authorisation available: a regulated market (most comprehensive but involving substantial costs), an MTF and an organized trading facility (most basic and least expensive). At present, the costs of obtaining a MTF authorisation by a trading venue are estimated at €300,000–€400,000 as a

one-off cost and €90–€100,000 on an on-going basis (including market surveillance costs)[329]. The costs of operating as an OTF for such entities are estimated at €200,000 one-off with €40-60,000 for on-going compliance per year[330]. It is worth noting that a number of venues are part of wider groups and should be able to leverage experience from these. Some are also already conducting market surveillance (one of the major cost drivers) and thus may be able to incur lower adaptation costs. If we assume that there would be six smaller trading venues that would have to get a MiFID authorisation (3 MTF licences and 3 OTF licences), this would give rise to aggregated one-off costs of € 1.5-€1.8 million (€900,000-€1.2 million for the 3 MTFs and €600,000 for the 3 OTFs). The aggregate ongoing costs would amount to €390,000-€480,000 (€270,000-€300,000 for the 3 MTFs and €120,000-€180,000 for the 3 OTFs).

The second group impacted would be compliance buyers. Should trading in emission be covered by MiFID, ETS compliance buyers participants may observe an increase in their transaction costs (including any post-trade unit costs). Any such increase, resulting from adaptation and new compliance costs incurred by the trading platforms and – if applicable – intermediaries would be passed on to the ultimate buyers and sellers in the spot carbon market. At the same time, competition from carbon exchanges already authorised under the MiFID and offering spot trading would exert downward pressure on any such fee increases. In addition, a limited number of ETS compliance buyers[331] that currently have direct access to or membership in a spot carbon exchange may need to consider on a case by case basis substantial and occasionally costly changes to their organisation and business model in order to continue with any such status following the authorisation of the exchange concerned under the MiFID. In some cases, such compliance buyers may no longer be eligible to benefit from membership or direct access to the exchange, as a result of revision of the rules on access and membership undertaken by that exchange to conform to the MiFID.

The last category to be impacted would be market intermediaries. Only limited cost impacts for ETS market intermediaries which are financial market participants should be expected as a result of applying MiFID to spot trading in emission allowances. Such entities have typically been covered by MiFID compliance duties before and have already established arrangements and processes involving markets regulated under the MiFID. The additional costs involved would be associated with increased direct access, membership and transaction fees charged by the carbon exchanges as a result of their adaptation and compliance expense triggered by the MiFID authorisation duty. On the other hand, full alignment of compliance duties across the different carbon market segments would allow financial participants to keep largely unchanged own compliance costs associated with their activity on the spot carbon market. Finally, a substantial number of intermediaries currently not holding a MiFID authorisation for investment firms[332] would be required to ensure compliance with applicable organizational and operational requirements of the MiFID and to obtain such authorisation in order to pursue activity in secondary spot market for emission allowances. The average costs of obtaining a MiFID authorisation by an investment firm are estimated at around €0.5 – 1.5m one-off cost and €150,000 on-going cost per year.[333] For smaller firms (revenue lower than €3m) those average costs are expected to be significantly lower at around €100,000 for one-off cost and €30,000 for on-going cost per year. [334]

15.2.9. Broaden the scope of regulation on products, services and service providers when needed

Leave the optional exemptions regime under article 3 for certain investment services providers but introduce additional principles for national regimes aimed at tightening and

further levelling investor protection standards across jurisdictions irrespective of the entities providing the services.

We set out below the available information on the number of type of firms to whom Member States have applied the Article 3 exemption.

– **TABLE 32: Summary of Application of Article 3(1) Exemption**

Member State	Scope (services)	Scope (instruments)	Exempt service provider numbers
Austria	Both	Transferable securities and UCITS	101
Belgium	Transmission of orders only		6
Czech Republic	Both	Transferable securities and UCITS	9,059 investment agents (8,826 individuals, 233 companies)
France	Both	na	3,316
Germany	Both	UCITS only	80,000
Greece	Both	Transferable securities and UCITS	116 (only 14 providing investment advice)
Ireland	Both	Transferable securities and UCITS	1,386
Italy	Investment advice only	na	na
Lithuania	Both	Transferable securities and UCITS	3
Netherlands	Both	UCITS only	7,250
Poland	Both	UCITS only	66
Portugal	Investment advice only	Transferable securities and UCITS	7
Romania	Investment advice only	na	26 (22 individuals and 4 companies)
Slovakia	Transmission of orders only	UCITS only	2,032 (1913 individuals, 110 companies)
Sweden	Both	Transferable securities and UCITS	575 (only 456 active providing investment advice)
United Kingdom	Both	Transferable securities and UCITS	5,161

Source: National competent authorities and/or Governments, EE analysis.

The financial information available on the size of these firms is limited. It is understood that the majority are small firms or even individuals. The latest available data indicates that in Austria, the average annual revenue from the relevant services is €105,000; in the UK the median firm generated €175,000 (with the average firm having revenue of €820,000 with some firms clearly well in excess of that). Furthermore, in a number of cases investment services represent a minority of income (so that, say, in Germany the majority of revenue is related to insurance and pension products)

At table below we describe in summary form the current applicable national regimes in the relevant Member States.

– TABLE 33 Summary of Applicable National Regulatory Regimes

Member State	Authorisation	Information to Clients	Suitability	Inducements	Reporting to clients	Acting in best interest of client
Austria	Similar to that applicable under MiFID	Similar to that applicable under MiFID	Similar to that applicable under MIFID	Similar to that applicable under MiFID	Similar to that applicable under MiFID	Similar to that applicable under MiFID
Belgium	Similar to that applicable under MiFID	na	na	na	na	na
Czech Republic	Similar to that applicable under MiFID	Similar to that applicable under MiFID	Similar to that applicable under MiFID, unless only providing IA	Similar to that applicable under MiFID	Similar to that applicable under MiFID	Similar to that applicable under MiFID
France	Similarities to that applicable under MiFID (fit and proper requirements)	Similar to that applicable under MiFID	Similar to that applicable under MiFID	Similar to that applicable under MiFID	Similar to that applicable under MiFID	Similar to that applicable under MiFID
Germany	Similar to MiFID, and proposed amendment to Trade Regulations Act will make more so	German court decisions and banks for whom acting as agents may make similar to effect of MiFID but explicit regulation is lacking	German court decisions and banks for whom acting as agents may make similar to effect of MiFID but explicit regulation is lacking	German court decisions may make similar to effect of MiFID but explicit regulation is lacking	German court decisions and banks for whom acting as agents may make similar to effect of MiFID but explicit regulation is lacking	German court decisions and banks for whom acting as agents may make similar to effect of MiFID but explicit regulation is lacking
Greece	Similarities to that applicable under MiFID (fit and proper requirements)	na	na	na	na	na
Ireland	Similar to that applicable under MiFID	Similar to MiFID except that all clients assumed retail	Similar to MiFID except that all clients assumed retail	Similar to MiFID except that all clients assumed retail	Similar to that applicable under MiFID	All clients assumed retail without categorisation but otherwise application is similar
Italy	Similar to that applicable under MiFID	na	na	na	na	na
Lithuania	Similar to that applicable under MiFID	Fully the same as MiFID	Fully the same as MiFID	Fully the same as MiFID	[Fully the same as MiFID]	[Fully the same as MiFID]
Netherlands	Similar to that applicable under MiFID	Similar to MiFID except that all clients assumed retail	Similar to MiFID except that all clients assumed retail	All clients assumed retail without categorisation	Similar to that applicable under MiFID	All clients assumed retail without categorisation but otherwise application is similar
Poland	Similar to MiFID	Almost the same as MiFID	Almost the same as MiFID	Almost the same as MiFID	Almost the same as MiFID	[Almost the same as MiFID]
Portugal	Similar to MiFID	na	na	na	na	na
Romania	Similarities to that applicable under MiFID (fit and proper requirements)	na	na	na	na	na
Slovakia	Similar to that applicable under MiFID	Same as MiFID	Same as MiFID	Same as MiFID	Same as MiFID	Same as MiFID
Sweden	Similar to that applicable under MiFID	Same as MiFID	Same as MiFID	Same as MiFID	Same as MiFID	Same as MiFID
United Kingdom	Same basic provisions apply, but mey be as guidance rather than rules	Similar to MiFID except that all clients must be assumed retail	Same as MiFID, unless transmisison and receipt of orders only	Where investmnet advice is provided, will be aligned post-RDR	[Same as MiFID]	[Same as MiFID]

Source: National competent authorities and/or Governments, FIDIN, Bundesverband Deutscher Vermögenberater e.V, EE analysis.

As per the tables above, most of the 16 Member States that make use of the exemption already apply an authorisation process that is to a certain degree similar to the MiFID process. We expect that tightening the rules for receiving an authorisation due to the additional time needed for completing the authorisation process would imply a one-off cost across all of the affected service providers in these countries of €15–30 million.[335]

As can be seen from the above, where information is available, the applicable regulatory frameworks are relatively closely aligned (or even explicitly modelled) upon the provisions within MiFID, at least as far as the organisational and conduct of business rules selected for the minimum level of EU regulation are concerned. The most notable exception to this is Germany where in some cases explicit regulation is lacking (as opposed to the de facto effect of decisions by the German court system). In addition by far the majority of exempt firms (ca 80,000) are based in Germany so that we assume that 95 per cent of the costs resulting from a tightening of conduct of business rules would occur there. We assume that tightening the conduct of business requirements applicable to those firms in national legislation could lead to one-off costs equal to 0.45- 0.9 per cent of annual revenues (i.e. estimated annual revenue of €3.2 billion). It has to be borne in mind though that work is currently ongoing in Germany on a new statute already imposing stricter conduct of business rules on those exempt firms.[336] Therefore, most of the adaptation costs may already be triggered by that new national statute.

Extend the scope of MiFID conduct of business and conflict of interest rules to structured deposits and other similar deposit based products

There are a number of forms that structured products can take (these forms are called wrappers) such as funds, notes, bonds, certificates and deposits. Whilst the focus here is on deposit-based structured products (as these currently do not fall within the scope of MiFID), much of the market information relates to the structured retail product industry as a whole. The total outstanding amount invested across the EU at the end of 2008 was €678 billion, with total sales for 2008 reaching €179 billion.[337] In terms of outstanding amounts invested at the end of 2008 Italy has the lead (at €167.7 billion) followed by Germany, Spain, Belgium and France. Germany is the largest market in the EU in terms of annual sales (at €50.2 billion), followed by Italy, Spain and France.[338] Deposit-based products accounted for approximately 12 per cent (€22 billion) of total sales of structured products in 2008 across the European countries covered in the market information. The penetration rate was higher than this in Ireland, Poland, Slovakia, Spain and the UK. In terms of distribution, 92 per cent is sold by credit institutions, i.e. €20.2 billion in 2008. Independent financial intermediaries play a notable role only in the UK and Ireland.

The regulation of structured deposit-based products is relatively light. It has been found that seventeen Member States which do not apply any regulation similar to the MiFID selling rules. On the other hand, Italy and Slovakia's existing regimes are comparable to MiFID.[339] An extension of MiFID rules to the sale of such deposits would therefore trigger adaptation costs for the credit institutions involved in this business. Taking into consideration that some credit institutions already apply the MiFID conduct of business rules to the sale of these products on a voluntary basis we estimate a one-off impact of €31-€44m with ongoing costs of €9-€15m on a yearly basis.[340] To put this into further context, the one-off costs would be equivalent to 0.11–0.16 per cent of the estimated 2010 sales of these products by credit institutions[341]. The recurring costs would be 0.03–0.05 per cent of 2010 sales.

15.2.10. Strengthen rules of business conduct for investment firms

Reinforce investor protection by narrowing the list of products for which execution only services is possible and strengthening conduct of business rules for the provision of investment advice by further detailing information requirements and requiring the annual assessment of the advice initially provided

Execution only services are typically provided in two ways: first, from standalone brokers or credit institutions offering execution only as (typically) a standalone online service and

second, from off-line brokers. Europe Economics research indicates that online provision is the dominant form[342].

Concrete data on the size of the execution only market across Europe (i.e. in terms sales volume and sales value) are not available. Interviews Europe Economics have had with banking associations based in Germany, Italy and Luxembourg and two large universal banks based in Denmark (as well as desk-top research in the UK) indicate that business models governing the provision of execution only services appear to differ relatively markedly across providers of these services both between and within countries in the Europe Union. The differences largely reside with the extent to which execution only services, i.e. dealing only in non-complex products and with no appropriate tests carried out, overlap with other forms of online brokerage and in terms of market penetration. In general, the prevalence of execution only services tends to be larger in Northern than in Southern European States. However, some specific examples of differences across Germany, Denmark, Luxembourg and Italy were highlighted:

- In Germany, an "execution only" service is taken as a broader concept than set out in MiFID. In general, "execution only services" is used to describe both execution only trades in non-complex products (i.e. execution only in the strict sense where no tests of appropriateness are carried out) as well as online brokerage more generally in either complex or non-complex products where an appropriateness test is conducted. In Germany, the standard market practice is to apply a test of appropriateness irrespective of whether the product is non-complex — so that the distinction between execution only and online brokerage more generally is far from sharp. Indeed, approximately 90-95 per cent of execution only services provided by banks, where the products involved are non-complex, will include the application of a test of appropriateness. Ensuring maximum product choice for investors appears to be one of the key factors underlying this general preference of German banks not to differentiate between complex and non-complex products. It follows that the impact of this policy option would be significantly restricted in Germany.

- In Denmark, all execution only trading occurs through online platforms. While the exact proportion of execution only within non-complex trades is not known, it was thought to be substantially above the 20 per cent mark (indeed, for UCITS it is estimated at about 35 per cent). The practices of execution only providers in Denmark are significantly less uniform compared with Germany. Some banks will carry out all of its execution only services online and, like Germany, appropriateness tests are applied to trades involving non-complex products. However, unlike Germany, this is not standard market practice in Denmark and other providers do not apply an appropriateness test within the context of execution only.

- Execution only in Italy is much more limited in scope than in Denmark or Germany. A majority of execution only services in Italy also tend to be combined with a test of appropriateness. However, in Italy, this practice seems to have been driven more by the regulatory requirements of the Italian banking/financial services supervisor.

- Banks in Luxembourg apply a similar approach to those in Denmark. The view is that many clients (who know what they want to do) do not want excessive warnings.

- In a recent report published by the UK FSA it was estimated that two thirds of all retail investment product sales between April 2008 and March 2009 were sold on an advised basis.[343] This implies that up to a third of all retail investment products sales in the UK

were carried out on a non-advised basis (which includes execution only and direct offer) over this period.

Neither data on the products that embed a derivative are available (nor is the share of execution only business within them). However, the retail bank operators of execution services that Europe Economics interviewed spoke of UCITS as being the only packaged product being sold on an execution only basis — it indicates that volumes of complex products being executed in this way are probably not significant.

A reduction of the scope of non-complex products that can be distributed via execution-only services would inevitably increase the number of appropriateness tests that need to be carried out by investment firms for the products for which execution-only is not an option anymore. The costs for this should be marginal for those institutions already offering dual platforms for advised execution and execution only. Providers currently offering pure execution-only services would need to invest into IT, training and developing and filling out questionnaires to conduct appropriateness tests. Alternatively, these firms could simply offer a slightly limited range of products in the future as the reduction in scope only seems to affect a small minority of products and clients. As a result, we do not consider the overall costs of this option are likely to be very significant (because the universe of products and business practices affected do not appear to be significant). We estimate the overall one-off costs for this transition to be in the region of €0.1—€0.15 million.[344]

The overall compliance costs resulting from a strengthening conduct of business rules for the provision of investment advice for investment advisers would amount to a one-off cost of between €5.6 million and €12.5 million, and ongoing costs of between €134.3 million and €279.0 million.

We estimate that there are about 40–45 million mass affluent or high net worth individuals within the EU[345]. We consider two primary forms of advice — provision that is independent of the product providers (such as that provided through independent financial advisers) and other provision (such as, often, advice provided by banks). The importance of such independent advisers is highest in Ireland, the Netherlands and the UK. In the UK, for example, about 55 per cent of UCITS sales are through independent advisers. The penetration in France, Italy and Spain is much lower (perhaps five per cent). In Germany, independent brokers have grown in importance but remain closer to the levels seen in the latter group.[346] We estimate that across the EU 7–7.5 million of the wealthy individuals are receiving advice on an independent basis (i.e. 16 and 18 per cent of the total).

The obligation for investment firms providing advice on the basis of an independent and fair analysis to assess the suitability of a sufficiently large number of financial instruments available on the market would lead to incremental costs. The time taken to develop the suitability report is expected to increase by 3–5 minutes in order to tailor product choice to the investor's profile.[347] Based upon interviews with bank-based advisers, Europe Economics estimates that on average each client is receiving advice on one occasion per annum. This means that 33–37.5 million occasions[348] on which a suitability report is currently being provided. Based upon Europe Economics research, we consider the position in the UK and Germany to be sufficiently close such that the time required for advice would not need to be extended in the way described above. This reduces the number of bank-advised clients to 21–25 million. With an average adviser cost estimated at €50,000 per annum, this implies an on-going cost impact of €29–€59 million.

In addition, we would anticipate additional training, again only for bank-based advisers. If we apply the "industry standard" of 150 clients per adviser and take the incremental training to be 1-2 hours per adviser, then the incremental one-off training cost would be €6–€12 million. This is applied across the whole population including UK and German banks as some re-modelling of processes would be required across the board.

Requiring intermediaries to provide bi-annual updates (as a minimum frequency) to inform investors on the fair market value of their investments and on whether there has been any material modifications would give rise to incremental costs. If we take the case of two reports per annum then the incremental cost of accessing and delivering the valuation information is likely to be €1–€1.5 per client.[349] This means one additional statement per annum over and above the annual statement from product providers. If we take it that each of the 40-45 million wealthy individuals described above then this implies an on-going cost of €40–€67.5 million per annum.

A requirement to annually request information updates from clients would have several costs associated with it: the initiation of contact as well as the updating of the investment adviser's records. The costs of making such a request may be quite low. We assume that independent intermediaries send an information request pack (costing €1–€2 per client) whereas non-independent ones (typically banks) send a more generic request (e.g. for the customer to contact the local branch) at a lower cost of €0.5–€1 per client. This gives a cost impact of €23.5–€52.5 million since this would apply to all advised investors. However, in the event of a reply the investment adviser would potentially be required to re-work his or her estimates of suitability. We assume that only a relatively small proportion of clients — interviews carried out by Europe Economics with bank-based and independent advisers, and also a consumer representative group indicated that 5–10 per cent would be a reasonable response rate to expect. An association of independent advisers indicated that the necessary review of circumstances would take at least 90–120 minutes per client. However, in some proportion of cases it would be recommended by the adviser that some re-balancing of the investments should be done. Assuming that this was agreed to by the client and was executed by the adviser then this would generate revenue for the adviser and would pay for the time spent in reviewing the on-going suitability of the investments. Taking into account these two factors, we believe that the proportion of total clients requesting a review (by identifying a change in circumstances) but not requiring a change in the investments made (i.e. the net effect of the changes was not significant) may be 2.5–4 per cent. The implied on-going cost would then be €42–€100 million.

Apply general principles to act honestly, fairly and professionally to eligible counterparties and exclude municipalities and local public authorities from list of eligible counterparties and professional clients per se

Based upon feedback with market participants acting honestly, fairly, professionally, being clear and not misleading is very much the standard practice of players in the industry whether the client are retail, professional or are eligible counterparties. Notwithstanding this, we consider the following drivers of cost impact. First the level of monitoring by internal control functions would increase. The number of all of those workers within credit institutions and investment firms dealing with eligible counterparties is not known with precision. About 200,000 people work in (largely wholesale) financial services in the City of London and Canary Wharf.[350] On the other hand, not everyone in wholesale finance is client-facing. As a working estimate we take this figure of 200,000 (this is against 2.7 million employees working in EU credit institutions). In the past Europe Economics has found that a ratio of 350–400 of workers to a compliance worker was relatively typical with lower ratios applied in

investment banking or asset management, perhaps 100:1. Taking the ratio of 100:1, this implies a total of 2000 compliance staff as of now. We assume that this change would result in the industry as a whole moving to a ratio of perhaps 90:1. This implies an on-going cost of about €16 million.

Excluding municipalities from being classified as eligible counterparties or professional clients would not involve any significant costs at all. Indeed, in some Member States — such as Germany — this re-classification of municipalities as retail clients has already been done. Equally, in the UK and (from more recently) Italy municipalities are restricted from trade in OTC derivatives. However the restriction in the choice of products that may be traded without the application of a suitability or appropriateness test may increase the cost of transacting. However a municipality would be able to request treatment as a professional client subject to demonstrating experience and so on.

Reinforce information obligations when providing investment services in complex products and strengthen periodic reporting obligations for different categories of products, including when eligible counterparties are involved

Structured products (in the sense of direct participation in asset backed securities) are typically traded by banks and brokerage houses, insurers and hedge funds. There is very limited retail participation, although some presence in Italy and Spain is identified by IOSCO. The same can be said of OTC derivatives. However there is a broader category of structured products that are sold to retail investors. These include a mix of underlying assets: products linked to equities are the dominant form, followed by products linked to interest rates, hybrids, commodities and various other types. The value of these products was about €188 billion across Europe[351]. Arete Consulting identifies 335,000 individual retail structured products alone in the countries that it surveys. We consider a reasonable estimate of the population of products potentially affected to be 350–400,000. Again building upon Arete's analysis we consider that the population of unique product providers is likely to be around 250–300.

We assume that the community of investor relevant to this policy option are largely "high net worth" investors as well as those investors automatically categorised as professional under Annex II of Directive 2004/39/EC. The retail and professional clients who deal in OTC derivatives or asset-backed securities appear to be a relatively small community of investors. However robust data on the exact number are not forthcoming. We adopt a pan-EU figure of 150-300,000 retail investors to assist us in our analysis, the wide range reflecting the degree of uncertainty. In terms of professional investors as automatically classified under Annex II of Directive 2004/39/EC, we adopt a figure of 15–20,000[352]. This gives 165–320,000 overall.

The additional information to be provided to clients in relation in relation to complex products would include:

- A risk/gain profile of the instrument across different market conditions.
- Quarterly (independent) valuations.
- Quarterly reporting on structured finance products on the evolution of the underlying assets during the lifetime of the products.
- Timely informing of a material change modification in the situation of the financial instruments with an annual statement.

- Information on social and ethical criteria adopted.

We would expect the overall one-off costs to between €82.7-146.2 million and yearly ongoing costs between €11.5-36.7 million. A main source of cost would be the development of risk-gain profiles and the related marketing materials costs. We would assume that the time required for that would be less than a day per product for a compliance official resulting in aggregate costs of €50-87m[353], with on-going costs assuming the same volume of business of €10-29m. In addition, we expect the production and printing of related supporting documentation ("marketing materials") to result in a per provider cost of €100,000-150,000[354] which amount to an expected one-off impact of €25-45m. With respect to quarterly valuations, this information could easily be provided by the back office who usually compiles this kind of information. Whether external independent valuation (i.e. provided by a third party) might be needed is difficult to assess at this stage. In addition market participants interviewed have been unable to provide Europe Economics with costs estimates for external valuation. For a switch to quarterly reporting in the evolution of underlying assets we expect on-going costs of €1.5-7.7m[355]. The requirement to notify investors of material changes in circumstances will trigger system modifications of product providers which we expect to cause one-off costs of €1.7-2.7m[356]. Furthermore, accessing the information necessary for determining the occurrence of such a material change would cause additional cost. Here we would estimate that a compliance officer would need an hour for each client for such determination resulting in one-off costs of €6-11.5m. On-going costs would inadvertently depend on the number of times such material changes occur but are likely to be relatively low, i.e. below €1m.

Ban inducements in the case of investment advice provided on an independent basis and in the case of portfolio management

Requiring firms that claim to give advice on an independent and fair basis to offer a sufficiently broad universe of products to clients and to prohibit them from accepting any inducements would lead advisers currently operating as independent to recoup inducements by charging fees upfront. In the UK where there is a substantial community of independent advisers the impact would be a one-off cost of €41m and on-going costs of €29.5-35.4m which would already be triggered by the UK Retail Distribution Review (RDR)[357]. This review is broader in scope as it would prohibit third party commission payments. Our proposal targets independent advice only.

If firms outside the UK are to transition to a fee-based structure we would expect the costs to be material. We estimate that the affected community of independent investment advisers outside the UK is broadly comparable in scale (but slightly smaller) to that in the UK (this is due to the importance of this channel in the UK). As mentioned above we estimate the number of "mass affluent" and high net worth clients serviced by independent advisers as being 7–7.5 million. Further assuming that the 150 clients per adviser (derived from interviews with advisers) holds widely across the EU then we have a population estimate of 50,000 independent advisers in total, with about 60 per cent of those in the UK. If we pro-rate the costs of the UK RDR based on a conservative ratio of 80 per cent, this gives us an estimate of the one-off costs of about €33 million and on-going costs of €24–€28 million. As this option targets only independent investment advice (i.e. this is less wide-ranging than the DR), there is the distinct possibility that many advisers working based on commissions now would simply cease to describe themselves as independent so that there would be no immediate transition costs. However, they would need to demonstrate to clients that their service is nonetheless valuable investment advice. There may also be some product re-design costs that would be borne by the product providers. These are estimated by the UK FSA at

about €12 million for MiFID-relevant products in the UK. Applying the same reasoning as with the impacts on advisers, this implies an €8 million one-off impact.

As a rule of thumb, Europe Economics estimates that EU portfolio management industry could have revenues of at least €25bn. This would equate to perhaps 17 million customers and an industry of over 150,000 people (including back office workers).[358] Of the total assumed population of 150,000 affected employees, we assume that none of those in the UK or Italy are affected.[359] That leaves 90,000 potentially affected employees (60,000 portfolio managers and 30,000 back office staff).[360] Similarly, of the up to 17 million customers, proportionately up to 10.2m could be potentially affected. Due to a ban on inducements for portfolio managers we expect overall one-off cost implications of about €131 million. Portfolio managers would require a half day's training to explain matters such as new business models in respect of revenue raising (€280 per manager, in total €16.8m). The next category of one-off costs is the costs to draft letters to clients and edit contracts (three days of time of one back-office employee, total €9m). Thirdly, given that the nature of this industry is that of personal management of wealth, we estimate that a significant proportion of clients (one quarter) would seek a personal explanation (three days of time per manager, total €105m). Finally, we would estimate additional on-going internal monitoring costs to amount to €3.7m.[361]

We break down one-off costs below.

– **TABLE 34: One-off costs relating to banning of inducements in relation to portfolio management**

	Nature	Costs per employee (€)	Numbers of employees involved	Total cost (€m)
Training costs (front-office)	0.5 days at €560[362] per day	280	60,000	16.8
Contract renegotiation costs (back-office)	1 day at €300 per day	300	30,000	9.0
Client explanation costs (portfolio managers)	One quarter of clients seek explanation or renegotiation, 40 minutes per client = 3.125 days	1750	60,000	105.0
Total				130.8

Require trading venues to publish information on execution quality and improve information provided by firms on best execution

An obligation on trading venues to publish data regarding execution quality would require labour costs at the trading venue concerned which we estimate as amounting to €150,000 per venue one-off and as €50,000 per venue on an on-going basis[363]. Based on the number of

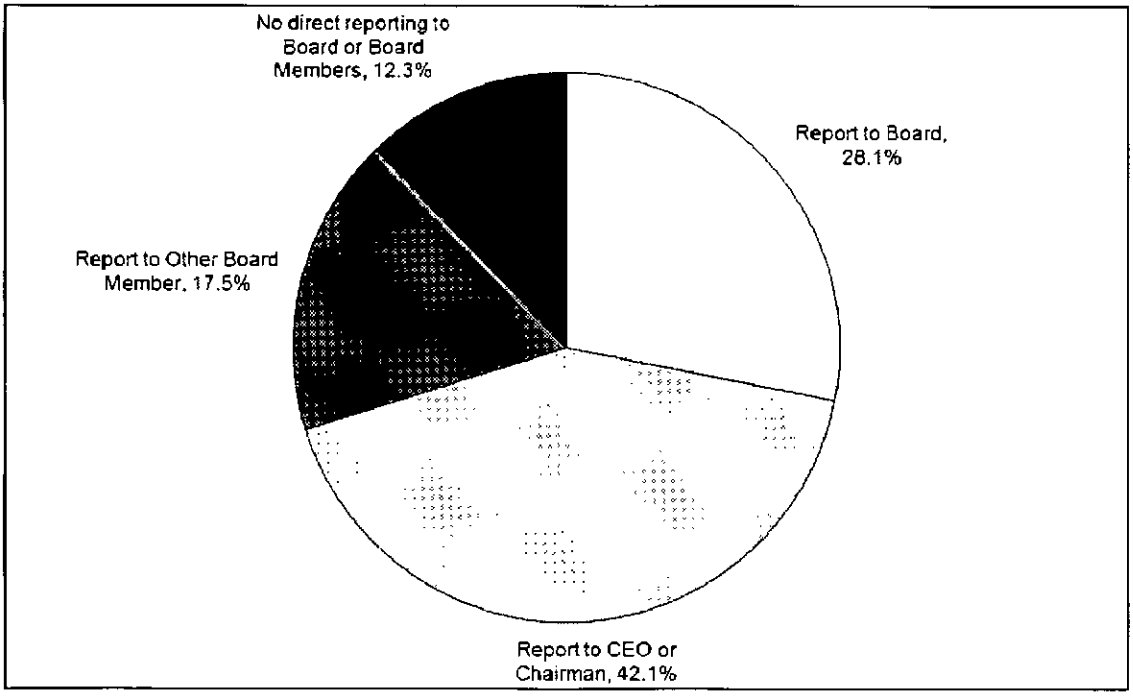
trading venues affected[364], the one-off costs would be estimated as €18m and the on-going costs as €6m. We do not envisage material changes to execution policies of firms. As these already do need to be reviewed on an annual basis we would not expect a cost impact at the level of the firm.

15.2.11. Strengthen organisational requirements for investment firms

Reinforce corporate governance framework by strengthening the role of directors especially in the functioning of internal control functions and when launching new products and services

As can be seen from the above the compliance function typically has a direct reporting line to Board-level executives, either as a group or through reporting to a designated individual.

FIGURE 13: The Nature of Compliance Function Reporting Lines



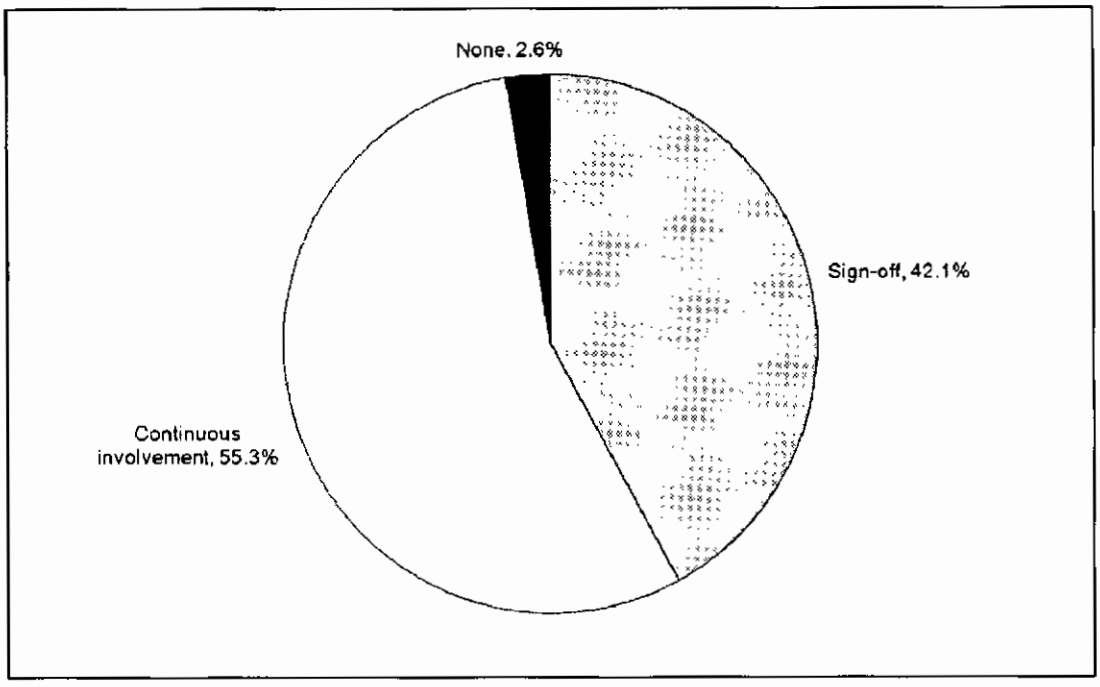
Source: Data gathered by Europe Economics in the development of its 2009 study on the "Cost of Compliance with Selected FSAP Measures" for DG MARKT. This chart is based upon analysis of responses from 57 discrete financial services firms (credit institutions and asset management firms).

If we take as our guide those firms that do not currently incorporate direct reporting to the Board or to someone at Board level as the sub-set that would be affected, then this implies that (given about 5,000 investment firms and 8,000 credit institutions) about 1600 firms would be making a change in formal reporting lines (i.e. 12.3 per cent from our sample). An enhanced profile for the compliance department is likely to result in either churn in the individuals responsible for it (with more senior managers coming in) or in an enhanced ability for the incumbents to demand higher remuneration then this may result in an increased cost burden. Following this line of argument, if we take a salary uplift of €7,500–€10,000 per affected individual compliance head as an illustrative scale of the impact then the implied on-going incremental cost impact would be €12–€16 million across the EU. A cost impact on the risk management function should be limited as this is already associated with a high profile.

However we could assume similar incremental costs of €12-€16 million for the internal control function, giving an overall ongoing costs impact of €24-€36 million across the EU.

Regarding additional organisational requirements for the launch of new products, operations and services there is evidence that compliance functions within firms are already actively involved in new product and service development:

- **FIGURE 14: Characterisation of the Involvement of the Compliance Function in the Development of New Products and Services**



Source: Data gathered by Europe Economics in the development of its 2008 study on the "Cost of Compliance with Selected FSAP Measures" for DG MARKT. This chart is based upon analysis of responses from 38 discrete financial services firms (credit institutions and asset management firms).

Therefore we would not expect a significant cost impact by implementing these measures. However we expect all firms providing investment services (about 9,500) to need two days for the re-assessment of protocols for the launch of new products resulting in an incremental one-off cost of €5m.

Require specific organisational requirements and procedures for the provision of portfolio management services and underwriting services

We do not expect a major cost impact by the measures envisaged in relation to the provision of the service of portfolio management. The message that we have from portfolio managers and associations representing them (or at their parent banks) is that there is a very strong, documented audit trail in terms of investment strategy and portfolio selection. However firms providing these services (about 4,900[365]) would need to carry out a review of existing client handling protocols that would likely take two or three days translating into a one-off cost of €2.8-4.2m.

For the measures envisaged regarding the provision of underwriting and placing services one cost driver would be the necessary review of existing procedures (the cost of such a review

has been estimated at €24,000 to €60,000 per firm[366]). More material costs would be incurred in those firms requiring actual adjustment to processes. Past work has indicated costs of €1.2–€2.4 million per firm.[367] From the interviews with investment banks that Europe Economics has conducted, we would not anticipate that these costs would be applicable within the firms operating internationally. Let us assume, however, that all firms not operating internationally do undertake such a review (i.e. 360 firms[368]). This implies one-off costs of €9–€22 million. Finally some (i.e. not all) firms in Central and Eastern Europe focused on a "cost-effective implementation of MiFID rather than a comprehensive one"[369] could incur additional costs linked to system changes. The specific rules proposed might indeed force a switch from the former type of implementation to the latter implying system changes giving rise to a one-off cost of €2-4 million[370]. In terms of recurring cost, we assume an additional quarter FTE compliance officer per firm to monitor on-going activities. This would imply an additional recurring cost of perhaps €0.25 million per annum.

Introduce a common regime for telephone and electronic recording but still leave a margin of discretion for Member States in requiring a longer retention period of the records and applying recording obligations to services not covered at EU level

The proposal would harmonise the telephone and electronic record-keeping requirements in terms of media covered and stipulate a minimum retention period. To assess the incremental costs impact of a harmonised recording regime, it is important to recognise that such recording already apply to a majority of Member States anyway. The following table outlines the current national recording requirements in place in different Member States:

– **TABLE 35: National legislative or supervisory recording requirements in EU member states**

Country	Legal / supervisory recording requirement?	Mobile phones included?	Duration of retention of records (years)
Austria	No	No	-
Belgium	No	No	-
Bulgaria	No	No	-
Czech Republic	Yes	Yes	10
Cyprus	Yes	Yes	5
Denmark	No	No	-
Estonia	Partially	Yes	5
France	Yes	Yes	0.5
Finland	Yes	Yes	2
Germany	Partially	Yes	0.25

Greece	Yes	Yes	1
Hungary	Yes	Yes	1
Italy	Yes	Yes	5
Ireland	No	No	-
Latvia	Yes	Yes	10
Lithuania	Yes	?	10
Luxembourg	No	No	-
Malta	No	No	-
Netherlands	No	No	-
Poland	Yes	Yes	5
Portugal	Yes	Yes	5
Romania	Yes	Yes	5
Slovakia	Unknown	Unknown	Unknown
Slovenia	Unknown	Unknown	Unknown
Spain	Yes	Yes	5
Sweden	Yes	No	5
UK	Yes	No	0.5

Source: CESR Technical Advice to the European Commission in the Context of the MiFID Review – Investor Protection and Intermediaries

Fifteen of the EU Member States that responded to CESR's consultation have a recording requirement which is incorporated in national legislation or rules, whilst 10 do not.[371] The costs for those Member States who do not currently have any recording requirements are likely to be significantly larger than those who already fulfil the expected measures by their current practice. In the absence of detailed information on Slovakia and Slovenia, we have assumed that no recording requirement is currently in place.

The cost of this option would be the incremental cost of the recording and storage. The magnitude of this cost would depend on a number of factors related to the implementing details of the obligation in this field such as the types of media covered and the retention period. We have taken the assumption that all media (fixed telephone lines, mobile telephone voice calls, text messages (SMS) from mobile phones, multimedia messages (MMS) from mobile phones, video communications using mobile phones, pin to pin messages (used in BlackBerry to BlackBerry communication), (secure) instant messaging services (IM), and e-mail) would be covered and that the retention period would be 2 years.[372]

To obtain aggregate cost estimates for the EU, we make the following assumptions:

(a) Member States with no current legislation for recording requirements will face full costs for all of their employees (i.e. we assume that there is no voluntary recording by firms).

(b) Those Member States with existing recording requirements will only face costs if the current required duration of the retention of records is less than two years (such as in France, Germany, Italy and the UK) or if no provision is currently in place for the recording of some of the media (e.g. mobile phone conversations in Sweden).

(c) The percentage of total financial sector employees that would require recording is the same in the UK as the rest of the EU. The FSA estimated the number of individuals in the UK requiring fixed line recording as between 55,000 and 70,000[373] – so between 4.6 and 5.8 per cent of financial sector employees. We estimate that around 30 per cent of employees with recorded fixed lines would also conduct relevant communications on a mobile device and therefore need recording of mobile communication channels as well.[374] We recognise that in the UK wholesale finance is a larger proportion of the total financial sector than the average for the EU and that a large part of those needing recording may well be situated in wholesale finance. Therefore, the percentages of EU employees requiring recording as calculated from the UK proportions will provide an upper bound.

(d) The split of small to large financial institutions is the same in the EU as in the UK. So the assumed distribution of phone lines that would be required to be taped across firm categories (by firm size) is as follows:. Small: 9 per cent, Medium: 9 per cent and Large: 82 per cent. (The cost data available has been organised by size of firm).

– **TABLE 36: Affected Financial Sector Employees by Member State, 2008**

Country	Number of employees	Number of employees requiring recording		Percentage still needing fixed line recording	Percentage still needing mobile recording
		Low estimate	High estimate		
Austria	136,100	6,219	7,915	100%	30%
Belgium	156,900	7,169	9,124	100%	30%
Bulgaria	54,900	2,509	3,193	100%	30%
Cyprus	18,500	845	1,076	0%	0%
Czech Republic	92,800	4,240	5,397	0%	0%
Denmark	87,400	3,994	5,083	100%	30%
Estonia	10,000	457	582	50%	15%

Finland	49,300	2,253	2,867	0%	0%
France	806,700	36,860	46,913	0%	0%
Germany	1,179,900	53,913	68,616	50%	15%
Greece	106,500	4,866	6,193	0%	0%
Hungary	81,200	3,710	4,722	0%	0%
Ireland	89,500	4,089	5,205	0%	0%
Italy	544,200	24,866	31,647	100%	30%
Latvia	19,400	886	1,128	0%	0%
Lithuania	19,900	909	1,157	0%	0%
Luxembourg	21,000	960	1,221	100%	30%
Malta	6,100	279	355	100%	30%
Netherlands	242,700	11,090	14,114	100%	30%
Poland	299,800	13,699	17,435	0%	0%
Portugal	90,000	4,112	5,234	0%	0%
Romania	108300	4,948	6,298	0%	0%
Slovenia	23,400	1,069	1,361	100%	0%
Slovakia	44,200	2,020	2,570	100%	0%
Spain	454,500	20,767	26,431	0%	0%
Sweden	90,800	4,149	5,280	0%	30%
UK	1,203,700	55,000	70,000	0%	30%

Source: Eurostat – Ifsa_eegen2 - Employees by sex, age groups and economic activity, NACE code F (Financial and insurance activities) Downloaded 19th November 2010.

Based on the estimated number of employees that would be affected per Member State, as estimated above, we come to the following totals across the EU:

– **TABLE 37: Estimated Employees affected by Different Aspects of Potential EU-wide Recording Regulation**

	Number still needing fixed line recording		Number still needing mobile recording	
Company size	Low	High	Low	High

Small	8,000	10,000	4,000	5,000
Medium	8,000	10,000	4,000	5,000
Large	72,000	91,000	35,000	45,000
Total EU27	87,000	111,000	43,000	55,000

Based on previous work undertaken by Europe Economics estimating the cost to authorised firms of implementing a recording requirement, the following estimated costs per user were obtained:

– **TABLE 38: One-off Cost per User, €**

	Small company		Medium company		Large company	
	Low cost	High cost	Low cost	High cost	Low cost	High cost
Fixed telephone	93	3,080	236	489	189	255
Voice from mobile	112	1,291	100	245	201	94
SMS	-	47	-	47	-	47
MMS	77	77	71	71	59	59
Video	112	112	100	100	89	89
Pin to pin	77	77	71	71	59	59
IM	77	77	71	71	59	71
Email	77	77	71	71	59	59

Source: Consideration of a Mobile Phone Recording Requirement - Final Report by Europe Economics to the Financial Services Authority and Consideration of a Discretionary Recording Requirement - Report by Europe Economics.

– **TABLE 39: On-going Costs per User, Six Month Retention Period, €**

	Small company		Medium company		Large company	
	Low cost	High cost	Low cost	High cost	Low cost	High cost
Fixed telephone	-	760	24	171	19	87
Voice from mobile	189	985	177	334	98	452
SMS	71	581	71	277	71	215

MMS	118	118	106	106	94	94
Video	354	354	307	307	283	283
Pin to pin	59	59	53	53	53	53
IM	59	59	53	53	53	53
Email	94	94	89	89	89	89

Source: Consideration of a Mobile Phone Recording Requirement - Final Report by Europe Economics to the Financial Services Authority and Consideration of a Discretionary Recording Requirement - Report by Europe Economics.

These costs relate to a retention period of six months for voice from mobile, SMS, MMS, video pin to pin, instant messaging and e-mail recording, and a retention period of any length for fixed telephone recording (as storage and retrieval are included in the package for new solutions).

Regarding fixed telephone recording, we can make some estimate of the additional cost that would be incurred if the required retention period for recordings were increased. Evidence shows that the price of the retention of records is typically included within the cost of installing a fixed line recording system for the first time. Therefore, for those Member States which currently have no requirement in place for recording fixed line telephone conversations the incremental on-going cost is only negligibly influenced by the length of the retention periods. However, for those companies with recording systems already in place for fixed lines, our past work indicates that some incremental on-going costs will be required to increase the retention period above the level currently sustained.

This is an important distinction — on-going costs are a function of the length of the retention period only where the requirement for a recording system is already in place. The following data give costs for changing the retention period when companies already have a system of recording in place.

– **TABLE 40: Additional On-going Costs per User with a Retention Period of Six months Increasing to One or Three Years, €**

	Additional on-going costs per user currently recorded		
	Small company	Medium company	Large company
One year retention period	6.5	6.5	41.3
Three years retention period	17.7	17.7	122.7

Source: Own figures as used in Consideration of a Discretionary Recording Requirement - Report by Europe Economics.

Based on the assumption that the costs of holding records for an additional year are linear, we estimate that increasing the retention period would cost €5.60 per user in an SME and €40.70 per user in a large firm.

Again, no additional costs (one-off or on-going) were found for voice from mobile in increasing the retention period of recordings when this system was implemented from scratch. We assume the magnitude of cost for storage and retrieval comparable to that for fixed line calls would be experienced in increasing the retention period for those already with mobile recording systems in place.

The following incremental on-going costs can be estimated for different choices of retention duration:

– **TABLE 41: Incremental on-going costs for EU27 of Implementing Different Retention Periods for Telephone Recordings of longer than Six Months, € millions**

Retention period	One year		Three years		Five years	
	Low	High	Low	High	Low	High
Fixed line telephones	2.3	2.6	11.1	13.9	20.0	25.2
Mobile telephones	0.4	0.5	1.9	2.4	3.5	4.4

Due to the small size of the files for SMS (maximum sizes of around 0.1kB) compared to the size of a voice conversation (a 2 minute conversation would require approximately 140kB to store, i.e. over a thousand times more than an SMS) we do not make any changes to the on-going costs of recording SMS for a longer retention period. The other media ("pin to pin" recording, MMS, Instant Messaging, e-mail and video) are not currently commonly in place in the EU. Therefore we have assumed that in effect all would be in the "from scratch" category of building a recording requirement.

For fixed line recordings, currently Finland, France, Germany, Greece, Hungary and the UK already have recording requirements but with retention period requirements of less than two years, so will still be impacted if a retention period of two years is legislated at EU level. All other Member States with existing recording requirements for fixed line telephone calls require retention for at least five years. The picture for mobile phone recording is similar, as the UK is the only country with a current recording requirement of less than five years where the legislation does not include mobile phone calls. So UK employees are removed from the numbers.

The following table gives the number of employees that will be affected as the retention period required is lengthened:

– **TABLE 42** Number of Employees in the EU with Additional On-going Costs with the Retention Period of Fixed Line Recordings Increased

Number of employees affected (000's)	Length of retention period									
	1 year		2 year		3-5 year		6-10 year		11+ year	
	Low	High	Low	High	Low	High	Low	High	Low	High

Fixed line telephones	112	143	127	162	130	165	182	232	189	240
Mobile telephones	34	43	38	49	39	50	39	50	39	50

– **TABLE 43** Estimated Total EU costs of Introducing Harmonised Recording Requirements with a Retention Duration of Two Years

	Europe Economics costings			
	One-off		Ongoing	
	Low	High	Low	High
	€m	€m	€m	€m
Fixed telephone	16.1	58.9	8.2	25.5
Voice from mobile	5.6	7.3	5.5	19.1
SMS	1.4	1.6	2.2	8.6
MMS	1.9	2.1	3.0	3.3
Video	2.8	3.1	8.9	9.8
Pin to pin	1.9	2.1	1.6	1.8
IM	1.6	2.5	0.9	1.9
Email	10.4	21.6	15.0	31.3
	41.7	99.2	45.2	101.2

Note: The low total cost estimates are calculated using the lower population estimate and the lower per unit estimates. The high total cost estimates are calculated using the higher population estimate as well as the higher per unit estimates.

In conclusion, based on the assumption that all media (fixed telephone lines, mobile telephone voice calls, text messages (SMS) from mobile phones, multimedia messages (MMS) from mobile phones, video communications using mobile phones, pin to pin messages (used in BlackBerry to BlackBerry communication), (secure) instant messaging services (IM), and e-mail) would be covered and a retention period of 2 years, we have estimated the range of incremental aggregated one-off costs to be €41.7-99.2 million and ongoing costs to be €45.2-101.2 million for the whole of the EU.

16. ANNEX 6: OVERVIEW OF ADMINISTRATIVE BURDEN

16.1. Description of the Model

The EU Standard Cost Model (SCM) is a model presented in the Annex 10 to the EU Impact Assessment Guidelines[375] as the preferred method of assessing the net costs of information obligations or administrative costs imposed by EU legislation. Administrative cost is defined as:

"the costs incurred by enterprises, the voluntary sector, public authorities and citizens in meeting legal obligations to provide information on their action or production, either to public authorities or to private parties."

On the basis of this definition of administrative costs only the compliance cost aspects of certain of the preferred options described in this IA are relevant in constructing the SCM estimate. The measures classified as giving rise to information obligations are as follows:

- Pre-and post-trade transparency (both equity and non-equity).
- Data consolidation
- Commodity derivatives — position reporting
- Transaction reporting
- Investor protection — the information obligations when offering investment services in complex products and the enhanced information to be published by trading venues on execution quality and the information given to clients by firms on best execution
- Further convergence of the regulatory framework — telephone and electronic recording of client orders
- Supervisory powers — position oversight.

There are two important distinctions to be made in considering costs:

(a) Recurring/on-going versus one-off — one-off costs are costs incurred only once, while on-going costs reflect the recurring costs associated with running the business.

(b) Business-as-usual costs versus administrative burdens — this distinguishes between costs that result from collecting and processing information that would be incurred in the absence of the legislation and the administrative burdens associated with the additional costs that result from processes undertaken solely due to the legislation. In each case costs can be divided into one-off and on-going costs.

In terms of estimating the SCM both the one-off costs and on-going costs must be considered, but only in so far as they are incremental to business-as-usual costs. It is therefore clear that the SCM can draw directly upon the results of the cost-benefit analysis that we have conducted. We have only considered the incremental cost impacts in our work and we have also identified where these are one-off in nature or else recurring impacts.

The core concept of the SCM is that costs should be calculated as the average cost of the administrative activity (price) times the total number of activities performed per year (quantity). The price is calculated by multiplying the time required for performing that action with the average tariff rate for workers that perform that action, and the quantity is calculated by multiplying the number of actions required by their frequency.

16.2. Estimating the SCM

The standard step by step procedure set out in the guidance is described in brief below:

- Step 1 — identify the information obligations and classify them according to a typology[376] published in Annex 10.
- Step 2 — for each type of information required, identify the type of action required based on the typology[377] published in Annex 10.
- Step 3 — obtain a picture of the target groups, which may be classified by size, type and location.
- Step 4 — identify of the frequency of the required actions, i.e. on average the number of times per year an action is required to be taken.
- Step 5 — identify the relevant cost parameters, i.e. the time spent performing the action and the hourly pay of those performing the action. In addition, there could be costs of equipment and supplies where the parameters would be (i) acquisition cost and (ii) depreciation period. Lastly, there could be outsourcing costs, where the parameter is what the service provider charges on average per information obligation per entity per year.
- Step 6 — estimate the average time spent on a task and the average hourly wage of those performing the task, based on information for all entities after removing any outliers.
- Step 7 — estimate of the number of entities in each target group.
- Step 8 — extrapolate data to EU level.

The results of this exercise are presented in the standard summary format.[378]

16.3. Assumptions Made to Reflect Nature of the Policy Options

In constructing out estimate we have made a number of assumptions. These are described below.

Step one

We categorise the information obligations as set out below.

Policy option giving rise to an information obligation	Type of obligation
Pre-and post-trade transparency (both equity and non-equity).	Non-labelling information for third parties

Data consolidation	Non-labelling information for third parties
Commodity derivatives — position reporting	Cooperation with audit and inspection by public authorities, including maintenance of appropriate records
Transaction reporting	Cooperation with audit and inspection by public authorities, including maintenance of appropriate records
Investor protection — investment services in complex products	Non-labelling information for third parties
Investor protection — enhanced information to be published by trading venues on execution quality and the information given to clients by firms on best execution	Non-labelling information for third parties
Further convergence of the regulatory framework — telephone and electronic recording of client orders	Cooperation with audit and inspection by public authorities, including maintenance of appropriate records
Supervisory powers — position oversight.	Inspection on behalf of public authorities

Step two

In terms of the administrative actions required to fulfil the information obligations set out above the most relevant for both one-off costs and on-going costs are as follows: Training members and employees about the information obligations; Buying (IT) equipment & supplies; Designing information material (leaflet conception etc); and Inspecting and checking (including assistance to inspection by public authorities). These are more fully detailed in the attached completed templates.

Step three

We have discretely identified the target groups (investment firms; investment advisers; MTFs, etc) within the compliance costs chapter and do not repeat that analysis here.

Steps four to six

For one-off costs we have assumed that the actions would only have to be undertaken once (i.e. once per year and for one year only). For on-going costs we have used the same assumptions in terms of the frequency of the actions per year as identified in the compliance costs analysis. For example, in terms of transaction reporting we have used the total number of transactions underlying the number.

For wages (or "tariff per hour" as set out in the template), we have used the hourly labour costs derived from the annual all-in annual cost estimates identified in Appendix 11 detailing our underlying main costs assumptions.

Since the only asset acquisition identified for the purposes of our estimates relate to IT systems we have not included a depreciation period. We have assumed that the system would continue until the company updated their IT as a natural part of their future development (i.e. unrelated to the introduction of the proposed rules). The one-off cost of the initial acquisition has, therefore, not been adjusted for depreciation.

Using this information we have estimated an average cost per type of company for each action.

Step seven

The number of entities in the EU as a whole for each of the target groups has, in the main part, been estimated as part of our analysis specific to each policy option. Where this has not been available we have used the total number of investment firms and credit institutions providing investment services identified in Appendix 16 as conducting a relevant investment service (or any investment service) as appropriate.

Step eight

As we have noted already, the SCM estimates have been derived from the cost estimates used in the analysis of compliance costs. . The report's cost estimates are based upon a number of more or less detailed (typically "bottom-up") assumptions which are detailed in the respective paragraphs relating to compliance costs. These cost estimates have then been applied to a "whole of EU" population for the purposes of establishing the cost impact of specific policy options. It follows that further extrapolation for the purposes of the SCM would be inappropriate.

To note again, the administrative burden estimated equates to the administrative costs. This is because the cost estimates are on an incremental basis, i.e. excluding any costs that they would incur in the absence of the regulation. As such we did not need to include any estimate of the Business as Usual costs.

16.4. Results

We present below the detailed tables. We provide low and high estimates for both on-going and one-off costs.

– **TABLE 44**: Administrative burden costs - One-off costs (low)

Review of the Market in Financial Instruments Directive						Tariff (euros per hour)	Time (hours)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Cost % of AC	Total Administrative Burdens (AC+BAU)
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group											
1	Equity pre-trade transparency		Non labelling information for third parties	Familiarising with the information obligation	Investment firms and credit institutions	0	0		1	600	600			0	0%	0
2	Equity post-trade transparency		Non labelling information for third parties	Familiarising with the information obligation	Investment firms and credit institutions	0	0		1	600	600			0	0%	0
3	Transparency for shares traded only on MTFs / OTFs		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions	0	0		1	600	600	3.333		1.999.800	0%	1.999.80 0
4	Non-equity pre-trade transparency for MTFs		Non labelling information for third parties	Buying (IT) equipment & supplies	Execution venues (MTFs)				1	46	46	8.696		400.016	0%	400.016
5	Non-equity pre-trade transparency for Market participants OTC		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	264	264	2.261		596.869	0%	596.869
6	Non-equity post-trade transparency - costs to MTFs		Non labelling information for third parties	Buying (IT) equipment & supplies	Execution venues (MTFs)				1	46	46	8.696		400.000	0%	400.000
7	Non-equity post-trade transparency - costs to market participants		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	380	380	10.853		4.123.999	0%	4.123.99 9
8	Data consolidation - APA		Other	Buying (IT) equipment & supplies	Investment firms, credit institutions and APAs	0	0		1	600	600	50.000		30.000.000	0%	30.000.0 00

9	Data consolidation - Consolidated tape		Other	Adjusting existing data	MTFs and exchanges	0	0		1		0			0	0%	0
10	Commodity derivatives markets - position reporting requirements for exchanges/MTF not currently requiring position reporting		Non labelling information for third parties	Buying (IT) equipment & supplies	MTFs and exchanges	0	0,00		1	13	13	10.000		130.000	0%	130.000
11	Commodity derivatives markets - position reporting requirements for traders not currently engaged in position reporting		Notification of (specific) activities or events	Buying (IT) equipment & supplies	Investment firms and credit institutions	0	0,00		1	52	52	12.000		624.000	0%	624.000
12	Transaction Reporting - extension in scope to equities primarily issued on an MTF		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions	0	0		1	600	600	1.092		655.000	0%	655.000
13	Transaction Reporting - extension in scope to depositary receipts		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions	0	0		1	600	600	1.092		655.000	0%	655.000

14	Transaction Reporting - extension in scope to OTC derivatives		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions	0	0		1	250	250	192.720		48.180.000	0%	48.180.0 00
15	Transaction Reporting - extension in scope to commodity derivatives		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions	0	0		1	450	450	35.444		15.950.000	0%	15.950.0 00
16	Investor Protection: Informing on Complex Products - risk-gain profiles		Non labelling information for third parties	Adjusting existing data	Investment firms and credit institutions	36	4	144	1.400	250	350.000			50.555.556	0%	50.555,5 56
17	Investor Protection: Informing on Complex Products - risk-gain profiles		Non labelling information for third parties	Designing information material (leaflet conception…)	Investment firms and credit institutions				1	250	250		100.000	25.000.000	0%	25.000.0 00
18	Investor Protection: Informing on Complex Products - material change		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	250	250		6.667	1.666.667	0%	1.666.66 7
19	Investor Protection: Informing on Complex Products - material change		Non labelling information for third parties	Familiarising with the information obligation	Investment firms and credit institutions	36	1	36	17	9.537	165.000			5.958.333	0%	5.958.33 3

20	Investor Protection: Execution quality reporting		Non labelling information for third parties	Buying (IT) equipment & supplies	Execution venues (MTFs)				1	120	120	150.000		18.000.000	0%	18.000.000
21	Convergence of Supervisory Powers - Electronic recording		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	9.537	9.537	4.372		41.700.000	0%	41.700.000
22	Reinforcement of Supervisory Powers - Position oversight for MTFs with some existing oversight		Inspection on behalf of public authorities	Buying (IT) equipment & supplies	Execution venues (MTFs)	0	0	0	1	29	29	75.000		2.175.000	0%	2.175.000
23	Reinforcement of Supervisory Powers - Position oversight for Eps with no existing oversight		Inspection on behalf of public authorities	Buying (IT) equipment & supplies	Execution venues (EPs)	0	0	0	1	10	10	600.000		6.000.000	0%	6.000.000
													Total administrative costs (€)	**254.770.240**		

– **TABLE 45**: One-off costs (high)

Review of the Market in Financial Instruments Directive						Tariff (euros per hour)	Time (hours)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative costs	Business As Usual Costs (% of ACT)	Total Administrative Burdens (AC - BAU)
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group											
1	Equity pre-trade transparency		Non labelling information for third parties	Familiarising with the information obligation	Investment firms and credit institutions	0	0		1	600	600			0	0%	0
2	Equity post-trade transparency		Non labelling information for third parties	Familiarising with the information obligation	Investment firms and credit institutions	0	0		1	600	600			0	0%	0
3	Transparency for shares traded only on MTFs / OTFs		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions	0	0		1	600	600	3.333		1.999.800	0%	1.999.80 0
4	Non-equity pre-trade transparency for MTFs		Non labelling information for third parties	Buying (IT) equipment & supplies					1	46	46	17.391		799.986	0%	799.986
5	Non-equity pre-trade transparency for Market participants OTC		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	264	264	3.899		1.029.217	0%	1.029.21 7
6	Non-equity post-trade transparency - costs to MTFs		Non labelling information for third parties	Buying (IT) equipment & supplies	Execution venues (MTFs				1	46	46	17.391		800.000	0%	800.000
7	Non-equity post-trade transparency - costs to market participants		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	380	380	17.300		6.574.000	0%	6.574.00 0
8	Data consolidation - APA		Other	Buying (IT) equipment & supplies	Investment firms, credit institutions and APAs	0	0		1	600	600	50.000		30.000.000	0%	30.000.0 00

9	Data consolidation - Consolidated tape		Other	Adjusting existing data	MTFs and exchanges	0	0		1		0			0	0%	0
10	Commodity derivatives markets - position reporting requirements for exchanges/MTF not currently requiring position reporting		Non labelling information for third parties	Buying (IT) equipment & supplies	Execution venues (MTFs)	0	0,00		1	13	13	15.000		195.000	0%	195.000
11	Commodity derivatives markets - position reporting requirements for traders not currently engaged in position reporting		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions	0	0,00		1	104	52	15.000		780.000	0%	780.000
12	Transaction Reporting - extension in scope to equities primarily issued on an MTF		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions	0	0		1	600	600	1.884		1.130.556	0%	1.130.55 €
13	Transaction Reporting - extension in scope to depositary receipts		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions	0	0		1	600	600	1.884		1.130.556	0%	1.130.55 €

14	Transaction Reporting - extension in scope to OTC derivatives		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions	0	0		1	250	250	247.940		61.985.000	0%	61.985.0 0C
15	Transaction Reporting - extension in scope to commodity derivatives		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions	0	0		1	450	450	44.222		19.900.000	0%	19.900.0 0C
16	Investor Protection: Informing on Complex Products - risk-gain profiles		Non labelling information for third parties	Adjusting existing data	Investment firms and credit institutions	36	6	217	1.333	300	400.00 0			86.666.667	0%	86.666.6 67
17	Investor Protection: Informing on Complex Products - risk-gain profiles		Non labelling information for third parties	Designing information material (leaflet conception...)	Investment firms and credit institutions				1	300	300		150.000	45.000.000	0%	45.000.0 0C
18	Investor Protection: Informing on Complex Products - material change		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	300	300		8.889	2.666.667	0%	2.666.66 7
219	Investor Protection: Informing on Complex Products - material change		Non labelling information for third parties	Familiarising with the information obligation	Investment firms and credit institutions	36	1	36	34	9.537	320.00 0			11.555.556	0%	11.555.5 56

20	Investor Protection: Execution quality reporting		Non labelling information for third parties	Buying (IT) equipment & supplies	Execution venues (MTFs)				1	120	120	150.000		18.000.000	0%	18.000.000
21	Convergence of Supervisory Powers - Electronic recording		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	9.537	9.537	10.402		99.200.000	0%	99.200.000
22	Reinforcement of Supervisory Powers - Position oversight for MTFs with some existing oversight		Inspection on behalf of public authorities	Buying (IT) equipment & supplies	Execution venues (MTFs)	0	0	0	1	29	29	100.000		2.900.000	0%	2.900.000
23	Reinforcement of Supervisory Powers - Position oversight for Eps with no existing oversight		Inspection on behalf of public authorities	Buying (IT) equipment & supplies	Execution venues (EPs)	0	0	0	1	10	10	1.000.000		10.000.000	0%	10.000.000
													Total administrative costs (€)	**402.313.004**		

– **TABLE 46** Ongoing costs (low)

Review of the Market in Financial Instruments Directive						Tariff (euros per hour)	Time (hours)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC + BAU)
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group											
1	Equity pre-trade transparency		Non labelling information for third parties	Familiarising with the information obligation	Investment firms and credit institutions				1	600	600			0	0%	0
2	Equity post-trade transparency		Non labelling information for third parties	Familiarising with the information obligation	Investment firms and credit institutions				1	600	600			0	0%	0
3	Transparency for shares traded only on MTFs / OTFs		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	600	600	667		400.200	0%	400.200
4	Non-equity pre-trade transparency for MTFs		Non labelling information for third parties	Buying (IT) equipment & supplies	Execution venues (MTFs)				45	46	2.070	77		159.990	0%	159.990
5	Non-equity pre-trade transparency for Market participants OTC		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions				45	264	11.880	341		4.055.654	0%	4.055.654
6	Non-equity post-trade transparency - costs to MTFs		Non labelling information for third parties	Buying (IT) equipment & supplies	Execution venues (MTFs)				1	46	46	3.478		160.000	0%	160.000
7	Non-equity post-trade transparency - costs to market participants		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	380	380	11.889		4.517.999	0%	4.517.999
8	Data consolidation - APA		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms, credit institutions and APAs				1	600	600	5.000		3.000.000	0%	3.000.000

9	Data consolidation - Consolidated tape		Non labelling information for third parties	Adjusting existing data	MTFs and exchanges						0					0
10	Commodity derivatives markets - position reporting requirements for exchanges/MTF not currently requiring position reporting		Non labelling information for third parties	Retrieving relevant information from existing data	Execution venues (MTFs)	44	3.150,00	######	1	13	13			1.820.000	0%	1.820.000
11	Commodity derivatives markets - position reporting requirements for exchanges/MTF not currently requiring position reporting		Non labelling information for third parties	Buying (IT) equipment & supplies	Execution venues (MTFs)	44	22,50	1.000	1	13	13			13.000	0%	13.000
12	Commodity derivatives markets - position reporting requirements for traders not currently engaged in position reporting		Notification of (specific) activities or events	Retrieving relevant information from existing data	Investment firms and credit institutions	44	450,00	######	1	52	52			1.040.000	0%	1.040.000
13	Commodity derivatives markets - position reporting requirements for traders not currently engaged in position reporting		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions	44	27,00	1.200	1	52	52			62.400	0%	62.400

14	Commodity derivatives markets - publication of COT report		Non labelling information for third parties	Retrieving relevant information from existing data	Execution venues (MTFs)	44	450,00	######	1	17	17			340.000	0%	340.000
15	Transaction Reporting - extension in scope to equities primarily issued on an MTF		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	600	600	29		17.326	0%	17.326
16	Transaction Reporting - extension in scope to equities primarily issued on an MTF		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	Investment firms and credit institutions	56	0,00027	0,015	5.201	600	#######			47.286	0%	47.286
17	Transaction Reporting - extension in scope to equities primarily issued on an MTF		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	Investment firms and credit institutions				1	600	600		31	18.725	0%	18.725
18	Transaction Reporting - extension in scope to depositary receipts		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	600	600	186		111.391	0%	111.391
19	Transaction Reporting - extension in scope to depositary receipts		Cooperation with audits & inspection by public authorities, including maintenance of appropriate	Inspecting and checking (including assistance to inspection by public authorities)	Investment firms and credit institutions	56	0,00027	######	33.442	600	#######			304.015	0%	304.015

			records													
20	Transaction Reporting - extension in scope to depositary receipts		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	Investment firms and credit institutions				1	600	600		201	120.390	0%	120.390
21	Transaction Reporting - extension in scope to OTC derivatives		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	150	150	753		112.995	0%	112.995
22	Transaction Reporting - extension in scope to OTC derivatives		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	Investment firms and credit institutions	56	0,00055	######	67.846	150	#######			308.393	0%	308.393
23	Transaction Reporting - extension in scope to OTC derivatives		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	Investment firms and credit institutions				1	150	150		271	40.708	0%	40.708

24	Transaction Reporting - extension in scope to OTC derivatives (credit index derivatives)		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	150	150	244		36.670	0%	36.670
25	Transaction Reporting - extension in scope to OTC derivatives (credit index derivatives)		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	Investment firms and credit institutions	56	0,00055	######	22.018	150	#######			100.082	0%	100.082
26	Transaction Reporting - extension in scope to OTC derivatives (credit index derivatives)		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	Investment firms and credit institutions				1	150	150		88	13.211	0%	13.211
27	Transaction Reporting - data storage		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	OTFs, MTFs and RMs				1	100	100	9.968		996.809	0%	996.809
28	Transaction Reporting - extension in scope to commodity derivatives		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	150	150	677		101.496	0%	101.496

29	Transaction Reporting - extension in scope to commodity derivatives		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	Investment firms and credit institutions	56	0,00055	######	60.942	150	#######			277.008	0%	277.008
30	Transaction Reporting - extension in scope to commodity derivatives		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	Investment firms and credit institutions				1	150	150		244	36.565	0%	36.565
31	Investor Protection: Informing on Complex Products - risk-gain profiles		Non labelling information for third parties	Adjusting existing data	Investment firms and credit institutions	36	0,80	29	1.400	250	#######			10.111.111	0%	10.111.111
32	Investor Protection: Informing on Complex Products - quarterly reporting		Non labelling information for third parties	Retrieving relevant information from existing data	Investment firms and credit institutions				5.940	250	#######		5.940	1.485.000	0%	1.485.000
33	Investor Protection: Execution quality reporting		Non labelling information for third parties	Buying (IT) equipment & supplies	Execution venues (MTFs)				1	120	120	50.000		6.000.000	0%	6.000.000
34	Convergence of Supervisory Powers - Electronic recording		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	9.537	9.537	4.739		45.200.000	0%	45.200.000

35	Reinforcement of Supervisory Powers - Position oversight for MTFs with some existing oversight		Inspection on behalf of public authorities	Buying (IT) equipment & supplies	Execution venues (MTFs)	44	6	268	28	29	812			217.500	0%	217.500
36	Reinforcement of Supervisory Powers - Position oversight for MTFs with some existing oversight		Inspection on behalf of public authorities	Inspecting and checking (including assistance to inspection by public authorities)	Execution venues (MTFs)	44	96	4.286	28	29	812			3.480.000	0%	3.480.000
37	Reinforcement of Supervisory Powers - Position oversight for Eps with no existing oversight		Inspection on behalf of public authorities	Buying (IT) equipment & supplies	Execution venues (EPs)	44	48	2.143	28	10	280			600.000	0%	600.000
38	Reinforcement of Supervisory Powers - Position oversight for Eps with no existing oversight		Inspection on behalf of public authorities	Inspecting and checking (including assistance to inspection by public authorities)	Execution venues (EPs)	44	257	11.429	28	10	280			3.200.000	0%	3.200.000
39	Reinforcement of Supervisory Powers - Position oversight for all execution venues i.t.o requesting information		Inspection on behalf of public authorities	Inspecting and checking (including assistance to inspection by public authorities)	Execution venues (Eps and MTFs)	44	32	1.429	28	39	1.092			1.560.000	0%	1.560.000

40	Reinforcement of Supervisory Powers - Position oversight for all market participants not currently monitored		Other	Buying (IT) equipment & supplies	Investment firms and credit institutions	44	8	356	5	250	1.250			444.444	0%	444.444
													Total administrative costs (€)	**90.510.368**		

– **TABLE 47**: Administrative burden costs - Ongoing costs (high)

Review of the Market in Financial Instruments Directive						Tariff (euros per hour)	Time (hours)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Burden	Burden as % of Total Cost (SCM)	Total Administrative Burden (ACCEA
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group											
1	Equity pre-trade transparency		Non labelling information for third parties	Familiarising with the information obligation	Investment firms and credit institutions	0	0		1	600	600			0	0%	
2	Equity post-trade transparency		Non labelling information for third parties	Familiarising with the information obligation	Investment firms and credit institutions	0	0		1	600	600			0	0%	
3	Transparency for shares traded only on MTFs / OTFs		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions	0	0		1	600	600	667		400.200	0%	400.
4	Non-equity pre-trade transparency for MTFs		Non labelling information for third parties	Buying (IT) equipment & supplies	Execution venues (MTFs)				45	46	2.070	155		320.001	0%	320.
5	Non-equity pre-trade transparency for Market participants OTC		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions				45	264	11.880	442		5.256.199	0%	5.256.
6	Non-equity post-trade transparency - costs to MTFs		Non labelling information for third parties	Buying (IT) equipment & supplies	Execution venues (MTFs)				1	46	46	6.957		319.999	0%	319.
7	Non-equity post-trade transparency - costs to market participants		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	380	380	17.995		6.838.001	0%	6.838.
8	Data consolidation - APA		Other	Buying (IT) equipment & supplies	Investment firms, credit institutions and APAs				1	600	600	7.500		4.500.000	0%	4.500.

9	Data consolidation - Consolidated tape		Other	Adjusting existing data	MTFs and exchanges				1		0				0%	
10	Commodity derivatives markets - position reporting requirements for exchanges/MTF not currently requiring position reporting		Non labelling information for third parties	Retrieving relevant information from existing data	Execution venues (MTFs)	44	4.050,00	180.000	1	13	13			2.340.000	0%	2.340.(
11	Commodity derivatives markets - position reporting requirements for exchanges/MTF not currently requiring position reporting		Non labelling information for third parties	Buying (IT) equipment & supplies	Execution venues (MTFs)	44	33,75	1.500	1	13	13			19.500	0%	19.(
12	Commodity derivatives markets - position reporting requirements for traders not currently engaged in position reporting		Notification of (specific) activities or events	Retrieving relevant information from existing data	Investment firms and credit institutions	44	450,00	20.000	1	52	52			1.040.000	0%	1.040.(
13	Commodity derivatives markets - position reporting requirements for traders not currently engaged in position reporting		Non labelling information for third parties	Buying (IT) equipment & supplies	Investment firms and credit institutions	44	33,75	1.500	1	52	52			78.000	0%	78.(

14	Commodity derivatives markets - publication of COT report		Non labelling information for third parties	Retrieving relevant information from existing data	Execution venues (MTFs)	44	450,00	20.000	1	17	17			340.000	0%	340.0
15	Transaction Reporting - extension in scope to equities primarily issued on an MTF		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	600	600	45		27.071	0%	27.0
16	Transaction Reporting - extension in scope to equities primarily issued on an MTF		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	Investment firms and credit institutions	69	0,00034	0,024	5.201	600	3.120.862			73.884	0%	73.8
17	Transaction Reporting - extension in scope to equities primarily issued on an MTF		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	Investment firms and credit institutions				1	600	600		62	37.450	0%	37.4
18	Transaction Reporting - extension in scope to depositary receipts		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	600	600	435		260.724	0%	260.7
19	Transaction Reporting - extension in scope to depositary receipts		Cooperation with audits & inspection by public authorities, including maintenance of appropriate	Inspecting and checking (including assistance to inspection by public authorities)	Investment firms and credit institutions	69	0,00034	0,024	50.162	600	#########			712.534	0%	712.5

			records													
20	Transaction Reporting - extension in scope to depositary receipts		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	Investment firms and credit institutions				1	600	600		602	361.169	0%	361.
21	Transaction Reporting - extension in scope to OTC derivatives		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	150	150	1.177		176.555	0%	176.
22	Transaction Reporting - extension in scope to OTC derivatives		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	Investment firms and credit institutions	69	0,00068	0,047	67.846	150	#########			481.864	0%	481.
23	Transaction Reporting - extension in scope to OTC derivatives		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	Investment firms and credit institutions				1	150	150		543	81.416	0%	81.

24	Transaction Reporting - extension in scope to OTC derivatives (credit index derivatives)		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	150	150	382		57.297	0%	57.
25	Transaction Reporting - extension in scope to OTC derivatives (credit index derivatives)		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	Investment firms and credit institutions	69	0,00068	0,047	22.018	150	3.302.720			156.379	0%	156.
26	Transaction Reporting - extension in scope to OTC derivatives (credit index derivatives)		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	Investment firms and credit institutions				1	150	150		176	26.422	0%	26.
27	Transaction Reporting - data storage		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	OTFs, MTFs and RMs				1	100	100	18.772		1.877.230	0%	1.877.
28	Transaction Reporting - extension in scope to commodity derivatives		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	150	150	1.057		158.587	0%	158.

29	Transaction Reporting - extension in scope to commodity derivatives		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	Investment firms and credit institutions	69	0,00068	0,047	60.952	150	9.142.756			432.896	0%	432.
30	Transaction Reporting - extension in scope to commodity derivatives		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	Investment firms and credit institutions				1	150	150		488	73.130	0%	73.
31	Investor Protection: Informing on Complex Products - risk-gain profiles		Non labelling information for third parties	Adjusting existing data	Investment firms and credit institutions	36	2,00	72	1.333	300	400.000			28.888.889	0%	28.888.
32	Investor Protection: Informing on Complex Products - quarterly reporting		Non labelling information for third parties	Retrieving relevant information from existing data	Investment firms and credit institutions				12.800	300	3.840.000		25.600	7.680.000	0%	7.680.
33	Investor Protection: Execution quality reporting		Non labelling information for third parties	Buying (IT) equipment & supplies	Execution venues (MTFs)				1	120	120	50.000		6.000.000	0%	6.000.
34	Convergence of Supervisory Powers - Electronic recording		Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Buying (IT) equipment & supplies	Investment firms and credit institutions				1	9.537	9.537	10.611		101.200.000	0%	101.200.

35	Reinforcement of Supervisory Powers - Position oversight for MTFs with some existing oversight		Inspection on behalf of public authorities	Buying (IT) equipment & supplies	Execution venues (MTFs)	44	8	357	28	29	812			290.000	0%	290.0
36	Reinforcement of Supervisory Powers - Position oversight for MTFs with some existing oversight		Inspection on behalf of public authorities	Inspecting and checking (including assistance to inspection by public authorities)	Execution venues (MTFs)	44	193	8.571	28	29	812			6.960.000	0%	6.960.0
37	Reinforcement of Supervisory Powers - Position oversight for Eps with no existing oversight		Inspection on behalf of public authorities	Buying (IT) equipment & supplies	Execution venues (EPs)	44	80	3.571	28	10	280			1.000.000	0%	1.000.0
38	Reinforcement of Supervisory Powers - Position oversight for Eps with no existing oversight		Inspection on behalf of public authorities	Inspecting and checking (including assistance to inspection by public authorities)	Execution venues (EPs)	44	643	28.571	28	10	280			8.000.000	0%	8.000.0
39	Reinforcement of Supervisory Powers - Position oversight for all execution venues i.t.o requesting information		Inspection on behalf of public authorities	Inspecting and checking (including assistance to inspection by public authorities)	Execution venues (Eps and MTFs)	44	64	2.857	28	39	1.092			3.120.000	0%	3.120.0

40	Reinforcement of Supervisory Powers - Position oversight for all market participants not currently monitored		Other	Buying (IT) equipment & supplies	Investment firms and credit institutions	44	8	356	10	250	2.500			888.889	0%	888.
													Total administrative costs (€)	**190.474.286**		

17. ANNEX 7: DETAILED UNDERLYING COSTS ASSUMPTIONS

MARKET PARTICIPANTS		Assumptions	
Bonds/equities	No. large players	25	
	No. medium players	75	
	No. small players	500	
		600	
Notes:	**Highest number of participants in any exchange is 325.** **If all participants unique (i.e. no overlap), FESE data imply 1551 participants** **600 seems reasonable middle-ground**		
Breakdown for non-equity transparency			
	Large dealers (with automated pricing)	14	G14 Large dealers
	Medium dealers (with automated pricing)	40	Based on information from electronic platforms about total number of dealers
	Small dealers (with automated pricing)	100	Based on information from electronic platforms about proportion of dealers that have manual pricing systems
	Large buy-side firms	50	
	Others	396	
		600	
Derivatives (excl commodity derivatives)			
	No. large players / associated cost	14	
	No. medium players / associated cost	36	
	No. small players / associated cost	200	
		250	
Notes	**Highest number of participants in any exchange-based derivatives market is 83.** **If all participants unique (i.e. no overlap), FESE data imply 383 participants, but missing UK where most specialist firms are** **At least 67 participants OTC from ISDA survey** **250 looks reasonable middle-ground assumption**		
Commodity derivatives			
	No. large players / associated cost	14	
	No. medium players / associated cost	36	
	No. small players / associated cost	400	

		450	
	Total derivatives - but likely to be some overlap between commodity and other derivatives (esp large dealers), but not so much with smaller ones. So total of around 600 market players	700	
Breakdown			
	Number of large buy-side firms	50	Based on info from MTF about the total number of buy-side clients (500) and proportion likely to be large
	Number of smaller buy-side firms	450	Based on info from MTF about the total number of buy-side clients (500) and proportion likely to be small
	Number of large dealers	14	G14 dealers
	Number of medium dealers	20	Based on information from electronic platforms about total number of dealers
	Number of smaller dealers	76	Based on information from electronic platforms about proportion of dealers that have manual pricing systems
		610	

EMPLOYEE COSTS ASSUMPTIONS		**Annual**	**Per Day**
IT worker		€ 100.000	€ 444,44
Compliance & back-office workers	Medium-level staff	€ 60.000	€ 266,67
	Senior staff	€ 80.000	€ 355,56
Portfolio managers		€ 125.000	€ 555,56
Transaction reporting	Low estimate	€ 100.000	€ 444,44
	High estimate	€ 125.000	€ 555,56

18. ANNEX 8: ESTIMATE OF IMPACT IN TERMS OF INDIRECT ECONOMIC EFFECT

18.1. Trading of clearing eligible and sufficiently liquid derivatives on organised trading platforms

Trading derivatives on exchanges, MTFs or electronic platforms should result in operational efficiencies for traders (both buy- and sell-side), reduce the occurrence of front and back office errors and provide a clear and easily accessed audit trail. The increased transparency on such platforms, as well increased competition between dealers, is also likely to reduce the bid-ask spreads in the relevant markets provided that liquidity is not reduced. It is likely that part of this reduction would stem from reduced search costs — costs savings made by dealers in finding eligible counterparties for trades and unwinding such trades (assuming that liquidity on an organised platform would be greater and ease of doing business will increase), as well as cost savings from operational efficiency; and part should also come from downward pressure on prices from increased competition and transparency.

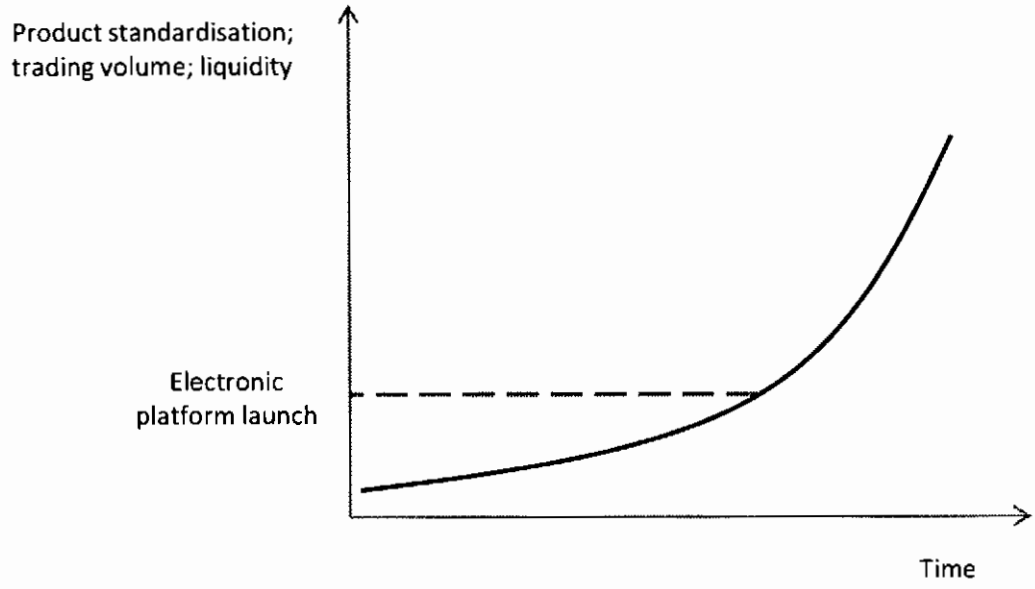
Spreads decrease represents a benefit to the market as a whole, but an opportunity cost to (particularly sell-side) dealers of operating on an organised trading platform rather than bilaterally over the counter. In order to better understand how this may affect dealers, we describe here the trading 'life cycle' of a derivative product.[379]

The market for a derivative product will typically start out very small. The product will be traded only bilaterally (e.g. voice) OTC and will be relatively bespoke and non-standard. Over time, as more market participants trade in the product, it can become increasingly standardised (or 'commoditised'), with common features emerging (e.g. popular maturity rates etc). The increasing number of players will increase competition among dealers. Each trade will become less and less profitable for dealers, but this can often compensated for by the significant increase in volume, and well as increasing ease of trades.

The role of an electronic platform or exchange lies somewhere along this path. Such platforms will not launch a product at the beginning of its life, and will instead wait until it has reached a certain level of standardisation and attracts a certain level of trading interest. The interest of at least four or five dealers (depending of the platform) will be required. If a product launch is successful, then more dealers join as a result of customer demand (if a customer is trading with four out of their five dealers over a platform, it will be in the interest of the fifth dealer to join to maintain his share of business). When a product is traded on a platform the level of standardisation increases, trading volumes increase, trading costs decrease and liquidity increases. Once on a platform the growth in the market for a product will generally increase more quickly than usual given these reinforcing factors.

The diagram below provides a simple illustration of this life cycle.[380] The variables on the y-axis are various factors that lead to the trading of a product on a platform. As mentioned elsewhere all of these factors are important (e.g. a product needs to be standardised and have a sufficient volume and trading interest). As can be seen, the launch of the product on a platform would only occur once the product is already sufficiently developed. It is stressed that there is nothing automatic in the development of a product on this cycle — some products will simply not achieve the necessary critical mass to migrate to an electronic platform.

FIGURE 15 Life Cycle of a Derivative



When a product is launched for trading on an electronic platform the willingness of dealers to move to the platform can be mixed. From an interview with an MTF, it is typically the smaller or newer dealers in the market who are the most interested, as this presents a means by which they can capture market share and exploit trading efficiencies. In addition, the associated reduction in spreads would not pose as big an opportunity cost to them. Later adopters tend to be the large incumbent dealers who require relatively larger trading volumes and efficiencies to attract them to the platform.

Despite the fact that spreads are tighter for products traded on electronic trading venues, it must be emphasised that this represents an existing trend in the life cycle of the product and that according to the description of product life cycle in time a decrease in spreads would have occurred anyway (although possibly over a longer period of time). Therefore assessing the opportunity costs to dealers of mandating a move towards electronic trading is complicated by the possibility of what would have happened anyway (both in terms of the general life cycle of a product in the absence of an electronic platform, and in terms of dealers moving to an electronic platform without being mandated to do so). If the move is mandated before a natural point in the life cycle of the product, then it is likely that dealers will suffer an incremental decrease in profits from 'prematurely' reduced spreads.

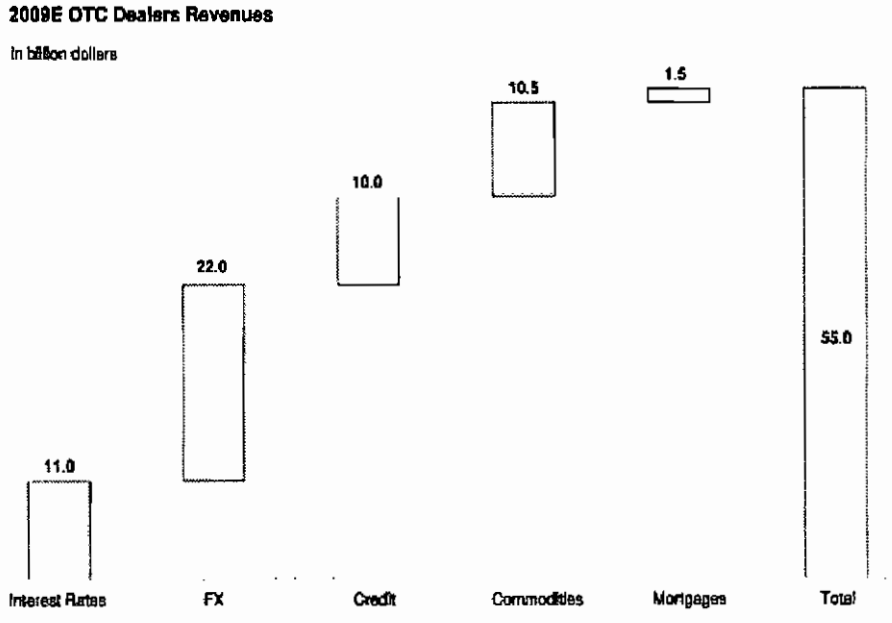
A report by Morgan Stanley and Oliver Wyman in the context of US OTC derivative reform indicates that they expect the OTC derivative markets to be significantly reshaped by the reforms (which include similar central clearing requirements to the EMIR legislation in addition to exchange trading of derivatives). In relation to spreads, they assume that "the sell-side margin erosion will be largely offset by increased volumes, improved cost structure and balance sheet efficiency." However, they do also emphasise that an unintended consequence of enforced exchange trading in terms of a severe loss in liquidity is a distinct possibility.[381]

It is also possible that mandating a move of derivative trading to electronic platforms and exchanges may increase competition between these venues. Although the scale of such an impact — even its likelihood — is uncertain, one could anticipate downward pressure from this on exchange/platform fees. Should this be the case, it would contribute to offsetting a decline in dealers' revenue from tighter margins.

According to our interviews, once a product is launched on a platform it can take a number of years before liquidity has built up sufficiently to observe decreasing spreads, and by then comparison with the pre-platform spreads is clouded by changing market conditions in the intervening years. It follows that robust measurement of the possible decline in spreads is not possible as we have no indication of how spreads respond now, let alone in the more complex conditions that would apply in the context of a mandated switch.

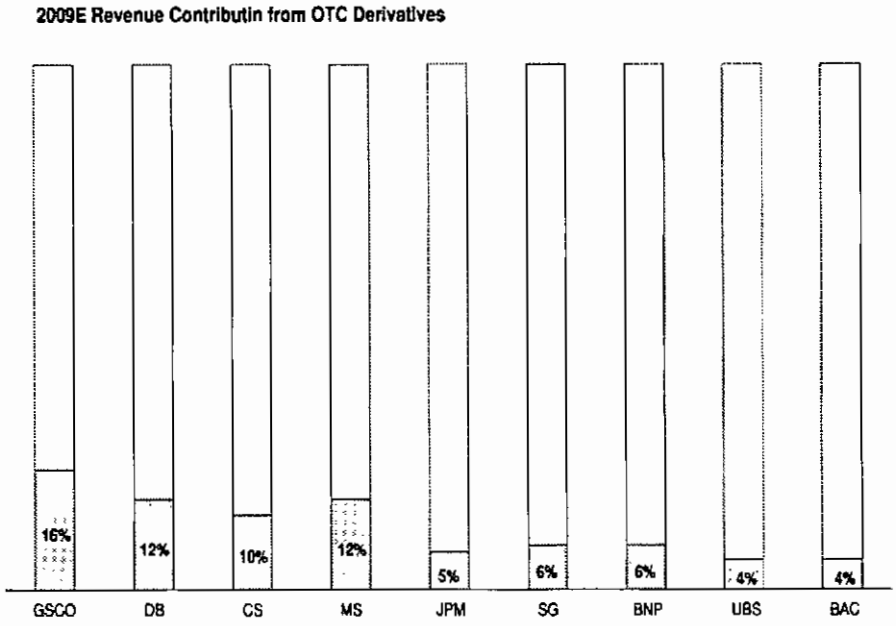
It could be that if a move is mandated then the uptake of the electronic trading will be more rapid than under normal circumstances. Dealers would suffer from reduced spreads but may be compensated by rapidly increasing volumes and trading efficiencies. However, it is not possible to know what the balance of these factors would be. In order to contextualise the impacts of a shift to electronic trading on dealers' profits, we have investigated the revenue from OTC derivative trading for the largest global dealers. In 2009 revenue from global OTC derivative trading across the nine largest derivative trading banks amounted to $55 billion (see figure below). The proportion of total revenues is represented by global OTC derivative trading.[382] About 60 per cent of global OTC trading is within the EU, giving us $33 billion, or €27.7 billion.[383] [384]

– **FIGURE 16** Estimated revenues from OTC derivative trading



Source: Citi Investment Research and Analysis (2010)

FIGURE 17 Share of OTC derivative trading in total bank revenue



Source: Citi Investment Research and Analysis (2010)

According to the Financial Times, Tabb Group estimates that in 2010 there was $40 billion in annual revenues in global OTC derivatives, excluding credit derivatives, in play for the top 20 dealers.[385] This figure is broadly in line with that of Citi Research given that credit derivatives make up approximately 18 per cent of all derivative revenues.

To the extent that a mandated move to electronic trading reduces spreads, these revenues will fall. However, it must be kept in mind that increases in volumes and trading efficiencies may offset losses, as described above. It must also be noted that the scope of OTC derivatives that may be mandated to trade on electronic platforms will be less — possibly significantly less — than the total universe (as only those that are clearing eligible and considered sufficiently liquid will be included), and therefore the full revenues depicted above will not be affected.

In 2006 JPMorgan estimated that FSA proposals for a benchmark model would place significant pressure on fixed income dealers' margins due to increased market transparency and potential price competition, and from enforcing best execution practices with respect to pricing and trading cost. Whilst this proposal did not come to pass, the analysis is a reasonable analogue in that it focuses on the impact on margins (spreads) and increases in transparency and price competition should also occur under greater electronic platform trading of derivatives.

JPMorgan's analysis is based around interest rate derivatives, fixed income and money market business ('vanilla trading revenues') as it assumed that a benchmark model for more tailored products would not be realistic. Whilst we are not considering fixed income (bonds) here we could assume that only standardised vanilla interest rate and money market products would fall under the scope of mandated derivative trading.

JPMorgan estimated that the impact on margins would equate to a three per cent decline in affected revenues. We stress that JP Morgan modelled what we consider an analogous change (rather than this policy option). In addition, the proportion of revenues described above

relating to applicable products remains an unknown; we also must take into account that of the total OTC trading referred to above, some of it will already be taking place on an electronic platform (here we assume that the definition of OTC includes everything that is off-exchange).

As an illustration, information received from an electronic trading platform indicates that approximately 30 per cent of trades they process are conducted through a hybrid of voice and electronic methods (whilst the other 70 per cent are either already fully electronic, or fully voice).[386] If we take this sample (30 per cent) as the most likely to be mandated to trade fully on an electronic platform, we could estimate the proportion of trading revenues affected by the policy, and apply the reduction of three per cent to this.

Taking the global revenues from interest rate derivatives ($11 billion or €7.9 billion) and multiplying by 60 per cent to reach a figure for trades within Europe, and a further 30 per cent to reflect only the proportion of trading that would move onto electronic platforms, a reduction in three per cent is approximately €43 million. Applying a similar methodology to foreign exchange derivatives results in a reduction in revenue of €85 million. Given the fact that a very large proportion of credit derivatives are already traded on electronic platforms, we apply a similar methodology to the credit derivative figure but use a figure of 15 per cent instead of 30 per cent to represent the possible volume that would migrate to electronic platforms. This results in a corresponding reduction in revenue of approximately €19 million. We stress again that these figures are highly indicative and will depend on the proportion of derivative trading that is mandated to move to electronic platforms. It must also be kept in mind that it is likely that margins on derivatives (and thus associated revenues) that are considered sufficiently standardised and liquid to be traded on a platform will already be relatively lower, and the incremental decline in revenues may be lower.

18.2. Extend the equities transparency regime to shares traded only on MTFs or organised trading facilities

The analysis of the impact on the liquidity (measured as the average bid-ask spread) of this proposal is based on the econometric model built up by Europe Economics. Their results are based on the experience of the UK Alternative Investment Market (AIM), which is regulated as a MTF and is part of the London Stock Exchange Group (LSE).

Since the introduction of MiFID the AIM complies with the same transparency regime as the main LSE market. Hence the impact of MiFID on the AIM should be similar to the impact that would be observed in other primary market MTFs if the more detailed transparency regime for shares admitted to trading on a regulated market were to be applied. It should be noted, however, that some other primary market MTFs, such as First North, already comply with the same transparency obligations as the respective main market and hence additional benefits of this regulation would apply only to a subset of primary market MTFs.

The results presented by Europe Economics show that bid-ask spreads were approximately 1 euro cent lower in the post-MiFID period for AIM stocks, a decrease of approximately 16 per cent relative to the average bid-ask spread in the pre-MiFID period. This is a significant impact on transaction costs and hence investors may benefit from the application of the detailed trade transparency regime to primary market MTFs that do not already comply with such measures.

18.3. Post-trade transparency in non-equities

There are a number of potential positive impacts of increased post-trade transparency. The impacts discussed here are theoretical, or drawn from the analysis of other markets. Much of the evidence supporting post-trade transparency comes from analysis of the post-trade reporting system in the U.S, TRACE. Please see Annex 18 for a summary of the TRACE initiative and the main findings of the three seminal studies analysing the impacts of the initiative.

18.3.1. Reduce transactions costs (narrow spreads)

Reduce market-maker rents. It is suggested that opaque markets tend to benefit relatively well informed dealers in their negotiations with customers. Increased transparency may improve customers' ability to control and evaluate trade execution costs and protect themselves against unfair pricing.[387] Green et al. (2004) and Harris and Piwowar (2005) examine trade in US municipal bonds, and both find that small trades pay much larger percentage trading costs than large trades. Schultz (2001) finds that the bid-ask spreads on US corporate bonds also decline with trade size.[388] Each set of authors conclude that this may occur because small investors cannot easily evaluate the trading costs they pay in the opaque market.

Decrease market-making costs: increased transparency in a dealer market may improve inventory risk sharing, thus decreasing inventory carrying costs.[389] In an opaque market, the lack of transparency can encourage strategic behaviour, whereby liquidity suppliers will slowly unwind a large trade with further step-by-step trades with different dealers at different points in time, seeking to minimise the price impact. This will reduce the overall risk sharing gains from trade in the market place and, in that sense, its liquidity. In a transparent market, on the other hand, such strategic behaviour is not possible (as al dealers will know if a supplier is trying to unwind a trade) and thus risk sharing can be greater. In reality, however, increased transparency appears to increase dealers' risk as they find it much more difficult to unwind their trades when the market has the ability to move against them.

All three studies[390] examining the impacts of TRACE find that TRACE significantly reduced transaction costs (spreads). With the exception of a few trade size groups, the spreads of all bonds whose prices become transparent under TRACE decline by more than those of the control groups. Goldstein et al. find that this effect is strongest for small and intermediate trade sizes (between 101 and 250 bonds). These results are consistent with investors' ability to negotiate better terms of trade with dealers once they have access to broader bond-pricing data. These results suggest that public traders benefit significantly from price transparency. If transactions costs are a deterrent to retail interest, it can be expected that retail interest should increase with lower transaction costs associated with transparency. In addition, Bessembinder et al. find this effect evident even with large institutional trades.

Increased transparency can reduce transactions costs and improve liquidity if customers originally (in the opaque market) paid a search cost to find out quote prices from different dealers. Transparency in this case will reduce information asymmetries, increase competition between dealers, narrow spreads and increase the number of investors in the market.

The view from market participants in mixed. Approximately 40 per cent of respondents (buy-side, sell-side and repo) to ICMA's survey on corporate bond markets felt that bid-offer spreads would be positively impacted by higher transparency, but a greater majority felt that this would not be the case.[391]

18.3.2. Increase liquidity

Some argue that increased transparency in the bond market will facilitate better deterrence and detection of fraud and manipulation and will improve pricing efficiency and competition in bond markets, leading to lower transactions costs.

Greater transparency may reduce adverse selection and encourage uninformed investors to enter the trading arena. This of course depends on the scale of retail investors in the market (and likelihood that this increases). For example, in the US municipal bonds are more attractive to retail investors than corporate bonds as they are tax free and offered in more numerous, smaller issues. EU corporate bond markets have relatively low retail participation, even with the existence of retail-focused initiatives.

Just under 60 per cent of respondents to ICMA's survey on transparency and liquidity in bond markets felt that greater post-trade transparency would improve liquidity in the corporate bonds market. [392] This was lower than the proportion in favour of greater pre-trade transparency. Other factors that were felt would contribute more to increased liquidity were greater volume transparency, larger issue size and grater electronic trading. It must be kept in mind, however, that the nature and structure of the post-trade transparency regime was not specified in the survey, and there is significant concern about liquidity relating to relatively stringent post-trade transparency requirements.

18.3.3. Liquidity externality

Transaction reporting for some bond issues may also improve the market quality for other issues. Amihud et al. (1997) report that an improvement in the trading mechanism used for a subset of Tel Aviv Stock Exchange securities led to an enhanced liquidity not only for the affected stocks, but also for correlated stocks with no change in trading mechanism. Bessembinder et al. (2006) suggest that a liquidity externality is particularly plausible for corporate bonds, since market practitioners often estimate the value of non-traded bonds on "matrix" pricing that incorporates bond characteristics and observed prices for bonds that do trade.[393]

18.3.4. Reduce information gathering

An increase in transparency could reduce the benefits to market makers of collecting superior information, which could adversely affect incentives for traders to incur costs in order to become more informed. This could in turn affect the informational efficiency of the bond market.

As reported in the CESR report (2009), a number of sell-side market participants are of the opinion that different market participants has access to different types of price information, and that the existence of such differences is not a market failure per se. Differences in trading information may effectively exist if participants who stand to benefit for the information feel they are benefitting more than they are compensating the person gathering the information. Mandatory transparency, without appropriate compensation, may remove the incentive to generate information.

18.3.5. Valuation practices

A report by the Institute of International Finance indicates that post-trade information about prices and volumes in the bonds market is critical to the reinforcement of valuation practices for credit instruments and as supplementary information on the scale of risk transfers. Post-

trade transparency is key for the price discovery and valuation of specific structured products. In some cases, where the underlying assets are sufficiently liquid, the primary valuation often does not entail the use of a valuation model, but rather rely on market quotes (both at the underlying asset and the structured products level).[394].

In the current financial situation, it is held by some that the Credit Default Swap (CDS) market is no longer a reliable indicator for bond price valuation — whilst ordinarily some market participants say that the CDS market is useful as a means to obtain some price information, in the current financial turmoil the link between prices provided by CDS and prices for cash bond have uncoupled so that the CDS market is no longer considered to be a reliable indicator for bond price valuation. In light of this, among other issues, some respondents to CESR maintained that additional post-trade transparency in the bond market could assist in valuing portfolios more accurately[395].

A large number of respondents to the CESR consultation agreed that a greater amount of post-trade information would assist in properly valuing European corporate bonds. Regarding the role of post-trade transparency for valuation in distressed market conditions, most respondents considered that post-trade transparency might be helpful for valuation purposes, e.g. in a situation where there are more participants with more access to see the prices where bonds are trading, their confidence to trade and investor confidence will both improve.[396]

Lack of transparency may contribute to market failure or reduce the efficiency of the market. For example, some market participants may have limited access to trading information, or find it prohibitively expensive to obtain, which may in turn affect their ability to determine a fair price at which to trade. In the case of investment firms acting on behalf of clients, this may reduce their ability to obtain best execution for their clients. Some market participants may be able to exploit these differences in access to information in a systematic way, earning rents at the expense of less informed participants.

The CESR report suggests that even though market transparency is less essential for bonds as there is more information available to assess their intrinsic value, it could help to "correctly" price this kind of assets which could mean that portfolios are more accurately valued.

Evidence from TRACE has shown that TRACE has directly benefitted investors and traders by increasing the precision of corporate bond valuation and consequently decreasing the bond price dispersion. Research indicated that at the individual bond level, regardless of rating or issue size, pricing marks across a fund became much tighter once TRACE was implemented.

18.3.6. Applying TRACE to EU markets

Mapping the impacts of TRACE on the US market to the EU market is not something that can be done easily, if at all. There are important differences between the two markets, such as greater competition between dealers and historically tighter bid-ask spreads in the EU market. Trading activity is more highly concentrated in US markets, with a handful of banks or dealers controlling the majority of the trading and syndication. Client intermediation, particularly in the less liquid segments of the market, appears to be performed increasingly on an agency basis in the US, without dealers committing their own capital.[397] The added value of more transparency in the EU is therefore likely to be less than experienced in the USA. In addition, negative consequences to liquidity resulting from dealers who act as principals and commit capital being less able to easily unwind large trades in the face of increased transparency are likely to be more of an issue in EU markets.

Other differences between the two markets include the fact that EURO denominated bonds are traded more frequently than US bonds, suggesting that the former was relatively more liquid than the latter before the financial crisis. However, as noted by CESR, post financial crisis the spread gap in the US market in comparison to the EU corporate bond markets is less obvious than before, especially for higher grade corporate bonds.

18.3.6.1.Bond Data analysis

Europe Economics undertook their own analysis of bond data to examine the potential impact of increased post-trade transparency on trading costs. This was the most cited benefit of TRACE in the U.S. Given that the policy options refer to post-trade transparency for bonds trades both on exchanges and OTC, they have conducted two sets of analysis.

18.3.6.2.Exchange-traded Bond Transparency

It is widely accepted that RMs and MTFs generally apply transparency requirements to non-equity products as they do to other products. However, the requirements for non-equities may be less rigorous, and currently there are only relatively high level transparency obligations with respect to exchanges listing non-equity products as part of their organisational requirements.[398]

Information from CESR's report on Options and Discretions[399] describes the formal transparency requirements for bond markets in EU Member States. A number of Member States have exercised the Option under Recital 46 of MiFID to extend MiFID transparency requirements for equities traded on exchanges and MTFs to non-equities. Other Member States, while not exercising this option, have nevertheless introduced some form of transparency.

The table below summarises the information regarding transparency requirements for non-equities traded on exchanges.

In order to collect data on corporate bonds traded on these exchanges and MTFs, Europe Economics researched the number of exchanges and MTFs within each country. There are many stock exchanges and even more MTFs within Member States. Their criteria for including exchanges were that they are included in Bloomberg's database and list a large number of bonds (for example, Bloomberg includes the Stock Exchange of Antwerp where only one bond is listed).

Their research also found that if MiFID transparency regime was extended under Recital 46 then this includes regulated markets and MTFs.

They created an indicative 'transparency score' based on the degree of formal transparency, with the following categories:

- 1 = similar to equities traded on regulated markets;
- 2 = no Recital 46 but other requirements;
- 3 = no apparent transparency.

- **TABLE 48: Transparency requirements in bond markets in EU Member States**

Member state	Main stock exchanges[400]	Transparency of exchange-traded bonds[401]	Index[402]	MiFID Level 2 implementation[403]
Austria	Vienna Stock Exchange	Option under recital 46 of MiFID has not been exercised. Current transparency unknown	3	01/11/07
Belgium	Euronext Brussels	Recital 46 of MiFID has not been exercised. Regulated markets however include in their rule books some level of post-trade transparency requirements.	2	01/11/07
Bulgaria	Bulgarian Stock Exchange			01/11/07
Cyprus	Cyprus Stock Exchange			1-2/11/07
Czech Republic	Prague Stock Exchange			01/07/08
Denmark	NASDAQ OMX Copenhagen	Option under recital 46 of MiFID has been exercised inasmuch as there is a post-trade transparency requirement for mortgage bonds, covered bonds, corporate bonds and UCITS.	1	01/11/07
Estonia	NASDAQ OMX Tallinn			19/11/07
Finland	NASDAQ OMX Helsinki	Option under recital 46 of MiFID is partly implemented. Pre- and post-trade transparency requirements are applied to other instruments than shares. Only operators of regulated markets and MTFs are required to disclose appropriate information of trades concluded on a regulated market or an MTF.	1-2	01/11/07
France	Euronext Paris	The General Rulebook of the Autorité des Marches Financiers provides for pre- and post-trade transparency requirements for financial instruments other than shares admitted to trading on a regulated market or on an MTF.	2	01/11/07

Germany	Berlin Exchange Dusseldorf Exchange Stuttgart Exchange Frankfurt Exchange Hamburg Exchange Munich Exchange	Stock Stock Stock Stock Stock Stock	The option under recital 46 of MiFID has been exercised by extending the transparency requirements to depository receipts in respect of shares. The information available with respect to the trading of corporate bonds includes the data which is generally required for all financial instruments admitted to trading on regulated markets. These transparency requirements for corporate bonds are also applicable to corporate bonds traded on MTFs operated by an RM.	1-2	01/11/07	
Greece	Athens Exchange	Stock	Option under recital 46 of MiFID has not been exercised. However, under national secondary law, regulated markets should specify in their rulebook the pre- and post-trade transparency information to be made public in respect of all financial instruments admitted to trading in their systems.	2	01/11/07	
Hungary	Budapest Exchange	Stock	Option under recital 46 of MiFID has not been exercised. Information on transactions completed through the electronic trading system of the BSE is available on-line for BSE subscribers and with delay of 15 minutes free of charge for the public.	2	01/12/07	
Ireland	Irish Exchange	Stock	Option under recital 46 of MiFID has not been exercised.	3	01/11/07 21/11/07	and
Italy	Italian Exchange	Stock	Option under recital 46 of MiFID has been exercised. See the section about Italy.	1	1-2/11/07	
Latvia	NASDAQ Riga	OMX	Option under recital 46 of MiFID has not been exercised.	3	18/05/07 08/11/07 16/11/07	

Lithuania	NASDAQ OMX Vilnius				01/11/07
Luxembourg	Luxembourg Exchange	Stock	Option under recital 46 of MiFID has not been exercised. The Luxembourg Stock Exchange disseminates information (pre- and post-trade data) on all financial instruments admitted to trading on its regulated market or on its MTF.	2	01/11/07
Malta	Malta Exchange	Stock	Pre- and post-trade transparency for corporate and sovereign bonds is equivalent to that for equities on the Regulated Market.[404]	1	01/11/07
Netherlands	Amsterdam Exchange	Stock	Option under recital 46 of MiFID has not been exercised. However, there is a real time pre- and post-trade transparency for on-exchange trading of listed bonds.	1-2	01/11/07
Poland	Warsaw Exchange	Stock	Option under recital 46 of MiFID has been exercised. There is no difference in pre- and post-trade transparency requirements for all financial instruments that are admitted to trading on a regulated market and an MTF.	1	01/05/08
Portugal	Euronext Lisbon		Option under recital 46 of MiFID has not been exercised regarding corporate bonds.	3	01/11/07
Romania	Bucharest Exchange	Stock	Option under recital 46 of MiFID has been exercised. The transparency requirements are identical both for shares and bonds traded on a regulated market.	1	28/02/07
Slovakia	Bratislava exchange	Stock			01/11/07
Slovenia	Ljubljana Exchange	Stock			11/08/07 22/11/07

Spain	Barcelona Exchange Madrid Exchange	Stock Stock	Option under recital 46 of MiFID has not been exercised. The Fixed Income Electronic Market uses the same electronic platform as the stock market and it provides pre-trade information on best bid and asks prices and volumes in real time. Circular 3/1999 from the CNMV states certain level of post-trade transparency.	2	17/02/08
Sweden	NASDAQ Stockholm	OMX	Option under recital 46 of MiFID has been exercised. For other financial instruments than bonds, the requirements are similar to the MiFID requirements for shares admitted to trading on a regulated market. Transparency requirements for government bonds are less strict and there is currently a discussion with market participants to what extent the similar requirements are applicable to corporate bonds.	2-3	01/11/07
UK	London Exchange	Stock	Option under recital 46 of MiFID has not been exercised. Exchanges do provide pre- and post-trade transparency similar to that required for equities, but this does not apply to MTFS. Other publicly available post-trade data is limited to the information currently captured by the ICMA self-regulatory initiative.	2	01/11/07

Source: CESR (2009) "Transparency of corporate bond, structured finance product and credit derivatives markets"

The tale below presents the Member States within each of their categories.

– **TABLE 49:** Transparency rating

(1) Option under Recital 46 exercised	(2) Other transparency requirements	(3) No apparent transparency

Denmark; Finland; Germany; Italy; Malta; Poland; Romania;	Belgium; France; Greece; Netherlands; Spain; Sweden; UK	Austria; Ireland; Latvia; Portugal;

Notes: Although the Option under Recital 46 has been exercised in Sweden, corporate bonds are currently subject to lighter transparency requirements and thus Sweden is classified as 2 here.

It must be noted that in Italy transparency requirements did exist for financial instruments other than shares traded on regulated markets before the introduction of MiFID. These requirements were characterised by a flexible approach which did not prescribe specific transparency requirements for trading venues in terms of timing and content of information to be made available to the public. Trading venues could design their transparency rules, taking into account the market microstructure, the nature of the financial instrument and the type of market participants involved. Whilst it is not clear how the transparency requirements have changed since the exercising of the option under Recital 46, we assume that the regime has become more formalised and that the level of transparency has increased. Furthermore, some platforms previously not included in transparency requirements have now been brought into the scope.

They downloaded from Bloomberg daily information on corporate bonds listed on the main exchanges within each country (as opposed to bonds issued in particular countries, as we assume that transparency requirements will matter more according to where a bond is traded than where it is issued). Information includes:

(a) average daily bid price;

(b) average daily ask price;

(c) average daily mid price;

They calculated the relative spread for each bond at each day as (Aski,t −Bidi,t)/Midi,t and then compared the evolution in the spreads for bonds in the 'Intervention Group' (those listed on exchanges with MiFID-like transparency - Category 1) and the 'Control Group' (those listed on exchanges with Recital 46 not exercised – Category 2 and 3).

The statistical analysis presented below is based on daily observations from the fourth quarter of 2006 (pre-MiFID) and the fourth quarter of 2009 (post-MiFID). They chose these date ranges to compare the change in spreads before and after the adoption of MiFID and the increase in transparency. They have not included 2007 and 2008 to avoid the effects of the volatility of the financial crisis, and also because the exercising of Recital 46 in the relevant countries may have occurred at some time after the introduction of MiFID.

The figure below shows the evolution of relative bid-ask spreads in corporate bonds between the end of the last quarter of 2006 and the beginning of the last quarter of 2009.

– **FIGURE 18**

Source: Bloomberg and EE analysis

As can be seen, relative spreads increased significantly between 2006 and 2009, although this is almost certainly a result of the financial crisis and not the introduction of MiFID. The main explanations for this include a withdrawal of liquidity provision by market makers and banks, overall market volatility and sharply reduced risk appetite. Other likely factors were the widespread lack of confidence, the reduction in the number of market counterparties and increased uncertainties regarding credit spreads

Despite the widening of spreads in all markets, it is clear that bonds traded on exchanges with a higher degree of transparency did not increase as much as bonds traded on other exchanges. Using the student's t test and taking into account unequal sample sizes and unequal variances in post and after MiFID periods, they could conclude that the increase in relative bid-ask spread is significantly lower for the intervention group compared with the control group on any sensible significance level. This suggests that applying MiFID transparency regulations to corporate bond markets helps to lower the relative bid-ask spread.[405]

The gap in spreads between the intervention and control groups widened after MiFID by an average of 0.0809% across the period, which is equivalent to eight basis points. It is possible that the relative reduction in spreads in the intervention group was not all due to post-trade transparency. However, for simplicity's sake if we assume that it was, then the effects of post-trade transparency can be viewed as a reduction in eight basis point of relative bid-ask spreads.

Data relating to the value bonds transactions conducted on EU exchanges[406] enables them to estimate the value of this reduction in bid-ask spreads. Assuming that exchanges in countries

in the control group (i.e. those without the Option under Recital 46 exercised) could experience a similar reduction in relative bid-ask spreads after introducing post-trade transparency, then this could amount to €8 million euro a year.[407] It must be emphasised, however, that these calculations are very rough estimates, and serve only to indicate the potential scale of trading cost reductions arising from post-trade transparency.

Whilst this spread analysis relates only to corporate bonds, we could apply the same rationale to government bonds. However, government bonds markets are widely held to be far more liquid and transparent than corporate bond markets,[408] and thus the impacts of additional transparency requirements are likely to be significantly lower.

18.3.6.3.Bonds Traded OTC

The vast majority of corporate and government bonds are traded over the counter (estimated at 89 per cent of all trades).[409] Furthermore, in terms of post-trade transparency bonds traded OTC are likely to be less transparent than bonds traded on regulated markets (even though Recital 46 of the MiFID options and discretions has only been applied in nine countries) given high-level transparency requirements for the majority of regulated markets.

In order to assess the potential impact of greater post-trade transparency on the indirect transactions costs of bonds (e.g. bid-ask spreads), Europe Economics compared the spreads of OTC bonds from Member States for which a post-trade transparency regime already exists to some degree.

In most cases the Recital option discussed above was exercised only in relation to non-equities traded on exchanges and MTFs. However, in some countries post-trade transparency was also extended to OTC trades. Italy and, to a lesser extent, Denmark, are two such counties where post-trade transparency already exists in OTC markets.

Italy

Post-trade transparency in OTC corporate bonds has existed in Italy since before MiFID. According to CONSOB, prior to MiFID implementation there existed obligations for investment firms to report off-market transactions in financial instruments (admitted to trading on regulated markets) to regulated markets. This transparency regime is characterised by a flexible approach, and firms are able to benefit from work done already for transaction reporting purposes.

Investment firms are obliged to make public the information concerning the date and time of the transaction, the details of the financial instrument involved, and the price and quantity of the transaction. The obligations apply to transactions below or equal EUR500,000. For transactions exceeding this threshold, investment firms are allowed not to publish the quantity and instead provide an indication that the transaction exceeds the threshold. In terms of timing, the information has to be published with reference to each transaction by the end of the working day following conclusion of the transaction (i.e. the following day).[410] [411] The fact that the information is reported at the end of the following day enables the firms to overlap (to some extent) this trade reporting obligation with transaction reporting obligations, which are also done at the end of the day.

These levels of transparency were formalised after MiFID through Level 3 guidance issued by CONSOB in relation to areas not covered by MiFID (such as OTC trading obligations), and the nature of the transparency did not change significantly.[412] Even though Level 3 guidance

is not full law, CONSOB maintains that their recommendations have been met with support among market participants. The two main associations for banking and investment (ABI and Assosim) have issued industry guidance (ratified by CONSOB) that closely reflects CONSOB's recommendations.

Very little analysis of the transparency regime has been undertaken in Italy. According to CONSOB, based on the information available to them, the transparency regime is working well, without any negative impacts on liquidity and investment strategies. Other Italian commentators also agree that the regime is successful. However, given the important timing delay, no analysis in terms of liquidity effects has been possible. Furthermore, it has been highlighted by the LSE Group (of which Borsa Italiana is a member), that the Italian bond market has different characteristics to the rest of Europe (in particular a larger retail investor base, which developed before any transparency was introduced) which suggests more inherent liquidity and transparency. In terms of the formalised transparency arrangements after MiFID under the Level 3 guidance, CESR is of the opinion that it is too early to accurately assess the impact of the these requirements on Italian bond markets.[413] However, given that little has changed it is not likely that significant impacts will be seen.

Denmark

Post-trade transparency requirements exist in the OTC bond market in Denmark, but only apply to bonds listed on the NASDAQ OMX CPH that are traded OTC. Trade reporting is done through the OTC Publication Service, and all users of the OTC Publication Service must have appropriate technical connections with NASDAQ OMX.[414]

The information to be included in the post-trade reporting of OTC trades is Order book identification; buyer/seller; price; volume; counterparty; trade type; and time of trade (agreement). Trades that take place during opening hours must be reported/published no later than three minutes from the time of the agreement.[415]

18.3.6.4.Data used

The dataset analysed by Europe Economics consists of information regarding amount issued, bid and ask spreads, maturity, credit rating, sector and country for 914 corporate and government bonds for the last day of April, July and September of 2010, provided by Markit from their Evaluated Bond data.[416] Whilst it is not possible to state exactly how the coverage of their dataset reflects the overall corporate and government bond market in the EU, they consider it to be closely representative.

A significant aspect of their data set, however, (this is also the case with data sets used in other studies) is that it represents the more liquid and frequently traded bonds in the EU, as these are the bonds for which the most information is available. In addition, because they required bonds with available pricing information in order to carry out our bid/offer spread analysis, the bonds included are by definition more liquid and frequently traded (so that this information is available for each bond on a continuous basis). The greater liquidity of their sample must be kept in mind when viewing our results. Increases in transparency could have a greater effect on less liquid bonds due to the lack of current information. On the other hand, negative effects on liquidity are likely to be greater for less liquid bonds.

18.3.6.5.Transparency analysis

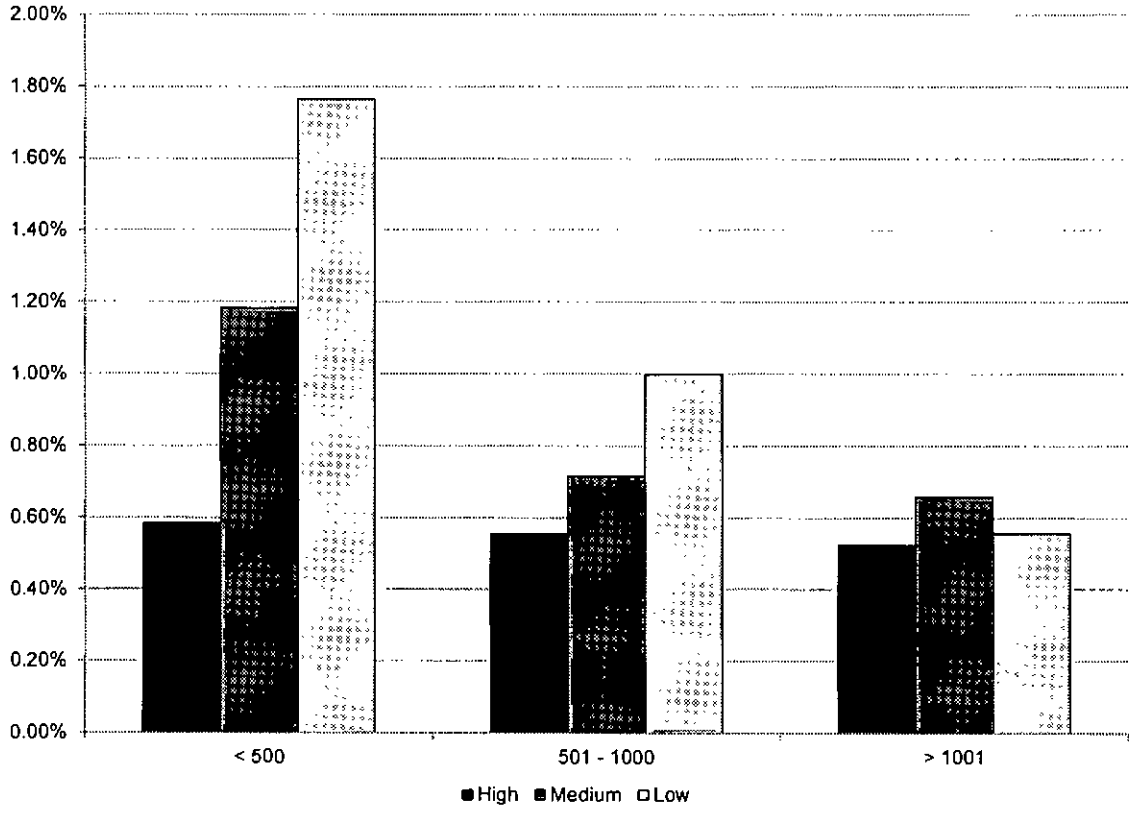
In order to assess the potential impact of post-trade transparency on bid-ask spreads they adopted two methods.

The first involves comparing average spreads per country in order to see if more transparent countries (Italy and Denmark) exhibit lower spreads. The impact of increased post-trade transparency on corporate bonds did not appear to be strong.

Their second method of examining the impact of increased transparency involves the use of their indicative transparency score used in the analysis of exchange-traded bonds above. Even though this transparency variable relates to exchange-traded bonds, they believe it can reflect an overall level of transparency for the same bonds traded OTC. Comparing the bonds in their OTC data set with data available on Bloomberg shows that nearly all the bonds within their OTC sample are also traded on exchanges. It must be kept in mind, however, that trades conducted on exchanges are likely to be far smaller than trades conducted over the counter, and thus price information obtained from exchange trading may only have a limited effect on the spreads of bonds traded OTC. This data set includes both government bonds and corporate bonds within the same regime.

The figures below indicate that spreads are lower for OTC corporate and government bond trades in countries with higher exchange-based post-trade transparency. This takes into account issue size, and ensures that the spread-reducing effects of large issue size do not interfere with the effect of post-trade transparency.

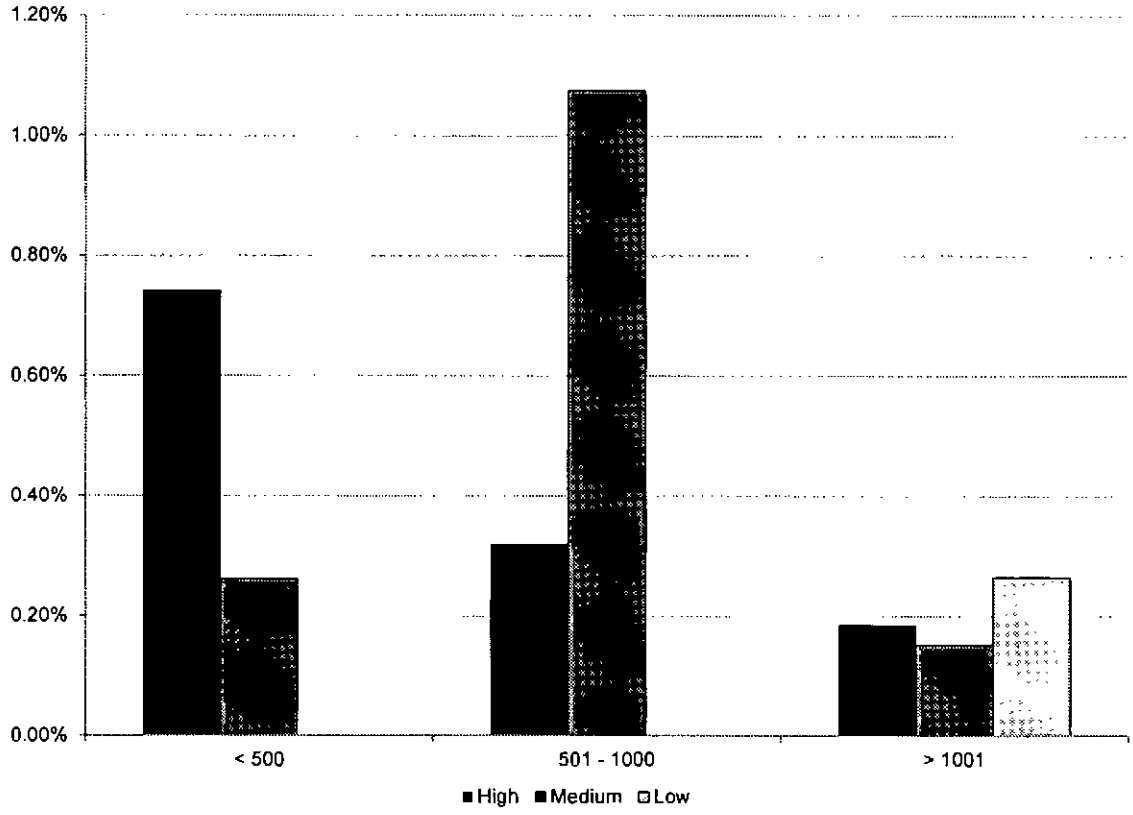
– **FIGURE 19**: Corporate bond Average Spreads by Issue Size and Transparency Score



Source: Markit Evaluated Bonds data and EE analysis

The figure above presents a very interesting result. Transparency of exchange-traded bonds (measured by our transparency score) appears to influence (or at least to be correlated with) the trading costs of bonds traded over the counter, as average spreads for OTC bonds are lower, particularly for smaller issue sizes, in Member States where post-trade transparency exists for regulated markets. This result is far stronger than our analysis of spreads in Members States that have transparency particular to OTC markets. This suggests that improvements in exchange-based post-trade transparency could have a positive effect on the OTC bond market. This result could be related to the concepts of a liquidity externality, whereby increased transparency in one segment of the bonds market affects the spreads of other, non-transparent bonds.

– **FIGURE 20**: Government Bond Average Spreads by Issue Size and Transparency Score



Source: Markit Evaluated Bonds data and EE analysis

The effects of exchange-based transparency for government bonds are much less convincing. They believe this is likely to be related to the fact that government bonds, particularly those traded on exchanges, are already significantly more transparent and more liquid than corporate bonds, making the impact of formal transparency far less noticeable.

18.3.6.6.Impacts on liquidity

The possible negative impacts on liquidity resulting from increased post-trade transparency, in particular whether it is to be in real-time or at end of day, have been raised as a very significant concern of market participants and industry associations. However, assessing the impact of increased post-trade transparency on the liquidity of European markets is made difficult given both the lack of information on trading volumes, trading activity and spreads,

and evidence of liquidity impacts from other transparency regimes such as TRACE or Italy's bond market.[417] This section provides an analysis of the possible impacts of post-trade transparency, setting out possible ways in which liquidity could be affected and the potential universe of trades affected.

Any analysis of the impacts of transparency on liquidity rests on the definition of liquidity. This includes a number of components such as market depth (i.e. the market's ability to sustain relatively large market orders without impacting the price), trade volume, resilience, trading costs as well as the ease of transacting.[418] Europe Economics provides us with an analysis of these factors separately.

Trading costs

Trading costs include direct costs to market participants of trading (e.g. exchange fees, the costs of linking to electronic platforms, front and back office costs), indirect costs covering, for example, search costs (included in bid-ask spreads) and market impact costs (the opportunity cost resulting in movements in market price before a trade has been completed), which can also be reflected in the bid-ask spreads as dealers seek to protect themselves against trading at an informational disadvantage. In terms of the liquidity debate, indirect costs and market impact costs are the most relevant.

Dealers that provide liquidity in markets and act as principals in trades (commit their own capital when enabling a trade between two counterparties) need to be compensated for this service, not least due to the risk they face when taking the trade onto their own order books and unwinding it at a later stage. This risk premium forms part of the bid-ask spread. The authors of an ECB paper on the impacts of transparency on liquidity provide a simple analytical framework for considering liquidity.[419] In this framework, this risk premium consists mainly of credit and liquidity premia.[420] The liquidity premium is the additional yield investors demand as compensation for the potential reduction in price they may have to accept if they need to sell or unwind a bond immediately, compared with the price they would receive if they could afford to wait until a buyer willing to pay the 'market price' appears. The authors identify two main drivers of the liquidity premium:

- Search liquidity, which represents the costs in terms of time, information asymmetries, capital, funding and research costs required for a trader to locate a willing buyer for a stock he has recently purchased. Search liquidity is likely to be the main driver during 'quiet times', and is likely to be improved through increased trade transparency. If traders are aware of the activities and availability of other buyers or sellers then the search costs of finding suitable counterparties should be reduced.

- Systemic liquidity is a more suitable concept in times of market stress when investor risk-appetite has fallen and buyers are both less common and prices are lower. A trader buying stock (or providing liquidity to a trade) will therefore require a greater compensation for the risk that he will have to unwind the trade in the face of falling prices and fewer buyers. The driver of this liquidity is the behaviour of market participants, and is related to how homogenous they are (for example, if investors are homogenous in their information, valuation and risk management they will all react in a similar way to signals thus causing a possible wide-spread reduction in liquidity).

Systemic liquidity can be affected by increased transparency. After large trades in transparent markets, liquidity suppliers can be in a difficult bargaining position to unwind their inventory, as competitors will have observed the initial trade and will be aware of the former supplier's

need to resell, and could 'act together' and offer lower prices. These movements in the market could increase the margin that liquidity suppliers will require from investors to offer liquidity initially.

It is possible to see a tension between systemic liquidity and search liquidity, whereby increased transparency undermines the role of market-makers and reduces search costs (increasing search liquidity) but at the same time exposes dealers to the behaviour of market participants through increasing the homogeneity of information, risking for them a move in the market upon acquisition of a large trade which will have to be unwound (decreasing systemic liquidity). Therefore, although observed decreases in transaction costs (bid-ask spreads) may indicate an increase in search liquidity, it may be possible that a reduction in systemic liquidity is occurring alongside resulting in negative market impacts.

For example, in some large transparent markets there is evidence of an increasing frequency of liquidity black holes (short term unavailability of liquidity), combined with declining bid-ask spreads.[421]

The three seminal papers on the impacts of TRACE point to a tightening of spreads in the corporate bonds market.[422] This is discussed in more detail above in the section on benefits. Viewed in terms of our liquidity framework, this could suggest (among other things) an increase in search liquidity whereby traders' uncertainty about finding buyers and sellers at any one time is reduced and the risk premium they demand for searching decreases. However, there could also be support for a reduction in systemic liquidity having an opposite effect on spreads. Although no study found that spreads widened for large trades, all found that the tightening of spreads after increased transparency was lowest for large trades (and at times statistically insignificant), which could indicate a counteractive, but proportionately smaller, effect as a result of a decrease in systemic liquidity.

It is argued that the three research papers that show TRACE has tightened bid-ask spreads and thus not damaged liquidity focus on a too narrow definition of liquidity, and that it is likely that other factors such as market depth, trade volume and the ease of transacting have all declined post-TRACE.[423] We now turn to these issues.

Market depth

The market impact of increased transparency discussed above can have further negative implications for liquidity by reducing the willingness of dealers to commit capital. This could happen alongside a widening of spreads if dealers feel that negative market movements cannot be sufficiently compensated for by increases in bid-ask spreads. This in turn could lead to a further reduction in liquidity. The withdrawal of liquidity and increased difficulty in finding suitable counterparties is viewed as a serious consequence by the industry. Increased market impacts may also lead to increased price volatility (if the price changes more often as a result of large trades) and affect price discovery.

According to a small survey of high yield investors,[424] referred to in several SIFMA presentations, 54 per cent of them believed that TRACE had negatively affected dealers' willingness to commit capital or to provide liquidity.

Trade volumes

Evidence from the USA market points to a possible reduction in trade volumes after TRACE. Goldstein et al find that for one set of bonds examined there is a significant decline in average

daily trading volume between transparent and non-transparent bonds (although this result is not significant for other sets of bonds, not for very large trades). Although Bessembinder and Maxwell argue that average daily trading volumes of corporate debt securities increased rather than decreased from 2002 to 2007, the total amount of corporate debt outstanding also increased over this period, by a far larger proportion (an increase of 42 per cent compared with an increase in trading volumes of 27 per cent).[425] This indicates that trading volumes failed to keep pace with the total amount of corporate debt outstanding. Whilst it must be kept in mind that this relatively slow increase in corporate bond trading may be due to the fact that in recent years much credit trading has migrated from corporate bonds to derivative instruments such as credit default swaps (and that this migration is not necessarily due to TRACE), it cannot be conclusively argued that the increase in bond trading since TRACE shows that TRACE has not impaired liquidity in the corporate bond markets.[426]

Furthermore, the TRACE studies do not take into account the development of alternative and parallel markets for acquiring and hedging credit risk, such as the CDS market, and their role in price discovery.[427] Whilst we do not have direct evidence for this, it has been suggested to us by a number of market participants that the price discovery and liquidity in the CDS market may have offset some of the negative effects on liquidity in the corporate bond market resulting from TRACE.

Shift towards a broker market (ease of transacting)

A bid-ask spread is a pre-trade, posted spread, indicating the combination of prices at which a dealer is willing to buy and sell a specified amount of securities. A bid-ask spread represents a dealer mark-up, i.e. the implicit profit the dealer makes on a security he buys from one counterparty and sells to another, relevant when dealers act as principals and put trading capital at risk. When dealers act as agents, i.e. identifying suitable counterparties to a trade without putting their own capital at risk, then they would earn a commission to compensate their search costs, which would be a predetermined, disclosed amount paid by the buyer or seller to the dealer.[428]

The reduction in mark-ups after TRACE identified by the three studies may have occurred because fewer trades have been executed on a principal (capital risk) basis and more on an agency (risk-free) basis, or that relatively fewer and smaller trades have been completed. Such a rise in the agency or brokerage role of dealers would not necessarily be in the interests of investors, as the immediacy of trades conducted on an agency basis is likely to be lower than those conducted on a principal basis. In models of agency/brokerage, the bids may remain the same as when the dealers commit capital (or indeed decrease as the mark-up has been reduced and instead a commission is paid) but the time to execute the trade may take much longer, as a suitable counterparty needs to be identified before the dealer will arrange the trade.

Indeed, Bessembinder and Maxwell (2008) found that market participants whom they surveyed (including small, medium and large investment firms and medium and large corporate bond dealers) "were nearly unanimous that trading is more difficult after the introduction of TRACE".[429]

This puts investors at risk as they are open to price movements between first putting an order with a dealer and having a suitable counterparty found. The risk in this case moves from the dealer to the investor (where previously the dealer would have bought all the bonds being sold by the investor, he now may buy fewer bonds and take the rest on order so that he does not have to bear the risk of the market moving against him as a result of increased post-trade transparency), and the loss to the investor of price movements could be far higher than the

savings in mark-up he or she made.[430] In addition to losses made from price movements, opportunity costs of unexecuted trades resulting from a shortage of market makers should also be considered and could be significant.

Feedback from interviews with industry associations representing both buy- and sell-side market participants highlights this possibility of an increase in the broker, rather than principal, role of dealers.

Impact on end clients

As mentioned previously, the significant risk to dealers posed by post-trade transparency may result in dealers widening bid-offer spreads in order to compensate for this additional risk, or employing a larger brokerage role by either delaying the execution of a contract until a suitable counterparty is found, or by breaking up a client's position into smaller parts. Both these actions would shift cost and risk onto the client, increasing the need for client sophistication.

Further analysis

Measuring how the possible effects of transparency on liquidity described above could impact the EU bond and derivative markets is difficult given the lack of data and the absence of any existing analysis that explicitly measures these effects (the results of the TRACE studies do not adequately address these effects, and are also not applicable to the EU context given the significant differences between the EU and US markets).

It must also be kept in mind that large trades occurring under the current system could still have a degree of market impact, particularly where products are infrequently traded and market depth is low: a buyer being contacted in these circumstances by a dealer wanting to unwind a very large trade will know that the dealer might not have many alternative options and may factor in this knowledge when quoting a price.

The extent to which increased transparency will increase this market impact will depend to a large extent on the calibration of a transparency regime. If very large trades are allowed to remain opaque to a substantial degree (e.g. by having no post-trade volume information published) then the negative impacts on liquidity may not be severe. The timing of information disclosure is also an important factor.

18.4. Ban inducements in the case of investment advice provided on an independent baisis and in the case of protfolio management

Inducements are typically employed for packaged investment products, such as UCITs and other forms of PRIPs.

18.4.1. Independent advice

Europe Economics estimates the population of independent financial advisors to 50,000, with about 60% of those in the UK (see Annex 5.2.10). Reliance on third party inducements by investment advisors is extremely widespread[431], with commission-based models being widespread.

The following possible effects of this measure could take place:

- There is a risk that a number of small providers may exit the market as a result of the ban of inducements[432] (notably those for which commissions is an important source of revenues and that will not be willing or able to change their business model). The impact of the UK FSA's Retail Distribution Review (RDR) dealing with the regulation of inducements when advice is provided could be used a reference point. It should be mentioned, however, that the RDR proposes more stringent restrictions on the treatment of inducements since it deals homogeneously with inducements provided for in any form of advice (not only independent); furthermore, the RDR deals with products and entities which are not covered under MiFID (i.e. entities providing insurance products). In addition it also includes measures on professional standards (i.e. professional qualifications of advisors). Lastly it should be taken into account that there is a broader population of investment advisors in the UK, including a significant proportion of small advisors. Having said than, it is anticipated that, 23 per cent of UK advisory firms might exit the market as a result of the RDR, with a much higher ratio amongst the smallest advisers (those with annual incomes below €50,000). Overall, adviser numbers would fall by about 11 per cent. This includes, for instance, small providers which are close to retiring and will not find worthwhile to make investments to adapt to the new rules.[433] If the overall fall in adviser numbers relating to the UK (i.e. about 11 per cent) is applied here then it implies that about 2,000 advisers would leave the industry.

- There is a significant possibility that many investment advisers working with a remuneration structure geared towards third-party commissions would simply cease to self-describe as being independent and switch their business to the provision of non-independent advice (in that making the nature of their business more transparent to clients).

- There may be a switching effect away (by clients) from advisers that switch from a commission-basis to a fee-basis. The scale of this switch will be critically dependent upon the extent to which consumers value (and are therefore willing to pay) "*independent* investment advice" against "investment advice". If this is the case, any secular trend towards independent advice (in the sense of not being restricted in market choice and also having a remuneration structure geared towards downstream remuneration) would be considerably strengthened. This would benefit consumer choice and the quality of service received.

18.4.2. Portfolio management

Based on Europe Economics bulk estimates, the EU portfolio management industry could have revenues of at least €25bn. This would equate to perhaps 17 million customers and an industry of over 150,000 people (see Annex 5.2.10).

Whereas in investment advice provided on packaged products downstream charging is typically not standard practice, fees are usually charged to final investors in the case of discretionary portfolio management.

The only European country where inducements are strongly discouraged in the context of portfolio management is Italy. Unfortunately no data are available to assess the scale of the changes driven by such a measure in Italy. An Italian trade association described this as having had the following impact on the business models of banks:

- the reduction in the use of inducements has resulted in an increase in the charges levied on investors (to compensate the portfolio managers for the revenues lost — however, previously the customer would have borne these charges implicitly as the product provider

would have charge higher fees in order to enable him to pay commissions to the portfolio manager and these fees would have been deducted from the investment returns achieved)

- A switch away from packaged products (where there had been inducements) towards direct investments by portfolio managers.

However, we note that private banking and discretionary portfolio management (combined) have been recently estimated to account for about 6 per cent of mutual fund distribution in Italy.[434] This was 7 per cent in 2007 (FERI Fund Market Information). Whilst we recognise that market changes flowing from the regulatory change in Italy may not be fully reflected in the current estimate (and there could also be other drivers of the change) and that the split between private banking and discretionary portfolio management activities might have changed this scale of change does not appear likely to be having significant impacts upon the asset management sector.

Another relevant example could be the UK which as part of its Retail Distribution Review is considering eliminating inducements for portfolio management when they provide personal recommendation to clients. Apparently the advent of the new charging approach (i.e. fee-based instead of commission-based) does not seem to be in itself a major concern for the UK industry. Indeed, 26 per cent of discretionary portfolio managers anticipate an increase in business (i.e. more customers) due to the increased transparency in charging and consequent increase in confidence.[435]

Whether the same impacts would occur if this model were applied elsewhere in Europe is unclear. There are only limited data on the importance of discretionary portfolio management as a distribution channel for these packaged products. The importance of portfolio management (together with private banking) in the distribution of these funds is estimated to range from 6 per cent (in Italy, Spain and the UK) up to 9.5 per cent in France and 10.7 per cent in Germany.[436] It follows that there could be some impacts upon the asset management industry, particularly in markets (e.g. Luxembourg or Germany) where inducements remain a more important aspect of the business model than in the UK or where portfolio management represents a more important component within the distribution of funds (e.g. France, Germany).

If distribution through portfolio managers declines by 15 per cent (the decline implied by the initial data on the Italian market, and if that is wholly attributed to the impact of the inducements ban) — without any increase from other sources such as direct sales — and we further assume that 6-10 per cent of packaged products (which have a total volume of €7.1 trillion)[437] are distributed in this way, then this implies (remembering that Italy and the UK would already have affected an equivalent policy approach or market practice) that the policy option would lead to a further decline in assets under management of 0.5–0.9 per cent (about €36–€64 billion across the whole EU). This could mean a reduction in revenues in this sector of €216 to €384 million if we assume that management fees represent about one per cent of assets managed and if we also exclude Italy and the UK. This would be about 0.8–1.5 per cent of the total annual revenue attributed to discretionary portfolio management above (1.3–2.5 per cent of revenues outside of the UK and Italy).

This could result in some reduction in headcount in the asset management sector, if firms were unable to achieve compensatory changes elsewhere. We are not in a position to estimate the scale of that affect but we do not anticipate notable structural change to the asset management industry. Further, our model of the effects here is that the assets under management would "switch" from packaged products to direct investment through the

portfolio managers, i.e. there could be a compensating upward adjustment in the headcount at portfolio managers.

19. ANNEX 9: SUMMARY OF SECONDARY POLICY OPTIONS CONSIDERED

19.1. Under the operational objective "Regulate appropriately all market structures and trading place taking into account the needs of smaller participants"

(a) Systematic internalisers

MiFID introduced specific provisions for systematic internalisation.[438] The core requirement for systematic internalisers (SIs) is to publish firm quotes in shares admitted to trading on a regulated market that are classified as 'liquid' under MiFID when dealing in sizes up to standard market size.

To date only 10 investment firms have been registered as systematic internalisers. The low number of SIs may be attributable to a number of possible factors such as lack of clarity in the definition of a systematic internalisers[439] and the relative inflexibility of the quote publication regime.

The policy option will be to

- Provide more objective criteria in the implementing regulation for determining when a firm is a SI, in particular, by replacing the material commercial relevance test with clear quantitative thresholds and clarify the application in substance of the non-discretionary rules and procedures.

- Clarify that once the conditions are fulfilled, SI are obliged to register towards competent authorities.

- Require SI's to maintain quotes to both buy and sell.

- Require SIs to maintain a minimum quote size equivalent to 10% of the standard market size of any liquid share in which they are a SI.

- Require SIs who make use of the exemption from identifying themselves in post-trade reports to publish trading data monthly instead of quarterly as a condition of using this exemption.

A further issue relevant to which activities fall within the systematic internaliser definition is how the execution of orders by the use of matched principal trades would be treated for the purposes of MiFID (see paragraph 5 (d) below).

(b) Non-discriminatory clearing access for financial instruments

In addition to requirements in Directive 2004/39/EC that prevent Member States from unduly restricting access to post trade infrastructure such as central counterparty and settlement arrangements, legislation should remove various other commercial barriers that can be used to prevent competition in the clearing of financial instruments. Barriers may arise from central counterparties not providing clearing services to certain trading venues, trading venues not providing data streams to potential new clearers or information about benchmarks or indices not being provided to clearers. Without access to the central counterparty, positions involving similar financial instruments could not be netted down by participants. This would prevent competition from new trading platforms as it would be economically unviable for participants to use them.

The policy option is to prohibit discriminatory practices and remove barriers that may prevent competition for the clearing of financial instruments. Central counterparties should accept to clear transactions executed in different trading venues, to the extent that those venues comply with the operational and technical requirements established by the central counterparty. Access should only be denied if certain access criteria specified in delegated acts are not met. This will increase competition for clearing of financial instruments in order to lower investment and borrowing costs, eliminate inefficiencies and foster innovation in European markets.

The policy option will also require trading venues to provide access including data feeds on a transparent and non-discriminatory basis to central counterparties that wish to clear transactions executed on the trading venue. Licensing and access to information about indices and other benchmarks that are used to determine the value of financial instruments should also be provided to central counterparties on a non-discriminatory basis. The removal of barriers and discriminatory practices is intended to increase competition for clearing of financial instruments in order to lower investment and borrowing costs, eliminate inefficiencies and foster innovation in European markets.

19.2. Under the operational objective "Improve trade transparency for market participants for equities and increase it for non equities"

(a) Include Equity like instruments

The pre and post trade transparency requirements currently only apply to shares admitted to trading on a regulated market. A number of instruments that are similar to shares are outside the scope of MiFID transparency requirements. Given the similarity of the instruments to equities, support from market participants and supervisors and the fact that some Member States already apply transparency requirements to such instruments, the policy option is to amend the framework directive[440] to extend the transparency regime to the following equity like financial instruments if admitted to trading on a regulated market:

- Depositary receipts;
- Exchange traded funds; and
- Certificates issued by companies (i.e. securities issued by a company that rank above ordinary shareholders but below unsecured debt holders for the repayment of the investment).

The regime would in principle be based on the regime that applies to shares but with appropriate differentiation to take into account specific differences in the nature of the instruments concerned. For example, appropriate thresholds for applying the pre-trade large in scale and post trade deferred publication regimes would be developed for each type of financial instrument in the implementing measures. It would provide a harmonious and consistent framework for products which are very similar in the way they trade. On the negative side, this new transparency regime could impact the liquidity of these instruments but a proper calibration of the regime could prevent that.

The extension of the transparency regime to these equity-like instruments is expected to generate one-off costs of €5 million and ongoing costs of €1 million.

(b) Flag OTC trades

The Commission services consider that the MiFID could continue to be neutral as to where a trade is executed. Nonetheless, concerns have been raised by some market participants over the lack of granular information about the nature and extent of trading that is taking place in various instruments outside regulated markets, MTFs and systematic internalisers. Such OTC trading is currently subject to the full range of MiFID organisational (e.g. conflicts of interest) and conduct of business requirements and subject to post-trade and transaction reporting requirements.

Regulators from some Member States have suggested that there could be greater granularity of information about such trading. The policy option would be that further post trade identification of trades on organised trading facilities there could be identification and flagging of trades that are OTC in post trade transparency reports.[441] This would ensure that there is much more granular and accurate information about levels of OTC trading. The drawbacks of such solution would be some additional reporting costs for investment firms as well as some possible disincentivisation of using OTC mode to trade. Nevertheless, the additional costs should be limited and the restraint on the use of OTC is one of the objectives of the G20.

19.3. Under the operational objective "Reinforce transparency towards and powers for regulators"

(a) Extend the scope of transaction reporting

This option will require market operators of organised trading venues to report transactions on behalf of their members which are not MiFID firms. The advantage would be that regulators would receive reports on the transactions of non-regulated market participants in relation to instruments covered by MAD. These reports contain additional information in comparison with the data feeds from the platforms themselves. Competent authorities' capacity to detect and sanction abuses would thus be enhanced. The main disadvantage is in terms of reporting costs for the operators of organised venues, but this should be mitigated by the fact that they already possess most of the data.

(b) Improve the content of transaction reporting

Various differences in national implementation and interpretation regarding transaction reporting have led to diverging reporting requirements. In order to minimise differing requirements, reduce costs and improve efficiency in the exchange of transaction information between regulators, specific changes are necessary.

First, Member States take differing views on which legs of the process of order execution constitute executing a transaction. Some Member States consider that only the execution of a transaction on an organised venue or OTC is reportable, while others consider that changing the essential characteristics of an order also constitutes a reportable transaction. There is also disagreement as to whether the aggregation of orders is considered to be executing the order.

Second, national schemes differ as regards collecting data that identifies the person who has made the underlying investment decision. Some Member States do not require this information at all. This hampers automated detection of market abuse, and complicates investigations of possible market abuse as such information first needs to be gathered from investment firms. Member States that collect this information do so either through direct

reporting by the client-facing entity, or by passing on client information down the execution chain. As a result, the number of transaction legs that need to be reported, as well as the way the client and counterparty fields are populated in a transaction report differs across the Member States. This divergence limits the use of transaction reporting for purposes of detecting and investigating possible cases of market abuse, because it hinders the exchange of information between supervisors. It also leads to diverging obligations on firms.

Third, the Commission services are also considering whether, in order to provide further information to monitor for market abuse, transaction reports could identify the trader within a firm who executes the transaction. This field is a so-called "trader ID". When the investment decision is made by an automated system (i.e. when a computer algorithm has decided on the aspects of execution of the order such as timing, quantity and price), the transaction report should identify the algorithm as having made the investment decision (i.e. flagging of algorithm in the transaction reports)

Further, it will be necessary for implementing measures to fully harmonise the content of transaction reports as any differences between Member States not only create difficulties for firms but act as an obstacle to competent authorities being able to exchange and understand exchanged information on transactions. Therefore, subsequent clarifications to transaction reporting are needed in the implementing acts.

In this context, the policy option would be to modify transaction reporting obligations could be modified as follows:

- Amend the implementing regulation to specify that, for transaction reporting purposes, a transaction refers to any agreement concluded with a counterparty to buy or sell one or more financial instruments.[442]

- Amend the framework directive to introduce an obligation on firms that receive and transmit or otherwise handle orders but which are not executing transactions in the above sense to transmit the required details of such orders to the receiving investment firm[443].

- Amend the framework directive to require transaction reports to include means of identifying the person who has made the investment decision (the client identifier) [444] and the trader who executes the transaction. Transaction reports would need to identify the person who has made the investment decision through the chain of order transmission to the final execution of the transaction. This would require that all entities in a chain of transactions have the obligation to pass on all the details of the trade including client identifiers as in b) above they are themselves not subject to transaction reporting.

- Amend the framework directive to allow for the adoption of implementing acts on a common European transaction reporting format and content, including the reporting form, identification of the instrument traded, date and time, price against which the transaction took place, identification of the reporting parties, identification of the client, trading capacity, number of the report, technical format of transmission, and way of transmission.[445]

This would greatly improve the quality of the reporting, especially in case of cross border transactions and should result in an upgrade of the supervision performed by competent authorities. The changes brought to the reporting format could create one off costs for the reporting parties but they should be minimal and reporting parties could actually benefit from having similar reporting obligations all across Europe.

These measures are expected to generate one-off implementation costs of between €20 and €33 million.

19.4. Under the operational objective "Reinforce regulation on products, services and providers under the directive when needed"

(a) Classifying the ancillary service under annex I section B (1) of MiFID as and investment service.

The provision of ancillary services under MiFID[446] is subject to supervision when they are provided by intermediaries authorised to provide investment services and activities. A particularly sensitive ancillary service is the "safekeeping and administration of financial instruments for the account of clients, including custodianship and related services such as cash/collateral management".[447] This service is very often provided by investment firms and credit institutions but it could be provided by different entities, regulated at national level or not.

MiFID already addresses important aspects of safeguarding client assets in the context of organisational requirements for firms.[448] The Commission services consider that this service should be classified as an investment service[449]; consequently, entities providing the service of safekeeping would need a MiFID authorisation (except in cases when an existing MiFID exemption applies) and they would be subject to the MiFID regulatory framework[450] and to supervision by competent authorities.

This option has already been assessed in the context of the Impact Assessment accompanying the Proposal for a Directive on legal certainty of securities holding and transactions[451].

19.5. Under the operational objective "Strengthen rules of business conduct for investment firms"

(a) Reinforce the framework around selling by investment firms of their own securities

Some national regulators have raised concerns with respect to the applicability of MiFID when investment firms or credit institutions issue and sell their own securities. While the application of MiFID is clear when investment advice is provided as part of the sale, greater clarity is needed in the case of non-advised services, where the investment firm or bank could be considered not to be providing a MiFID service.

Some practical issues have also emerged with respect to investment firms and credit institutions distributing products to investors on the basis of an agreement with the issuer in the provision of the services of placing and underwriting. In particular, it seems necessary to clarify in practice the situation of investment firms that can be acting on behalf of an issuer and, as part of the same transaction, on behalf of the investor as well.[452]

On the first issue, the policy option would be to specify that MiFID also applies to investment firms and credit institutions selling their own securities when not providing any advice. To this end, the definition of the service of execution of orders on behalf of clients could be modified in order to also include the direct sale of their own securities by banks and investment firms.[453]

Concerning the second point, the Commission Services consider that MiFID conduct of business rules clearly apply to the provision of services to investors, irrespective of the circumstance that a firm is acting, at the same time, on behalf of the issuer and of the investor.

However, in order to ensure a convergent application of these principles in concrete situations, the policy option would be to adopt measures such as guidelines and examples of practical application of the rules by ESMA. This would clarify any ambiguity that could have existed and reinforce the position of investors.

The costs of these options should be minimal with one-off costs in the range of €3 to €4.5 million.

(b) Dealing on own account

Dealing on own account by investment firms is listed among the investment services and activities requiring authorisation. The MiFID definition of dealing on own account is very broad since it includes trading against proprietary capital resulting in the conclusion of transactions in financial instruments.[454] On the other hand, the exemption regime in MiFID narrows significantly the coverage of this activity by excluding persons who do not provide any investment service or activities other than dealing on own account, unless they are market makers or deal on own account outside a regulated market or an MTF on an organised, frequent and systematic basis.[455]

Experience shows that practice and supervision in Member States differ on how MiFID is applied to specific cases of firms dealing on own account and on the scope of this activity. This is particularly the case when firms execute client orders (another investment service which requires authorisation) against their proprietary capital. The first option in this area is to modify the definition of dealing on own account and the corresponding exemption to make clear that the exemption applies to persons who do not provide any investment services or activities other than dealing on own account unless they are market makers or deal on own account by executing client orders. Firms dealing on own account by executing client orders would continue to be authorised for the execution of orders on behalf of clients and to be subject to the corresponding obligations towards clients (for instance best execution[456]).

Another issue concerning the definition of dealing on own account concerns the treatment under MiFID of orders executed for clients using matched principal (also known as "back to back") trading. Provided the legs of the trades are precisely matched, this method of executing orders can either be considered only as the execution of client orders, or also as dealing on own account, based on the argument that the firm's proprietary capital may be put at risk if one of the matched trades fails.[457] The classification of this part of executing client orders has potential implications, in terms of, for instance, the applicability of the systematic internaliser regime and the capital treatment under the Capital Adequacy Directive.[458]

The second policy option in this area is to clarify that generally under MiFID, the execution of client orders on a matched principal basis should be treated as also involving the activity of dealing on own account.[459] But this should not affect the capital requirements under the Capital Adequacy Directive.

19.6. Under the operational objective "Strengthen the rules of organisational requirements for investment firms"

(a) Fit and proper criteria

The framework directive requires persons who effectively direct the business of an investment firm to be of sufficiently good repute and sufficiently experienced as to ensure the sound and prudent management of the investment firm (so called "fit and proper test")[460]. This provision

is generic and has led to different application in Member States. The implementing directive regulates the responsibility of senior management in ensuring the compliance of investment firms with their obligations under the MiFID.

Following the Commission services consultation on corporate governance issues[461], the policy option is to clarify and strengthen with particular reference to the role of executive and non-executive directors. As to fit and proper criteria, different roles could be mirrored in different professional skills (for instance, non-executive directors should have professional experience in the financial field to enable them to carry out their role and should fulfil independence requirements in relation to the firm where they provide their activity). In addition, the role of supervisors could clearly include the initial and on-going assessment of fitness and propriety of directors.

The policy options will include the following modifications in the framework and in the implementing directives could be envisaged:

- fit and proper criteria would clearly apply to all members of the board of directors (both executive and non-executive directors) and not only to persons who effectively direct the business[462]. To this end, a comprehensive definition of management body could be introduced. Fit and proper criteria could include the assessment of time commitment and assessment of independency, especially for non-executive members of the board. Principles aimed at promoting diversity in the composition management body could also be envisaged;

- competent authorities would be satisfied, at the moment of the authorisation and in the on-going monitoring of the firms, that all members of the board are and continue to be of sufficiently good repute and sufficiently experienced to ensure the sound and prudent management of the firm and compliance with the applicable rules;

- implementing measures could clarify the details of these requirements in order to adapt them to different roles and functions and ensure their uniform application[463];

- the definition of senior management[464] in the implementing directive would be modified to reflect changes in the framework directive.

These options are expected to generate one-off costs of €3.4 - €4.7 million and ongoing costs of €13.6 - €31.4 million.

(b) Conflict of interest and sales process

Conflicts of interest requirements[465] cover a broad range of situations that may occur in the provision of investment services and activities. This also includes the remuneration of sales forces and the structure of incentives for the distribution of financial products.

The Commission services consider that the framework for addressing conflicts of interest within MiFID is still appropriate to prevent failures in the sales process provided that it is consistently applied across Europe. The key element of this framework is the management and the avoidance of conflicts – not just disclosure. While the framework also addresses circumstances in which the disclosure of conflicts of interest might be necessary, this is a measure of last resort and not a means for managing conflicts of interest. For instance, it would be very difficult for a firm which creates strong incentives for its sales staff to sell certain products, e.g. through internal bonus structures, to be able to manage the conflicts of

interest thereby created. It is unlikely that such a firm could, in this situation, demonstrate compliance with MiFID.

The Commission services consider that the convergent application of conflicts of interest provision has to be ensured across the Union in order to grant the same level of investor protection in different jurisdictions and the same treatment of intermediaries providing the services. To this end, the policy option is to add implementing measures in the area of conflicts of interest which would be useful for a consistent application of MiFID principles (e.g. elaboration of guidance and concrete examples by ESMA in order to ensure consistent application of the rules in practical situations).

(c) Segregation of client assets

Recent cases where ownership of assets has been in dispute[466] as a result of poor rules or practices underline the importance to have strong requirements in this area. Therefore, the Commission services consider appropriate to introduce modifications in the implementing directive[467] in the following areas.

- A recital[468] currently allows the exclusion of client asset protection rules when full ownership of funds and financial instruments has been transferred to an investment firm to cover any client obligations. The indiscriminate application of such a possibility would jeopardise the effectiveness of segregation of client assets requirements. Under the new policy, these arrangements would not be allowed, at least when dealing with retail client assets.[469] Member States would also be given the option to exclude title transfer collateral arrangements in the case of professional clients and eligible counterparties and to require that, when such arrangements are allowed, clients receive a specific warning in writing giving appropriate evidence of the risk of these arrangements.

- MiFID allows the use of securities financing transactions involving client financial instruments held by the investment firm, subject to clients' express consent.[470] The policy option here is to consider that the implementing directive could require firms, at least for retail client assets, to adopt specific arrangements to ensure that the borrower of client assets (for instance in the case of stock lending activities) provides the appropriate collateral and that the firm monitors the continued appropriateness of such collateral and takes the necessary steps to maintain the balance with the value of client assets.

- Firms are required to provide retail clients with clear, full and accurate information on the terms of the use of the financial instruments and relevant risk.[471] Leveraging on the fact that described information is a useful tool irrespective of the type of client, the option is to extend it to all categories of clients in order to increase awareness of the risk of such practices.

- Investment firms are required to place client funds into accounts opened with a central bank or a credit institution or certain money market funds and, except for central banks, to exercise all due skill, care and diligence in the selection and review of the institutions they choose.[472] As a result of the financial crisis, it has emerged that the concentration of client money in group entities may face the risk of contagion when intra-group insolvency occurs. The option is to consider that diversification in the placement of client funds could be one of the criteria of conducting the due diligence and that implementing acts could be proposed in this area.

The range of costs is expected to be between €1.4 -€1.6 million for one-off costs and €6.8 – €24.1 million for ongoing costs.

(d) Tied agents

Member States may currently allow[473] investment firms to use tied agents as a means of offering their services and soliciting business[474]. This option has been exercised in most Member States. Based on CESR assessment[475], the rules governing tied agents have worked well so far. Thus, the Commission services consider that only a few adjustments to these provisions would be necessary.

In particular:

- National discretion of allowing tied agents[476] could be abolished and the possibility to use tied agents would be generalised in all Member States.

- The possibility for Member States to allow tied agents to handle clients' money and/or financial instruments could be restricted.[477] Although this possibility is subject to the tied agent remaining under the full and unconditional responsibility of the investment firm, it may pose undue risks especially when tied agents represent investment firms which are themselves not authorised to hold client money and/or financial instruments. Therefore, tied agents would not be allowed to hold client money or assets.

- Tied agents would be treated as a branch[478] independently of whether the investment firm operates any other branches on the territory of the host Member State. This would ensure their appropriate and consistent supervision across the EU.

- Where an investment firm intends to use tied agents in providing services cross border, the current MiFID provisions allow, but do not prescribe, the transmission of the identity of tied agents from the home to the host competent authority. The host supervisor has the option, but not the obligation, of publishing this information.[479] For investor protection reasons, it is important to give investors the possibility to check the identity of a tied agent. Therefore, the policy option is to make both requirements mandatory.

- Finally, the passporting provisions only apply to investment firms which intend to use tied agents. The cross-border activities of credit institutions using tied agents are not regulated under EU legislation, resulting in an unlevel playing field between the two types of institutions providing the same services. In order to ensure sufficient transparency for investors and competent authorities, the provisions on tied agents under articles 31 and 32 of Directive 2004/39/EC could also be applicable to credit institutions.[480]

20. ANNEX 10: BIBLIOGRAPHY INCLUDING LIST OF REPORTS PUBLISHED BY CESR ON MIFID RELATED ISSUES

MiFID Impact Assessment Bibliography

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Directive 2004/72/EC (Market Abuse Directive)

Directive 2003/6/EC (Market Abuse Directive)

Directive 2006/49/EC on the capital adequacy of investment firms and credit institutions (recast)

Directive 2005/60/EC (Anti-Money Laundering Directive)

Directive 2003/87/EC of the European Parliament and of the Council

Directive 2003/71/EC (Prospectus Directive)

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21. ANNEX 11: DATES AND LIST OF PARTICIPANTS TO MEETINGS ORGANISED BY DG INTERNAL MARKET ABOUT MIFID RELATED ISSUES

List of workshops organised on MiFID related issues			
Organisation	**Name**	**Organisation**	**Name**
Transparency 9 December 2009		**Commodities markets 17 December 2009**	
AFME	*Bertrand Huet*	EFET	*Karl-Peter Horstmann*
EFAMA	*Nick Robinson*	EuroPEX	*Paulo Sena Esteves*
Tradeweb	*Roger Barton*	LEBA	*Alexander McDonald*
Thomson Reuters	*Robin Poynder*	ICE Futures Europé	*Simon Martin*
AIMA	*Aron Landy*	LIFFE (NYSE Euronext)	*Gilles Clerc*
CESR	*Alberto Garcia*	AAF	*Juliette Jacques*
EFAMA	*Bertrand de Guerny*	The European Flour Millers	*Bernard Vallius*
Euroinvestors / FIN USE	*Guillame Prasche*	CIAA	*Roxane Feller*
Markit	*Marcus Schueler*	IETA	*Marc Cornelius*
ICMA	*Richard Britton*	ECX	*Patrick Birley*
CEA	*John Hale*	CESR	*Diego Escanero*
EBF	*Dominic Adler*	ERGEG	*Andrea Korr*
London Stock Exchange	*Fabrizio Plateroti*	Liam McCarthy	*Morgan Stanley*
AFME	*Guy America*		
ICAP	*Godfried De Vidts*		
European Issuers	*Pierre Marshal*		
Bloomberg	*Jason Connolly*		
FESE	*Ludovic Aigrot*		
High frequency trading 12 January 2010		**Waivers and dark pools 18 January 2010**	
Getco	*Jim Faraci*	CESR	*Alberto Garcia*
Optiver	*Edwin van der Kruk*	FESE	*Burcak Inel*
IAT	*Yorck Schumacher*		*Miroslav Budmir*
FESE	*Miroslav Budimir*	LSE	*Steven Travers*
BATS	*Paul O'Donnell*	Chi-X	*Denzil Jenkins*
AFME	*Andrew Morgan*	BATS	*Mark Hemsley*
EFAMA	*Bertrand du Guerny*	AFME	*George Andreadis*
AIMA	*Rebecca Fuller*		*Brad Hunt*
Thomson Reuters	*Bill Fenick*		*John Serocold*

EBF	*Stéphane Tyc*	EBF	*Gorm Praefke*
CESR	*Alberto Garcia*		*Ross Barrett*
AMAFI	*Emanuel De Fournoux*	ICAP	*Pinar Emirdag*
Flowtraders	*Jan de Bolle*	Euroissuers	*Pierre Marshal*
Chi-X	*Graham Dick*	TABB Group	*Miranda Mitzen*
EACB	*Philippe Guillot*	CEPS	*Diego Valiente*
		Liquidnet	*Eva Heffernan*
		EFSA	*Stephane Giordano*
		EFAMA	*Bernard Coupez*
Best execution and conduct of business rules 22 January 2010		**Data consolidation 28 January 2010**	
EBF	*Georg Baur*	FESE	*Santiago Ximénes*
AFME	*Tillie Rijk*		*Burcak inel*
EFAMA	*Graziella Marras*	LSE	*Steven Travers*
EFAMA	*Graham Goodew*	BATS	*Paul O'Donnell*
EAPB	*Hans Bretschneider*	AFME	*John Serocold*
EACB	*Christoph Echternach*		*Stephen McGoldrick*
ESBG	*Jonas Myrdal*		*Andrew Bowley*
EFSA	*Stephanie Hubert*	EFAMA	*Bertrand du Guerny*
FIN USE	*Marcin Kawinski*		*Guy Sears*
Euroshareholders	*Casten Heise*	EBF	*Kim Lilmose*
CESR	*Diego Escanero*	Euroinvestors/FIN USE	*Guillaume Prache*
		CESR	*Alberto Garcia*
		Thomson Reuters	*Andrew Allwright*
		BOAT /Markit	*Sophia Kandylaki*
		Chi-X	*Denzil Jenkins*
		DG COMP	*Fabien Kaiser*
		EFSA	*Emmanuel de Fournoux*

22. ANNEX 12: SUMMARY OF PUBLIC HEARING

Conference on the MiFID review and commodity and exotic derivatives

20-21 September 2010

Summary

DAY 1

Opening Speeches

Jonathan Faull (Director General, DG Internal Market and Services, European Commission) welcomed all participants and attendees to the conference. He noted the backdrop of intense regulatory reform in the financial sector and the vital role MiFID has to play in this. In particular Mr Faull saw five areas where targeted modifications were needed: increased organisation, transparency and oversight of various market segments; continued progress towards a genuine single market for investment services; appropriate regulation to keep pace with increasing competition, fragmentation and speed; amendments to meet the new European supervisory structure; and finally, additional transparency and oversight measures in the commodity derivatives market.

Michel Barnier (Commissioner, Internal Market and Services, European Commission) noted the importance of MiFID, and its success to date; however he also noted that since the original proposal was drafted, the financial world has witnessed deep changes which justify this review. Commissioner Barnier stated that questions raised by the crisis must not remain unanswered and that he sought to fulfil four key objectives – increased accountability for financial actors; transparency for all; continuation of fair competition; and restoring confidence in the markets and financial intermediaries. He noted that these objectives apply comprehensively across the financial landscape and that no markets, activities or players will be left aside, including commodity derivative markets. He said that the Commission would adopt a proposal in spring 2011.

Dacian Cioloş (Commissioner, Agriculture and Rural Development, European Commission) expressed his concern about the impact on agriculture of excessive speculation on financial markets. He noted that across Europe farmers, various food industry players and processors and consumers were all seeking increased market transparency. The Commission must take measures against the extreme volatility of prices of agricultural products. Commissioner Cioloş cited the fluctuations in the milk market over the period 2007-2009 and underlined that speculation should not put in danger farms otherwise perfectly viable in normal times. Asking for more transparency of the financial markets and more supervision for the derivatives markets, Commissioner Cioloş stated that the future reform of the Common Agriculture Policy will include more elements to fight the volatility of prices and the decrease in farmers' incomes.

In her keynote speech, Sharon Bowles MEP (Chair,Economic and Monetary Affairs Committee, European Parliament) considered that although there are many recent events from which lessons can be learned, the ultimate consideration of MiFID should be the needs of users and investors – these being choice and protection. Mrs Bowles commented that there are times when the needs, interests and incentives of the individual and the whole are not always the same, and that this presents tough political decisions. In meeting these decisions key

principles must be considered – recognition of the difference between wholesale and retail markets; non discriminatory choice and regulation that is appropriate to its level; recognising that liquidity and transparency can sometimes be a trade off and that different asset classes behave differently; and that markets are organic and can not be forced. In particular, she questioned if the appropriate balance for pre trade equity transparency had been struck, in view of the growth of dark trading. She also noted the technical changes in the market (e.g. new types of trading and increased fragmentation), the strong case to move to intra-day monitoring, if not the banning on some types of trading - such as flash orders, and the need to move towards a consolidated tape of trade data.

In the final keynote speech, Carlos Tavares (Chairman, CESR) highlighted the progress made so far, but also the need to further develop MiFID. He queried whether fragmentation had increased liquidity - citing that mitigating systems (to provide consolidated information to investors and regulators) are still far from being complete, and summarised seven key points to be considered in the review – enhanced transaction reporting; urgently implement a consolidated tape; review the best execution concept; reduce opportunities for regulatory divergence; strengthen investor protection; increase pre and post trade transparency; and regulate new trading modalities e.g. high frequency/algorithmic trading. Mr Tavares also noted that the review should anticipate the newly created ESMA and leave room for this to implement principles via technical standards. Mr Tavares concluded that markets have proved to be dynamic and creative in building new solutions and so regulation must be flexible and agile.

Panel I Derivatives – geared for a paradigm shift

The moderator, Georges Ugeux (Galileo Global Advisors), opened the debate by recalling the context of the financial crisis, the US legislative reform and the recent Commission proposal on OTC derivatives.

Brendan Bradley (Eurex) underlined that trading on organised venues and OTC has been largely complementary. One of the key differences between the two was the level of pre trade transparency which has not been fully addressed in recent consultation as the focus has been placed on post trade transparency and the availability of CCP services. As a result he suggested that the standardisation approach and the possibility for organised trading should broadly follow the US regulatory approach and that European regulators should provide for a level playing field between regulated markets and MTFs given the similarities that exist in their execution functions.

Erik Litvack (Société Générale) came back to the statement of the G20 in Pittsburgh on trading of all standardised derivatives on organised venues where appropriate. He underlines the differences and complementarities between trading on regulated markets which can maximise turnover and liquidity and fits benchmark products and trading OTC which offers maximum flexibility for users but less frequency of trading. Post trade transparency for OTC products could be possible only if counterparty risk is excluded, otherwise it will create misleading price signals. He insisted on the need to define the reasons for more transparency and the fact that there will likely be a trade off between more transparency and the willingness of dealers to trade.

Håkan Feuk (E.ON Energy Trading) underlined the fact that it was crucial to allow efficient hedging for corporates, especially in the energy markets. Pushing more trading onto regulated markets could achieve increased liquidity but sufficient flexibility should be kept to allow effective hedging. For firms which have small volumes to transact, OTC is more efficient and

non financial firms should be able to choose the most efficient venue. Current exemptions for commodity firms should remain.

Rich Silts (CFTC), speaking in a personal capacity, confirmed the willingness of US regulators to achieve consistency on both sides of the Atlantic. He gave a summary of the US reform and subsequent rules which are being drafted. Among other reforms, he mentioned swap execution facilities (SEFs), the main features of which would be trade transparency and multiple participants on both supply and demand sides.

Matt Woodhams (GFI) mentioned that electronic trading was more developed in Europe than in the US. A balance should be found between transparency and liquidity. Suitable trading venues need to be created possibly by reproducing the SEF concept in MiFID.

The rest of the discussion focused on the different recipients of trade transparency. There was a rather larger consensus for a complete and full transparency for regulators but only high level transparency for the public.

Panel II Transparency, efficiency and soundness in the trading of financial instruments

The moderator, Alexander Justham (UK FSA), recalled the objectives behind a regulatory framework for transparency of trading, namely a balance between private and public interests in support of fair, robust and efficient markets. He noted that fragmentation of trading and data in the wake of MiFID, as well as rapid technological developments, underline the need for regulation of transparency to keep pace.

Scott Cowlling (Blackrock) said a review of MiFID transparency rules should seek to enhance, not rewrite the status quo. Equity market transparency was largely satisfactory, while non-equity transparency should be pursued in the same vein, with instantaneous publication whenever participants were not on risk, and allowing for suitable delays in other cases in order to avoid impairing clients' and participants' interests and damaging liquidity. He questioned whether many equity trades occurring OTC were relevant for price discovery purposes.

Roland Bellegarde (NYSE Euronext) said that there had been a big increase in opacity and OTC trading in equities since MiFID. He said a large number of equity trades occurring OTC were in fact of a small size and thus did not need the confidentiality associated with OTC trading. The future ESMA should have the capability and agility to address loopholes in the framework of transparency in order to mitigate private interests from circumventing and compromising commonly established rules.

Roger Barton (Tradeweb) said that trading in various fixed income non-equity markets is often characterised by relatively fewer numbers of trades, but in large sizes. Matching of clients' interests is unlikely and thus facilitated by dealers. Traditional means of executing trades by phone are increasingly giving way to electronic platforms, which adjust levels of transparency provided according to the needs of market users.

Massimo Mocio (Banca IMI) recalled that the Italian transparency regime was more extensive than MiFID. He said that while it had not played a direct role in supporting Italian banks during the crisis, it did serve to remind that liquidity and dealers' capital commitment in various non-equity markets can be fragile. Financial institutions should help regulators

formulate ambitious and balanced transparency rules, and that CESR's recent advice to the Commission was a good compromise.

Stephen Luparello (FINRA) said that, in relation to equities, the US was mostly focused on improving pre-trade transparency and transparency towards regulators, due to the challenges posed by dark pools and fragmentation between competing venues. As for non-equities, he said the TRACE model provided the necessary transparency for regulators, while achieving the right balance in transparency towards the market was always in flux.

In the discussion that followed greater clarity was sought on the size and nature of the OTC market in equities, whether there was a future for the systematic internaliser regime, and how transparency and various execution arrangements in non-equities would look like in the future.

Panel III The changing face of trading – achieving a level-playing field for trading venues and market participants

The moderator, Karel Lannoo (CEPS), observed that the questions analysed by the panel are similar to those in 2001 when MiFID was elaborated, namely the one of the balance between transparency and fragmentation, though the context has changed since. He also pointed out that MiFID has achieved its primary objectives of reducing fees and spreads, but more attention needs to be given to conduct of business rules and to markets other than equity markets.

David Lester (LSE) emphasized the success of MiFID in abolishing monopolies of national exchanges, in creating possibilities for new trading venues to appear, in bringing more choice and in reducing trading fees and spreads through modern technology. MTFs continue to gain market share. Harmonised data standards would allow effective consolidation of post-trade data by the industry and would enhance the transparency of the European equity market. Dark pools are an important component of the choice available to market participants, but all dark trading venues should be able to execute within the spread to deliver price improvement. Competition in trading must be supported by an efficient and cost effective post-trade environment. Finally, SME access to capital should be supported to help drive economic growth and job creation. In the UK, the AIM market has been a success.

Kelly Riley (US SEC), speaking in a personal capacity, underlined that markets have changed with automation, but also with the increase in the number of market participants. Applicable SEC regulation is similar to MiFID but has several differences due to market changes as regards for example best execution, information requirements, as well as order matching and the consolidation of quotations to determine one national best bid and offer. The order protection rule requires trading centres to direct the order to the venue offering the best price when they can't offer it themselves. Dealers also have to respect this rule for clients. Following the flash-crash, the SEC issued different proposals on regulating high-frequency trading, dark pools, flash orders and transparency in order to achieve investor protection and fair markets.

According to Jonathan Eardley (QCA/European Issuers) listing rules under MiFID are not prohibitive for large firms and there is no evidence of a need to change this for large caps. However, for small illiquid caps, rules need to be proportionate. The role of the Commission and of national government is to foster competition. This does not necessarily need to be done through uniform markets. On the contrary, markets have to meet investors' expectations.

Eleanor Jenkins (Morgan Stanley) expressed the view that the key driver to the success of the markets today is the choice of execution methods for different orders. These execution methods are not mutually exclusive. She pointed out that better understanding is needed regarding different types of models including the methods and organisation of crossing systems. The working group set up by CESR should improve the quality of post-trade data. Without this, a consolidated tape would make little sense. She expressed the wish that regulation be evidence-based. According to her, there was no significant increase in OTC trading after MiFID, but the methods of trading have changed. With regards to Broker Crossing Systems, this activity does not represent a material proportion of pan-European trading and arguably has no effect on price formation. Moreover, the provision of capital for risk filling purposes, which by its nature has to remain OTC, has always been a core broker activity and provides an important and valued service to institutional, retail and corporate clients. Integral to this is the ability of a broker to delay the publication of large risk trades and it would be damaging to European liquidity, especially in illiquid securities if this ability were to be taken away. Finally, the systematic internaliser regime is not achieving its aim. It makes little sense to mandate pre-trade transparency when only the investment firms' clients can interact with the quotes generated creating unnecessary noise on the tape.

John Woodman (Chi-X Europe) underlined that one person's level playing field is another's disadvantage, because investment objectives differ, for instance according to the time of the investment and the type of investor. Fostering choice of venues according to the characteristics of the order has been one of the main benefits of MiFID. Lower execution costs are important for efficiency, but the question is if new trading venues piggy back on existing exchanges, including taking the most lucrative part of the activity of regulated markets. He believes this is not the case, because new venues have grown the total market. Moreover, price formation occurs in new venues also and is more than centralising orders in a book. It is also about post-trade information from all venues. Concerning high frequency trading, made possible by technological developments, he considers it helps provide liquidity to markets and thereby drive execution costs down. Provided the risks of market abuse are prevented through the application of existing rules, high frequency business should not be inhibited unless it proves abusive or harmful. In this context, short-selling is also a valuable service, a natural adaptation of the market. The focus now should be on encouraging cheaper post-trading systems and on providing more consistent post trade information.

Judith Hardt (FESE) said that regulated markets played a key role in providing liquidity during the crisis, which shows that the structure of the markets they operate (neutral, robust, open, etc) brings real benefits to the whole economy. MiFID has had a positive impact on improving competition among regulated venues, enabling pan-European trading and reducing execution costs. However, MiFID has not increased choice for all and has not increased competition between all market players. There is a big amount of trading on unlit venues. The part of unlit trading on regulated markets and MTFs is well known, but the trading that happens on an OTC basis remains more opaque. However the best available public sources indicate that this trading might be quite significant when compared with other venue types – and more significant that one would have expected after MiFID, which allowed OTC only as an exception. This has undermined price formation as well as fair competition and proper supervision. She stressed that the same business should be subject to the same rules. FESE thinks the price discovery process should be improved through more rigorous pre- and post-trading transparency for all venues engaged in multilateral trading and a clear definition of OTC to ensure that only truly OTC trades remain outside the trading venue rules. She also stressed that funding for mid-size caps and SMEs should be analysed more closely, as the pan-European trading in blue chips encouraged by MiFID has had the undesirable and

unintended effect of restricting the ability of regulated markets to provide access to SMEs. As SMEs are not able to change jurisdiction easily, they will always need access to local capital markets. The MiFID Review needs to take a close look at their needs.

Replying to the question on the need to increase regulation of high frequency traders, Eleanor Jenkins warned against a regulation based on definitions as opposed to a regulation based on effects. Judith Hardt recalled that despite the advantage of high frequency trading in providing liquidity, there is a limit to speed. On the question of the need to maintain the MTF category, David Lester observed that the market needs MTFs because they innovate and they often operate on a pan-European basis, going beyond the national markets that regulated markets were operating in before MiFID. Judith Hardt also observed that it is much more expensive to run a regulated market than a MTF, notably due to different levels of supervisory oversight. If this trend continues, listing fees may have to increase.

Panel IV Investor protection after the crisis – repair or reform

The moderator, Jean-Paul Servais (CBFA) emphasised the great importance of MiFID as a step forward for investor protection across Europe. He recalled the recent contributions of CESR to the review in this area: advice to the Commission, a letter on specific additional areas, and a paper on client classification. He also mentioned some of the topics covered such as inducements, intermediaries' internal approval process for new services and products. the classification of UCITS as non-complex instruments, and the treatment of different categories of clients.

Fabrice De Marigny (Mazars) noticed that MiFID sets a satisfactory regulatory framework for the distribution of investment products and that fine tuning may be appropriate in few areas such as some aspects of client categorization and information on risk of financial instruments, which should include worst case scenarios. He recalled the PRIPs workstream and welcomed MiFID being the benchmark for selling practices. He emphasised that investor protection is one of five broad policy areas covered by MiFID (besides fragmentation, competition, liquidity and transparency). The five areas are clearly interconnected. For instance, he mentioned best execution as a topic touching upon different areas and deserving attention.

Alain Pithon (AFG) said that portfolio managers are classified by brokers as eligible counterparties and consequently do not enjoy best execution (while they have best execution obligations towards their clients). He recommended a careful assessment of any perceived problems in dealing with the treatment of inducements in the case of portfolio management. He expressed disagreement with positions emerged in CESR as to the classification of UCITS. He said that UCITS are appreciated by retail clients, they are liquid and strictly regulated in terms of management and should remain all classified as non-complex financial instruments.

Guillaume Prache (EuroInvestors) expressed a general pessimistic view since, in spite of the crisis, he sees financial operators back to "business as usual". He recalled that investor representation at the European financial policies level is an important area in the Commission communication on "Driving European recovery" that has not been followed through yet. He recalled the importance of real - independent - advice and the negative impact of compensation mechanisms on the quality of advice and also said that inducements provisions are actually not enforced. He mentioned the importance of the correct and full implementation and application of the regulatory framework by supervisors. He asked not to delay the PRIPs work stream and emphasised that MiFID only covers a fraction of investment products sold to retail investors.

Bernhard Koch (Raiffeisen Zentralbank Osterreich AG) noted that MiFID was implemented in Member States only at the end of 2007. The implementation was costly and it would be premature to conduct a wide review of the directive. He emphasised that, in assessing investor protection measures, the overall body of legislation should be taken into account, including consumer law and civil law. The overall picture seems satisfactory in terms of protection of investors.

Maria Velentza (European Commission) clarified that the PRIPs work stream is advancing. She mentioned that, for selling practices, it will be part of the MiFID review and, in the case of insurance products, should be included in the parallel review of the Insurance Mediation Directive.

In the subsequent discussion the relevance of distinguishing independent advice was mentioned. It was also noticed that there is an increasing retailization of complex products. Mr Prache recalled the importance of proper financing for investors associations and mentioned the commitment of the European Commission in that direction. Mr Pithon expressed the hope that US and EU authorities are equally committed to implement any new rules resulting from G20 agreements. Mr De Marigny underlined that the current flexibility of client categorisation rules should remain untouched (opt-in and opt-out mechanisms). He mentioned the impressive budget for investor protection issues in the US, but he also argued that competing US-style agencies do not seem necessary or desirable; rather a dedicated unit in ESMA would be useful.

Panel V Data consolidation – fixing the failures and supporting best execution

Maria Velentza (European Commission) opened the discussion by asking the panellists how they understand the concept of a consolidated tape, if they agree with the idea of a consolidated tape in case of a positive response, if it should be run by a public utility or if they prefer a decentralised solution and if they have any concrete proposals as to how to improve the best execution rule in MiFID.

The moderator, Rhodri Preece (CFA Institute), pointed out that Europe does have problems regarding the timeliness, quality and cost of data. In a survey, 68% of CFA Institute members considered trade-reporting as problematic with 64% believing that the cost of data had increased post-MiFID. 45% of members think that best execution had become more difficult and 82% were in favour of a consolidated tape.

Rudolf Siebel (BVI and EFAMA) considered improvements in data consolidation and quality as one of the main issues of the MiFID Review. He regarded the introduction of Approved Publication Arrangements (APAs) as a necessary first step in that direction, however, he advised to be careful in relation to the creation of a mandatory consolidated tape. A framework should rather be developed in cooperation between CESR and the industry.

Andrew Allwright (Thomson Reuters) blamed problems such as over-reporting, erroneous reporting, the lack of flagging of relevant trades for investors and the high costs on insufficient detail in MiFID on pre- and post-trade transparency rules and a lack of enforcement. In addition, he held the lack of clarity regarding best execution obligations responsible for investment firms not demanding a consolidated tape. He did not agree with the imposition of a mandatory consolidated tape as users wanted customised data rather than a one size fits all approach, it would entail limitation on pricing, would be costly to run and to finance and it would pose significant technical challenges. A demand for a consolidated tape

in his view could only be created if investment firms were judged on their performance against the consolidated data.

Charles-Albert Lehalle (Credit Agricole) questioned the possibility of a traceability of execution as the landscape of liquidity changes every two milliseconds. Hence, in his view pre-trade information does not allow for a determined decision and market participants should rely more on post-trade information. As useful regulatory measures he considered a recording of orders for surveillance purposes. For the price formation process, a better quality of post-trade data should be ensured. His conclusion has been that dark pools are not that different from lit pools with so blurred a picture pre trade.

Holger Wohlenberg (Deutsche Börse) emphasised that MiFID should continue without a mandatory consolidated tape as market structures in Europe are different from the US. He advised on harmonising trade-reporting in the EU, the introduction of standards for APAs modelled on those for Trade Data Monitors in the UK, application of sanctions by supervisors and a reduction of delays in reporting. If all that was implemented the industry could develop a solution at competitive prices compared to the US.

In the following discussion Mr Siebel and Mr Allwright considered that there is neither demand nor need for consolidated pre-trade data. Mr Wohlenberg was happy with the existing best execution criteria. Mr Allwright thought that more clarity on the price elements of best execution would be welcome. Dr Lehalle explained that he rejected a mandatory consolidated tape because without a trade through rule it would not have the same importance as in the US.

Conclusions Day 1

Maria Velentza (European Commission) concluded the first day with the following summation.

Panel I: The EU proposals on OTC derivatives, central counterparties and trade repositories goes a long way towards improving the regulation of derivatives markets but the MiFID review has still a big role to play. The G20 commitments must be honoured and trading should be migrated to organised venues as far as possible. In addition, new and harmonised powers for regulators appear to be necessary to introduce an appropriate oversight regime for the derivatives area.

Panel II: Additional rules on transparency in equity and non-equity markets appear to be an essential part of the upcoming MiFID review. Doing nothing in this area cannot be an option after the financial market crisis. However, new regulatory requirements must be carefully calibrated in order not to damage the liquidity of markets. Extensive consultations will be carried out to achieve this goal and we as the Commission encourage all parts of the industry to submit their views. In substance, key areas for review seem to be the aligning and clarifying of the pre-trade waivers regime for shares and defining suitable trade-transparency regimes for other asset classes.

Panel III: Creating more efficient and dynamic markets through competition is one of the key elements of MiFID that must be maintained. Levelling the playing field among trading venues can contribute to that end and should be addressed in the MiFID review. Among the issues to be discussed in the review will certainly be the establishment of appropriate regulatory requirements for crossing systems. Also the impact of and risks associated with high-frequency trading seem to call for a regulatory response.

Panel IV: The protection of investors – retail investors in particular – has been one of the main goals of MiFID. We are aware that the industry had to make significant efforts to adapt to the MiFID requirements. Nonetheless, the financial market crisis has demonstrated that some additional adjustments need to be made. Hence, the review should aim to strengthen the investor protection rules as well as their enforcement.

Panel V: Given the current state of post-trade transparency data, a regulatory intervention appears to be necessary. Standards in all likelihood need to be implemented to harmonise data outputs and facilitate consolidation. In addition, Ms Velentza saw merit in further exploring the options of mandating a consolidated tape.

DAY 2

Maria Velentza (European Commission) opened the day by recalling the G20 agreement "to improve the regulation, functioning, and transparency of financial and commodity markets to address excessive commodity price volatility". Policy-makers are tasked notably with increasing oversight of commodity and futures markets, as well as related OTC markets, in order to improve their functioning for price discovery and hedging purposes. She noted that there is significant discord around the impact of increased investment flows in commodities and commodity derivatives on prices, and encouraged stakeholders to contribute their views on the required policy actions.

In his keynote speech, Michel Prada (Former Chair, AMF) said that recent developments demonstrate that the proper functioning of commodity derivative markets was at risk. As a result, public authorities and financial regulators had a duty to improve regulation and intensify oversight. Increased investment flows, the presence of new market participants, an increasing number of available derivative products, and the growth of alternative means of trading presented challenges for the existing regulatory framework and for price formation. He emphasised the need to avoid repeating some of the mistakes of the past. No party, instrument, or venue should be overlooked. Transparency and better information flows were critical. The EU should consider a dedicated framework of regulation for commodity markets, with comprehensive but proportionate requirements for all players, instruments, and trading platforms across both physical and financial markets. Supervision of day-to-day market functioning would reside with financial regulators, with various commodity authorities tasked with overseeing market fundamentals and implementing sectoral policy.

Panel I The outlook for global commodity markets

The moderator, Philippe Chalmin (University of Paris Dauphine), started the debate by presenting data showing that commodity markets are undergoing big changes with prices on average three times higher than in 2000. Commodity prices evolution is subject to the combined effects of supply, demand and speculation. Compared to financial products, commodities have a much longer cycle because of physical constraints on the production.

Christof Rühl (BP) said that it was difficult to substantiate that volatility in oil prices is due to speculators. The increase in financial transactions on commodities started before the hike in prices. Long positions in derivatives are said not to have driven prices or inventories up. Oil prices are fundamentally driven by supply and demand and there is a 5 to 6 months gap between the decisions by producers (with OPEC playing a central role) to increase or decrease output and the actual effect on prices or inventories because of this new production.

Myriam Vander Stichele (SOMO) insisted on the fact that the interests of consumers needed to be taken into consideration in the new regulation. In addition, a precautionary principle and the specific nature of commodity markets in everyday well-being should also be integrated. The new regulation needs to define position limits and the type of intervention allowed as well as increasing the information available to the public and to regulators.

Jorge Montepeque (Platts) said that markets are reacting to fundamentals and fiscal and monetary conditions and that they are efficient. He pointed out that the oil market is getting more global with new pipelines capacities being rolled out and increasingly influenced by the economic evolution of Asia and particularly China.

Jonathan Whitehead (Barclays) mentioned that the fundamentals in the evolution of commodity prices lie with the physical markets. Speculation was said not to impact on prices. Mandatory clearing will make hedging more difficult by requiring hedgers to hold and manage flows of cash. Standardisation has its limits and many products are actually not traded. Transaction reporting obligations and positions limits should be pursued with care to preserve confidentiality while allowing taking large positions for people who need them.

The subsequent discussion and questions from the audience raised various points from the issue of the lack of a clear legal definition of emission allowances to further questions on the exact role of speculation on the commodity markets. Various audience members challenged the assumptions and analysis of those panellists who claimed that the impact of speculation on prices is limited.

Panel II Global regulatory perspectives

The moderator, Don Casturo (Goldman Sachs), introduced the debate by saying that rules should be harmonised across financial and physical markets. Efficient markets require greater transparency to regulators whereas the adequate level of transparency towards the public should be properly analysed.

Wayne Smith (French AMF) recalled that these markets are extremely diverse which create challenges. He made three main recommendations to improve the regulation and oversight of commodity markets: (1) All market participants should be comprehensively regulated and supervised. This implies a narrowing of the MiFID exemptions for specialist commodity firms. Naturally regulators should acquire the necessary expertise to carry out proper oversight of these participants. (2) The G20 roadmap for OTC derivatives should be applied swiftly to commodity derivatives. Promoting trading on exchanges will bring the benefit of increased competition and fairer prices. (3) The transparency of the underlying physical market should be improved. In parallel the cooperation between regulators should be reinforced.

Alexander Justham (UK FSA) acknowledged that no single category of traders could be pointed out as being the main group influencing prices. Against that backdrop he gave the message that there are clear areas where regulation could be improved: (1) Transparency of trading towards regulators should be improved by implementing the G20 roadmap on OTC derivatives. (2) Market participants should have some regulatory net although proportionate to the risks they pose. (3) Position reporting should be introduced as it is key information for regulators and market participants alike to understand the dynamics of the market. (4) Regulators need a broader set of powers than narrowly defined position limits to tackle excessive price volatility, including powers to address attempts at market manipulation.

Johannes Kindler (Bundesnetzagentur) said that markets need to be better protected by: (i) improving transparency of the trading process, (ii) a proper regulatory coverage of OTC derivatives, and (iii) enhancing the oversight of these markets. The regulatory regime should take into account the whole market, both financial and physical as these markets impact each other. He also drew the attention to the importance of fundamental data transparency.

Sony Kapoor (Re-Define) stressed that commodity markets are fundamentally different from securities markets. Although these markets may not contribute to financial systemic risk, they contribute to food and basic well-being risk. Markets are there to serve genuine end-users, while intermediaries should remain liquidity providers. Investor-interest in commodities is misplaced. Hence he called for the EU to develop a different regulatory approach for commodity markets. Transparency is paramount in these markets as is the idea of positions limits, but these are just the start.

Rich Shilts (CFTC), speaking in a personal capacity, outlined the US regulation of commodity derivative markets and upcoming changes. The CFTC's market surveillance program draws on multiple sources of information among which one of the key tools are the highly confidential data on the activity and positions of individual traders derived from their large trader report system. The Dodd-Frank Act aims to extend the existing CTFC's oversight of exchange traded derivatives to OTC commodity derivatives. It also provides for the setting of position limits on all non-hedged positions for future contracts in physical commodities, including agricultural products, energy and metals with the aims of combating excessive speculation and manipulation, ensuring market liquidity and protecting the markets' price discovery function.

Panel III Users and producers

The moderator, Anthony Belchambers (FOA), introduced the debate by underlying that the role played by speculators in markets has both pros and cons. Pros come in the form of additional liquidity. Cons come in the form of short term price spikes and acceleration of price trends. In light of this, any regulatory intervention will need to be carefully considered and evidence-based. In addition it should be properly tailored to meet the specificities of the commodity markets. A one-size-fits-all approach with rules for banks spilling over to non-banks would be disproportionate. Finally enhancing risk management capabilities of market participants is as critical as building safer derivatives markets.

Yves Vercammen (ENI) said that the trading arm of ENI uses commodity derivatives to hedge their commercial and financial risks arising from their underlying physical activity. As a result their trading activity does not contribute to systemic risk. This is why he stressed the importance of taking the specificities of the commodity business when devising any regulatory rules. He gave the example of the accounting standards (more specifically IAS 32 & 39) as poor practice based on an assumption of "one size fits all". In terms of transparency any additional information made available should be relevant information which allows market participants to better understand the price formation process.

Paul Dawson (RWE) considered the main challenge to be transparency. Regulators do not have up to now the necessary information to understand what is happening in the markets. The forthcoming EU energy transparency and market integrity regime will bring significant benefits. It will consist of three main legs: (i) transparency of fundamental data, (ii) reporting of trades irrespective of where it takes place, and (iii) alignment of the standards for conduct and integrity with the financial markets standards. He did not think action beyond this tailor-made regime was necessary at this stage, saying that neither these markets nor the market

participants pose any systemic risk. In addition there is no interaction with retail investors. Hence the case to extend financial regulation to power and gas trading has still to be made. Lastly the focus should be instead on increasing competition in the physical markets. The current triangle of regulation the energy companies are subject to, i.e. financial, energy and competition is in itself a challenge.

Fausto Filice (Cargill) expressed the view that the system that exists today is not broken although it could be improved. The factors for efficient and well functioning futures markets are the following: (i) the size of the underlying cash market, (ii) the liquidity of the futures markets, and (iii) the convergence between the futures contracts and the underlying at the time of delivery. He added that convergence between futures and the underlying cash markets acts as a natural deterrent for long term speculators. With the reform of the Common Agricultural Policy, producers and consumers will have to adapt to the increased volatility in the physical markets. Efficient futures markets can help them to deal with this increased volatility. He was in favour of a certain number of regulatory measures to maintain the efficiency of the markets: (i) regulators and exchanges should fix the convergence problem by, for example, expanding the number of delivery points, (ii) the introduction of position limits for certain categories of market participants, and (iii) increasing transparency by the introduction for example of a US type of Commitment of Traders report.

Pekka Pesonen (COPA COGECA) said the he current reality for farmers and cooperatives of the physical markets has to be taken into account. Farmers are exposed to severe price volatility. Agricultural markets are connected to world markets which expose farmers to foreign exchange volatility. Instability in agricultural markets has repercussions on other EU stakeholders and industrial sectors. A key tool farmers have at their disposal to deal with this volatility and instability is the futures markets. However these markets should respond to the need of greater transparency. Comprehensive transaction reporting should be introduced. Information about the trading activity of different categories of traders should be made available. Farmers should also get direct access to the markets. Transparency would also be greatly enhanced if the EU had its own tool to analyse world supply and demand, improving the consistency and availability of fundamental data about the underlying physical markets.

In the ensuring discussion several questions were raised about the size and profitability of trading activities of large corporate end-users. The panellists concerned said that this financial information is publicly available but that it is very difficult to draw the boundary between hedging and speculative activities. Some transactions may not qualify as hedging transactions under the international accounting standards but still be backed by underlying physical assets. European Flour Millers meanwhile advocated for an exemption in favour of end users from the obligation to report to trade repositories as these deals do not contribute to systemic risk. The importance for the Commission to consult all interested parties as part of its work was also recalled.

Panel IV The road ahead for EU energy and emissions markets

The moderator, Simone Ruiz (IETA), opened the panel by mentioned three priorities in ongoing EU energy and emissions work: (i) securing conditions for businesses to continue to manage their production and carbon-related risks; (ii) adapting new regulatory requirements to the circumstances of the different commodities; (iii) streamlining reporting requirements to regulators.

Simon Smith (Shell) considered that many parts of the G20 derivatives roadmap were unsuited for commodity trading. He recalled the 2008 advice by EU securities and banking

regulators that commodity firms do not represent a source of systemic risk. He said that clearing was well-established in various commodity derivative markets, that Basel rules on capital were not adapted to the industry, and that position limits were not helpful. He did agree however that the various transparency developments, for example trade repositories, could help alleviate concerns over excessive speculation and that better data flow on fundamentals should be required in sectoral legislation.

Alexandre Marty (EDF Trading) said that power companies occupy a central role in electricity, gas, coal and emissions markets, where prices are closely interlinked. He underlined various specific features of emissions markets, for example their origin in political decisions, their dematerialised nature, and their high rate of central clearing. He said that more detailed information on fundamentals such as supply and demand of emission allowances would be welcome, and argued that hasty solutions for enhancing oversight and market integrity should be avoided. He mentioned that financial regulators could well play a bigger role in micro-level supervision, with energy regulators monitoring market fundamentals.

Fredrik Voss (Nasdaq OMX) commented that the basic principles for regulating different commodity derivatives should be the same, with sufficient latitude to take into account notably different physical delivery mechanisms. Liquidity in today's EU power and gas market was poor and more trading by new investors was to be welcomed in order to improve economic efficiency and price discovery. A major challenge today was improving competition in the physical market. Levelling the playing field for hedging between exchange-based and OTC instruments was welcome although he was sceptical about mandatory clearing.

Jeremy Elliott (ICAP) said that competition between commodity derivative trading venues was helping efficiency. For example electronic trading and central clearing were well advanced in energy and emissions markets, compared to some other derivative classes. He stressed that the focus today should be on increasing automation and further developing clearing, as well as setting up efficient trade repositories.

In the ensuing discussion, panellists were challenged on why the G20 roadmap on derivatives was inappropriate for commodity derivatives, why position limits shouldn't also apply, and how to ensure a level-playing field between different participants in commodity markets. They commented that position limits had not dampened volatility in the US, that a transparent subsidy constituted a better means of price control, and that all participants in commodity and commodity derivative market should be better identifiable in the future.

Conclusions Day 2

Maria Velentza (European Commission) concluded the final day of the review of MiFID and commodity derivatives by reiterating that measures designed for commodity derivatives markets should and will be an integral part of the MiFID review. She noted the widespread agreement regarding the increasing "financialisation" of commodity derivatives, that the implications of this beyond financial markets (e.g. global food markets) deserved study, and that if necessary, a preventive policy approach may be required. She concluded with the following summation. **Panel I:** Commodity and commodity derivative markets have experienced developments of late that do pose regulatory challenges. The regulators and supervisors responsible for these markets need to strike the right balance when dealing with these challenges to ensure functioning and sound markets. An enhanced cooperation of the various regulators and supervisors involved seems to be key.

Panel II: The message from the G20 is certainly very clear that action must be taken to tackle the volatility we experienced in commodity markets. Of course, the Commission will respond to this message swiftly and take appropriate regulatory action. We have a number of initiatives in the pipeline which will apply to commodity derivatives markets in particular. In the field of DG Markt Ms Velentza noted in particular the EMIR legislation, the PRIPS initiative and the reviews of MiFID and of the Market Abuse Directive.

Panel III: The European Commission is aware that commodity derivatives markets function to some extent in a different fashion from equity markets, therefore, solutions must be found that fit the characteristics of these markets. To that end Ms Velentza found the ideas and opinions expressed during the course of the day very helpful and said that the Commission is keen to continue the dialogue with all stakeholders also in the future.

Panel IV: Energy and emissions markets are also very specific in their functioning and the development of "tailor-made" regulatory solutions for these markets should be explored. For example, the emissions markets have a significant number of SME participants who need to fulfil their obligations in respect of submitting CO2 allowances. Imposing a wide array of the financial markets regulation upon them does not appear to be proportionate. However, market integrity needs to be upheld at all times. In so far as necessary, adequate supervisory tools should be developed to guarantee market conditions that benefit the European economy as a whole.

23. ANNEX 13: SUMMARY OF THE REPLIES TO THE PUBLIC CONSULTATION

The consultation ran from 8 December 2010 to 2 February 2011. We received around 360 replies from organisations and nearly 4000 replies from citizens, on two distinct issues.[481]

Details by stakeholder group

The summaries below cover the aggregate views of stakeholders across nine groups: (i) public authorities; (ii) banks, brokers and their trade associations (sell-side); (iii) asset managers, funds and their trade associations (buy-side); (iv) market operators and exchanges; (v) retail investor associations; (vi) non-financial corporates; (vii) academics; (viii) service providers; (ix) other (including issuers, NGOs, law firms etc.).

Public authorities (approximately 29 replies)

1. Align requirements for venues and introduce Organised Trading Facilities (OTFs) A small majority is in favour but respondents raise several concerns. Some have doubts about, at once, adding a new venue and minimising differences in requirements between them. Some of the latter did however consider increasing cooperation in market surveillance between venues to be desirable. One opposed it as impractical and another said this should be treated under MAD. Two respondents suggested subsuming systematic internalisers into the new OTF category. One opposed a general OTF category as well as clarifying that crossing cannot overlap with systematic internalisation and MTF-type multi-party interaction.

2. Mandatory trading of clearing eligible and sufficiently liquid derivatives on OTFs A small majority is in favour. One explicitly opposes mandates, and prefers targets. Another is against requiring eligible OTFs to be multilateral in character, prefers to consider standardisation instead of clearing-eligibility as a better basis, and suggests non-financial users should be exempt from any requirement.

3. Introduction of tailored regime for SME markets A small majority is against the introduction of a new SME segment. Two say it should only be under the MTF-category, not the regulated market category.

4. Authorisation of and increase in organisational requirements for all HFT firms Respondents are mostly in favour. One says authorisation should hinge on whether the HFT firm is a direct member of a trading venue or a user of direct market access. Another says only direct members who are HFT firms should be authorised.

5. Additional requirements for firms providing sponsored or direct market access The majority agree with the proposals. One respondent says each algorithm should be uniquely identifiable to the regulator via a code.

6. Reinforcement of organisational requirements for organised venues Respondents unanimously support the proposal.

7. Introduction of order-to-execution ratio There is no clear support for the proposal. The few replies received are evenly divided.

8. Harmonised application of pre-trade transparency waivers, reduction of post-trade delays and extension of transparency to shares traded only on MTFs or OTFs (including

new SME markets) A large majority support the proposals. Some do not agree with the proposal to publish remaining stubs of unexecuted large-in-scale orders or to consider actionable indications of interest as orders. One respondent prefers to abolish the reference price waiver. One respondent suggests further calibration of the transparency regime may be needed for SME markets.

9. Calibrated pre- and post-trade transparency regime for bonds, structured finance products, and derivatives The majority broadly agree on the post-trade transparency proposals, but some disagree with extending the requirements beyond clearing-eligible derivatives. Most disagree with devising pre-trade requirements for OTC non-equity markets. Two respondents propose to exclude all sovereign securities from the exercise, and another two to further differentiate between currencies within asset-classes. Some propose further liquidity measures such as frequency of trading, issuance size, and the number of participants as relevant triggers to include in any regime.

10. Unbundling of data, ESMA guidance on "reasonable price", introduction of Approved Publication Arrangements A large majority agree. One respondent signals support for applying similar provision to non-equities.

11. Consolidated tape by approved commercial provider(s) A majority agree. Two respondents prefer a public body, while another prefers a commercial entity chosen by public tender.

12. Mechanism for banning products, services or activities The majority support the proposals.

13. Reinforcement of oversight of positions in derivatives, including possible position limits The views are mixed with a small majority in favour. One reply doubts the ability of regulators to assume these tasks. Another urges caution before proceeding with this significant policy reorientation. One reply urges keeping management of positions as close to the relevant markets as possible to ensure flexibility, with limits as a conceivable option in low-liquidity or immature markets. One respondent says that the possible objectives given for position limits are all dealt with under other legislation, e.g. on market abuse, capital requirements, etc, and that any scope for limits should thus only apply in the case of speculative trading by unregulated entities.

14. Third country regime The majority is in favour of such a regime. One respondent signals the AIFM Directive as a model.

15. Common minimum rules for administrative sanctions and requirement for criminal sanctions The majority support the proposals. Two respondents does not support an EU-level framework for determining what constitutes a criminal act.

16. Extension of transaction reporting to all instruments admitted to trading on organised venues and all OTC instruments the value of which correlates with these, as well as commodity derivatives Respondents largely agree. Two oppose reporting for all OTC commodity derivatives, and one prefers to replace "correlates with" by "is dependent on". One respondent prefers to go further and require reporting of all financial instruments.

17. Require reporting through Approved Reporting Mechanisms (ARMs) and enable reporting of derivatives through trade repositories The majority agrees, but two respondents signal ARMs can't absolve reporting firms of their responsibility. Many also

stress that data flows under EMIR and MiFID will have to be identical for the proposal to be acceptable.

18. Direct reporting to ESMA after transition A small majority is against this proposal. Many point to recently incurred costs setting up existing reporting systems and call for cost-benefit data. Some signal reporting to home competent authorities only as an option.

19. Market operators to store order data Respondents unanimously support the proposals.

20. Market operators to report on behalf of their non-MiFID members Respondents unanimously support the proposals

21. System of position reporting by types of traders on commodity derivative markets The majority are in favour. One respondent specifically urges adopting the US categorisation, while another stresses the need for close alignment, possibly via IOSCO.

22. Narrow scope of commodity derivative exemptions With one exception, respondents unanimously support the proposals.

23. Classify emission allowances as financial instruments There is no support for the proposal. Most urge further study.

24. Require the application of key MiFID principles for national Article 3 regimes With one exception, respondents unanimously agree.

25. Extend MiFID conduct of business and conflict of interest rules to structured deposits With one exception, respondents unanimously agree.

26. Narrow list of non-complex products, specify when investment advice is independent, and require annual assessment of the advice provided A majority agree. Some remark however that an obligation of ongoing advice blurs the distinction between portfolio management and investment advice. Many say that it should remain an option. Some do not agree with the proposals for a differentiation of advice as either independent or not, while one respondent prefers a clearer differentiation. One reply warns against harming the UCITS brand with any distinction of complex/non-complex UCITS, while another prefers to delete the execution-only regime altogether.

27. Apply general conduct of business principles between eligible counterparties and exclude municipalities from the list of professional clients A substantial majority agree. One respondent prefers to leave the classification of municipalities to national discretion.

28. Reinforce information obligation in relation to complex products and strengthen associated reporting requirements A small majority of respondents agree. Those in favour specify that they prefer it apply only to retail structures products (2 replies) and not to eligible counterparties (2 replies). One reply prefers a reporting frequency of six months. Another stresses that a risk/gain profile and periodic valuations may be too static to genuinely benefit the investor. Those against refer to the administrative burden.

29. Ban inducements for independent investment advice and portfolio management A substantial majority agree in the case of portfolio management. Those who agree with the differential labelling of independent advice support the proposal in this case as well.

30. Require trading venues to publish data on execution quality and improve information to clients on best execution A majority agree. Those who don't, say existing providers of data analytics, combined with the obligations incumbent on investment firms, are sufficient.

31. Strengthen role of directors in relation to internal control functions and when launching new products and services A substantial majority agree. Those who don't, nonetheless generally support improving internal reporting and governance. Two respondents disagree with any new requirements for launching new products. Another does not consider that all board-members have to have sufficient experience in financial services. Finally, one reply suggests public officials should not be able to take up a board seat before one year after leaving office.

32. Require specific arrangements for portfolio management and underwriting A small majority disagree. One reply doesn't wish to create legal uncertainty by singling out portfolio management in terms of organisational aspects, while another would prefer Level 3 guidance to any new requirements on underwriting.

33. Minimum regime for telephone and electronic recordings With two exceptions, respondents unanimously agree.

Banks, brokers and their trade associations (approximately 85 replies)

1. Align requirements for venues and introduce OTFs A small majority agree. Respondents generally ask for more clarity on the scope of an OTF and suggest various approaches to trim it down. Many underline that OTFs should only encompass trading systems and not systems that merely confirm trades post execution. Some propose that a more rigorous application of existing categories is more appropriate. Many oppose a unique identifier for crossing networks and disagree that execution against proprietary orders or third-party access should compel the application of MTF or SI requirements. Others however support this and say this would dismiss the need for an OTF category. Some even support a threshold upon which the OTF would convert to an MTF, at e.g. 3-4% of global turnover for specific shares within a certain timeframe. There is broad support for introducing more cooperation between venues, but only tentative agreement on the alignment of requirements of venues.

2. Mandatory trading of clearing eligible and sufficiently liquid derivatives on organised venues A majority disagree. Many argue against all aspects of the proposals, and in favour of targets set by authorities. They see few benefits, and only drawbacks. Some support the proposals, provided that voice execution remains an option within OTFs, notably as regards transparency requirements. Many underline that there are differences between derivatives eligible for trading and standardised derivatives. They stress that an evolution of liquidity over the life of the instrument, suitable exemptions for block trades and certain participants (non-financials) are needed. Many comment that flexibility in the choice of trading venue should be driven by both the type of contract and the type of customer.

3. Introduction of tailored regime for SME markets Views are divided. One respondent says an SME label cannot assure investors if disclosure standards and listing requirements are reduced. They say we should not compromise quality and standards associated with regulated markets and MTFs. They also comment that the proposal is very unclear. Various respondents remark that MiFID is not the right tool to alleviate administrative burden for SMEs.

4. Authorisation of and increase in organisational requirements for all HFT firms A majority are in favour. One respondent says HFT firms should be defined exclusive of the services provided by brokers. Another says HFT should be defined more specifically than as a subcategory of automated trading. Many disagree with requiring liquidity commitment akin to that of market makers and minimum duration of orders. As an alternative, some however suggest gradual increases in costs for cancelling orders.

5. Additional requirements for firms providing sponsored or direct market access Respondents largely agree.

6. Reinforcement of organisational requirements for organised venues Respondents largely agree. Some signal that the requirements should not be overly prescriptive and venues should have flexibility in applying them.

7. Introduction of order-to-execution ratio Few agree. Many say more study would be required before such a measure is imposed. Difficulties would emerge from HFT firms accessing markets via multiple brokers. Some suggest that venues should be left to determine the specifics of any ratios, or that they could gradually increase costs for cancelling orders in order to discourage abuse usage of systems.

8. Harmonised application of pre-trade transparency waivers, reduction of post-trade delays and extension of transparency to shares traded only on MTFs or OTFs (including new SME markets) A small majority agree. Many signal concerns with reducing post-trade delays and keeping current large-in-scale thresholds. Some oppose large-in-scale order stubs being made transparent and a minimum order size for the reference price waiver. Some oppose extending transparency to MTF/OTF-only shares.

9. Calibrated pre- and post-trade transparency regime for bonds, structured finance products, and derivatives Respondents mostly disagree. There is widespread opposition to any pre-trade requirements especially for securitised products and derivatives (different prices, terms and overall low levels of liquidity), except possibly for issues actively traded by retail investors. They refer to existing levels of pre trade data already available for vanilla and liquid products. Many consider that asset-specific post-trade calibration should take frequency of trading and issuance size into account, and apply to confirmed trades only. Others consider that the priority would be to allow for significant delays in the case of large trades, as well as avoid disclosing trade sizes above certain limits. Others prefer aggregate disclosure only. Many signal difficulties and significant work in devising an overarching transparency requirement for non-equities at Level 1, with asset-specific, highly calibrated regimes in Level 2. Many urge a phased approach. Various respondents comment that imposed transparency is only needed when there is retail participation and others say that it would even hurt retail investors in markets where they are present.

10. Unbundling of data, ESMA guidance on "reasonable price", introduction of Approved Publication Arrangements Respondents mostly agree. Some however doubt whether unbundling will reduce costs. Some support mandated publication by APAs in non-equities also. Others see no need to define "reasonable" further. Some urge to avoid the creation of new APAs and prefer to leverage upon existing arrangements (e.g. regulated markets). Isolated replies support making raw data available for free, with only APAs able to charge reasonable fees for processing it.

11. Consolidated tape by approved commercial provider(s) A majority agree. Some however doubt whether the incentives are strong enough to sustain commercial model. Many comment that governance and avoidance of monopoly power are more important than the nature of the entity. There is thus some support for a public entity or a public tender procedure but most support a single commercial organisation.

12. Mechanism for banning products, services or activities Respondents very largely disagree. They say the powers are not circumscribed clearly enough, and would give rise to legal uncertainty. Many remark that existing powers of regulators and ESMA suffice. Some insist that any ban be triggered only in the event of actual investor harm, and that in any case it should be at European level. Most criticise the ambiguity of safeguarding investor protection in this respect. All are against banning OTC derivatives eligible for clearing but not offered by a CCP.

13. Reinforcement of oversight of positions in derivatives, including possible position limits Almost all respondents disagree. Many support the views of the UK Treasury and UK FSA in favour of a position management approach. They remark that limiting activity in one part of the market is artificial and leads to regulatory arbitrage. Many urge considering soft position limits (i.e. information thresholds) instead, and comment that positions should already be supervised under existing prudential rules

14. Third country regime The views are split with a small majority against. They caution against a strict equivalence regime. Many also insist that great attention needs to be devoted to this issue because of possible increased competition with no reciprocity

15. Common minimum rules for administrative sanctions and requirement for criminal sanctions Respondents mostly agree.

16. Extension of transaction reporting to all instruments admitted to trading on organised venues and all OTC instruments the value of which correlates with these, as well as commodity derivatives Respondents largely agree. However many say the requirements should be limited to instruments solely traded on MTFs/OTFs and exclude non-securities derivatives and those with index underliers. Many comment that position reporting is far more useful for commodity derivatives and strongly oppose an extension of transaction reporting. Most respondents urge a central list of reportable instruments, clarity on technical requirements such as instrument and venue codes, and replacing "correlate" with "derived from or dependent on".

17. Require reporting through Approved Reporting Mechanisms and enable reporting of derivatives through trade repositories Respondents largely agree. Many support maximum synergies with trade repositories. Others oppose extending ARM regime to existing practices.

18. Direct reporting to ESMA after transition Many theoretically agree, but doubt will be more efficient in practice. Possible high transitional costs and a deterioration of service are noted.

19. Market operators to store order data Respondents are slightly against.

20. Market operators to report on behalf of their non-MiFID members Respondents mostly agree. Some express doubts about practical and cost implications.

21. System of position reporting by types of traders on commodity derivative markets A majority agree. Some say that a classification by EU-regulatory category is not watertight and suggest the following instead: producers, consumers/transformers, dealers, liquidity providers. Some remark that not all affected venues will have the required position information today. Isolated comments are very critical and think any classification will result in poor generalisations and confusing outcomes. One banking association suggested that ad hoc directive would probably be the best way to address problems identified in the commodity markets.

22. Narrow scope of commodity derivative exemptions A majority agree. Some however comment that there is a risk in driving smaller participants out of the market. Others point out that it could force some exempt entities previously eligible for ECP treatment into the professional client regime, with implications for who will accept to trade with them.

23. Classify emission allowances as financial instruments Virtually all are against. Some refer to the conclusions of the Prada report in this respect.

24. Require the application of key MiFID principles for national Article 3 regimes A majority agree. Some signal the need for proper cost-benefit analysis.

25. Extend MiFID conduct of business and conflict of interest rules to structured deposits A majority agree, but comment that this will entail some reorganisation within credit institutions.

26. Narrow list of non-complex products, specify when investment advice is independent, and require annual assessment of the advice provided Views are split. Many raise strong concerns over blurring of distinct services of advice and portfolio management, and possible new costs for clients from ongoing suitability services. Some remark that differentiation of advice should only be in relation to retail clients. Some doubt that differentiation can be adequately defined (e.g. what is a sufficiently large number of instruments), will be accepted by clients, or would deliver benefits to investors. Many recommend to await IOSCO work on the topic, and to avoid defining a list of complex products in Level 1 (leaving it to ESMA to make it more flexible). Many comment that risk level and not complexity of a product is a more valid distinction.

27. Apply general conduct of business principles between eligible counterparties and exclude municipalities from the list of professional clients The majority agree. However, some urge more study on ensuring municipalities still have sufficient access to financial markets and counterparties. Many resist the ideas to increase protections for professional clients or eligible counterparties. One reply comments that in their experience municipalities have never requested downgrading to retail, only sometimes upgrading to eligible counterparty status. Many comment that what constitutes a municipality differs across the EU. One reply notes that a population and budget threshold (e.g. 25k/€40k) could qualify them as professional.

28. Reinforce information obligation in relation to complex products and strengthen associated reporting requirements Most respondents disagree. They say information should only be made available to clients, not provided. The right for investors to request information is better met on the basis of demand of clients to firms than by regulation. Providing more information would run the risk of overloading clients and encouraging short-term investment horizons. Some say that PRIPs work should take precedence over this.

29. Ban inducements for independent investment advice and portfolio management Views are split. Many say that more clarity on what types of payments actually induce a conflicting situation should be prioritised. Many disagree with entirely prohibiting payments to advisors when these "facilitate" fee-based advice. Others are against any differentiation in advice and assuming that the best interests of clients cannot be reconciled with inducements. Some comment that commission-based advice is preferable for clients compared with fee-based advice as they only incur costs if they actually choose to invest.

30. Require trading venues to publish data on execution quality and improve information to clients on best execution Most respondents oppose. They say it is not necessary and that sufficient information already exists. Any system should ensure that price is a prominent but not the only measure of execution quality. Some say that more information on execution policies should be upon request only, lest clients are overloaded.

31. Strengthen role of directors in relation to internal control functions and when launching new products and services Views are split. Many say that distinctions between the involvement of the supervisory and the management board should be clarified. They underline the need to avoid duplication with other EU corporate governance principles.

32. Require specific arrangements for portfolio management and underwriting Respondents mostly disagree. They urge avoiding any legal uncertainties in the case of portfolio management. Many say that satisfactory rules already exist for underwriting and that flexibility shouldn't be hindered.

33. Minimum regime for telephone and electronic recordings Most respondents agree. However many prefer a retention period of 6 months. Those against question the value of recordings for detecting abuses and refer to privacy concerns with recording personal information.

Asset managers, funds and their trade associations (approximately 55 replies)

1. Align requirements for venues and introduce OTFs Respondents broadly agree with the extension of the admission to trading concept but ask for clarification. In relation to OTFs the buy side, in principle, appreciates the rationale of introducing a future-proof definition into MiFID, however is concerned that it could be too wide. Greater clarity is asked for also in relation to BCNs and the requirements applicable and other potential sub-regimes for other classes of financial instruments. Reasons that investors use lit and non-displayed venues (market impact suffered when trading on lit venues is considered as not acceptable) and the need for flexibility should be taken into account. There is general agreement that a separate OTF investment service should be created which can be passported. The majority of respondents rejects the idea of a threshold triggering a conversion into an MTF. Respondents widely agree with an alignment of regulatory requirements for RMs and MTFs and with extended cooperation requirements for trading venues.

2. Mandatory trading of clearing eligible and sufficiently liquid derivatives on organised venues Views are mixed with some in agreement with the proposals and others strongly opposed. Respondents vouch for continued flexibility in the use of derivatives (ie oppose mandatory exclusive trading on organised venues), favour a gradual approach and are concerned about an increase in costs.

3. Introduction of tailored regime for SME markets From the few responses received agreement to stimulating SME markets however little conviction that a specialised regime is needed or beneficial. Same standards of investor protection should apply as for other sectors.

4. Authorisation of and increase in organisational requirements for all HFT firms Overall support but firms urge to appropriately calibrate definition.

5. Additional requirements for firms providing sponsored or direct market access The majority of respondents support the proposals.

6. Reinforcement of organisational requirements for organised venues Strong support for measures suggested in respect of risk controls, particularly circuit-breakers. Also non-discriminatory access to co-location services is strongly supported while the views are mixed on minimum tick-sizes.

7. Introduction of order-to-execution ratio, [also minimum resting period and requirement to provide liquidity] Views are mixed regarding the imposition of a requirement to provide liquidity for HFTs. Some respondents see the point in an equal treatment of market makers and HFTs while a majority rejects such a requirement as inappropriate. A large majority rejects a minimum resting period for orders and most firms also are not convinced of an order-to-execution ratio citing concerns regarding a widening of quotes and a decrease in liquidity.

8. Harmonised application of pre-trade transparency waivers, reduction of post-trade delays and extension of transparency to shares traded only on MTFs or OTFs (including new SME markets) Firms by and large support the approach to pre-trade transparency but emphasise the importance of being able to execute orders in dark pools to manage market impact und achieve best execution. The right balance between transparency and protecting proprietary order information needs to be struck. A slight majority agrees with making IOIs actionable while a majority disagrees with disclosing stubs. Very limited feedback on embedded fees and minimum order size for waivers. Strong support for leaving pre-trade threshold untouched. Split views on reducing post-trade delays with some firms warning specifically that costs on reducing the delay from 3 to 1 minute outweigh the benefits. Of the limited responses received firms favour extending transparency to shares traded on MTFs only.

9. Calibrated pre- and post-trade transparency regime for bonds, structured finance products, and derivatives Most firms are concerned about the impact of the proposed measures on liquidity, price formation, costs and market efficiency and demand a calibrated and proportionate approach taking into account the specificities of all asset classes as well as factors like size and time of issue (eg for bonds). Firms disagree with a requirement to make all quotes public. If quotes need to be good to everybody below a certain size they fear detrimental effects on banks risks and liquidity.

10. Unbundling of data, ESMA guidance on "reasonable price", introduction of Approved Publication Arrangements The firms are very supportive of most of the intended measures but want to avoid an increase of costs for investors due to charges of APAs. For non-equities firms warn that collecting data will be much more difficult than for equities and ask the Commission to be careful regarding methods and costs.

11. Consolidated tape by approved commercial provider(s) Firms almost unanimously support the establishment of a consolidated tape while preferences regarding the type of tape are almost evenly split between the public utility model (option A) and the commercial provider solution (option C). There is almost no appetite for a pre-trade tape and firms are split regarding the usefulness of a tape for non-equities.

12. Mechanism for banning products, services or activities Contributions range from expression of concern (or even opposition) to recommendation to establish proper and careful criteria and procedures for any ban. Generally no support for ban of OTC derivatives that should be cleared but are not. One respondent warns against regulators vetting products.

13. Reinforcement of oversight of positions in derivatives, including possible position limits Few answers mostly disagreeing with the introduction of any hard position limits. Suggestion that position management or exposure management regime would be better. One respondent indicates any limits to be simple (one limit applicable to all), with few exemptions for hedging (but avoiding any concentration risk); net open interest would be appropriate. Another suggests spot month limits as tool to prevent market manipulation. Few respondents indicate contracts with narrow supply (eg platinum) or with delivery on the physical side, soft agricultural commodity and OTC derivatives as more prone to market manipulation.

14. Third country regime Few answers mostly supporting the current system and not introducing an equivalence regime. If introduced, it should be a broad substantive and not strict equivalence regime.

15. Common minimum rules for administrative sanctions and requirement for criminal sanctions Few answers. Support to consistent sanctions but not levelled to the highest existing level. One suggests example of Australian "enforceable undertakings" (settlements alternative to court action). Criminal sanction to be left to MS. Limited support for whistleblowing; most require full consultation, calibration and application across all sectors. Support for publication of sanctions but with possibility for supervisors to issue private sanctions and to withdraw previous publications.

16. Extension of transaction reporting to all instruments admitted to trading on organised venues and all OTC instruments the value of which correlates with these, as well as commodity derivatives Support for broad scope. A few recommend portfolio managers to be excluded. Others request list of instruments covered (in line with article 11 Implementing.Regulation). Alignment with MAD needed.

17. Require reporting through Approved Reporting Mechanisms and enable reporting of derivatives through trade repositories Few answers. Support to the proposals.

18. Direct reporting to ESMA after transition Few answers. Divided views. Recommendation to avoid duplications.

19. Market operators to store order data Few answers. Support for the proposal.

20. Market operators to report on behalf of their non-MiFID members Few answers. Support for the proposal.

21. System of position reporting by types of traders on commodity derivative markets There are concerns that information to the public even on an aggregate basis may not guarantee the anonymity of big players in the market and there may be adverse effects on liquidity and proprietary strategies. Concerns are also voiced regarding categorisation by regulated entity as some firms may fall into more than one category.

22. Narrow scope of commodity derivative exemptions The few respondents for these questions all favour a level-playing field for all market participants.

23. Classify emission allowances as financial instruments Basically just one response received which was in favour.

24. Require the application of key MiFID principles for national Article 3 regimes Broad support. One respondent proposes a quantitative threshold for exempted entities; another questions the application of best execution requirements.

25. Extend MiFID conduct of business and conflict of interest rules to structured deposits Broad support. Some suggest the extension of MiFID to any Packaged Retail Investment Products (PRIPs) (few also mention personal pension products).

26. Narrow list of non-complex products, specify when investment advice is independent, and require annual assessment of the advice provided

No support for abolition of execution-only regime. Broad support for narrowing and clarifying list of non-complex instruments but only few respondents support split of complex/non-complex UCITS while most disagree (in the light of strong UCITS framework and also not to weaken the UCITS "brand" in third countries). Few respondents recommend any shares in (non UCITS) investment funds to be treated as non-complex, similarly to other shares.

General support for measures aimed at strengthening advice and clarifying its basis. However, mixed views about the opportunity to label part of the advice as "fair and independent" (as opposed to "restricted" or "(multi-)tied") and about the ban of inducements for it (also considering clients' unwillingness to pay for advice). Prevailing support to written specification to clients about underlying reasons for the advice (to be adapted, however, to different channels). Mixed views on on-going advisory services; many recommend to leave the choice to clients and to require intermediaries to specify whether they offer this service; others underline the cost of this option that could be remunerated via continued payment of retrocessions; others disagree with regular reporting to clients about financial instruments; others mention the blurring line between this and portfolio management or suggest to classify this as a new service. Some emphasize the need of harmonised approach within PRIPs; also the issue of standardisation of disclosures is mentioned.

27. Apply general conduct of business principles between eligible counterparties (ECPs) and exclude municipalities from the list of professional clients General acknowledgement that current system works. Prevailing support for exclusion of municipalities from ECPs and professional clients per se. Prevailing support on extension of high-level principles to ECPs. A few respondents claim the right for portfolio managers to require/obtain (and not only request) classification as professional or retail clients (especially for best execution purposes).

28. Reinforce information obligation in relation to complex products and strengthen associated reporting requirements Mixed views. On information prior to the transaction, many request coordination with PRIPs to make sure that the Key Investor Information Document (KIID) is sufficient. Others mention the need to involve product providers in complying with any such obligations (one respondent mentions that issuers should provide certain data free of charge). Clarifications are requested about technical details and some express concerns about risk of confusion due to excessive information. One respondent mentions the inability of some intermediaries, emerged from the crisis, to understand product they sell and consequently welcomes an obligation to provide ongoing reporting (but on an annual basis, except when there has been a significant change in the structure or expected outcome of the product). Few answers, normally negative, to the extension of information requirements to ECPs.

29. Ban inducements for independent investment advice and portfolio management Disagreement, with some exceptions, with proposals. As to portfolio management, some mention, however, the possibility to require rebate to clients of inducements received (or to allow clients' consent to commissions paid to portfolio managers). Others request any ban not to include soft commissions. As to advice, few support ban for any advice, not only independent; others underline clients' unwillingness to pay fees and risk for small firms to exit the market. Some underline the need for horizontal approach across different products/sectors. Two respondents suggest the ban of (certain) inducements for all investment services.

30. Require trading venues to publish data on execution quality and improve information to clients on best execution Prevailing support concerning publication of data on execution quality by trading venues (some, however, mention that data seem already available from commercial providers). Prevailing support for clearer, more informative and more standardised execution policies; a few, however, underline that retail clients often would not be interested or not able to understand them.

31. Strengthen role of directors in relation to internal control functions and when launching new products and services General support for the proposal to strengthen fit and proper criteria and internal functions (some suggest, however, that flexibility for internal functions should be ensured, including involvement of the compliance function in handling complaints). Mixed view on organisational requirements for launch of products and services.

32. Require specific arrangements for portfolio management and underwriting Prevailing support for portfolio management. A few answers, with prevailing negative views, for underwriting.

33. Minimum regime for telephone and electronic recordings Broad support (with few exceptions). Some mention need to avoid duplications and that portfolio managers should not be included. Many believe 3-years retention period is too long.

Exchanges and market operators (approximately 30 replies)

1. Align requirements for venues and introduce OTFs The majority reject the OTF concept and recommend sticking to the existing MiFID categories (concerns re level-playing field, more fragmentation, lowering of standards, unnecessary complexity, and possibility for regulatory arbitrage). Some supported the new category but thought it needed to be more clearly defined and sought greater clarity about what brokerage activity the new category would apply to. A majority of respondents did not support thresholds for OTFs, saying instead that there should be a "functional approach" to classifying new venues.

Alignment of requirements for MTFs and RMs is widely supported as well as more cooperation between trading venues. A number of respondents pointed out that MTFs are not homogenous. Four broad groups were identified. It is the ones trading blue chips where treatment needs most to be aligned. But for others it is not necessarily proportionate to simply align all requirements with RMs. A number of exchanges expressed concerns about free riding by other MTFs and argued that exchanges undertake a number of costly or low margin activities that are not undertaken by an MTF. Many exchanges also expressed concern about what they saw as a high level of OTC trading. In relation to cooperation some raised concerns that this should not create practical problems. For example, trading halts should not be required to be notified across EU every time they occur. Confidential commercial information should not be required to be disclosed.

2. Mandatory trading of clearing eligible and sufficiently liquid derivatives on organised venues Views are mixed with a majority of operators strongly in favour of mandating trading on organised venues mentioning the benefits of reducing systemic risk and breaking-up vested business interests of parties involved for trading to remain OTC. Other operators question whether a reduction of systemic risk will be achieved and whether platforms can generate sufficient liquidity if platform trading does not reflect customer needs. A number of regulated markets argued that trading should only be on regulated markets or MTFs. They argued that venues should be multilateral in nature. Other supported a more flexible approach. Suggestions of derivatives suitable for trading on OTFs included credit derivatives, equity options and contracts, fixed income options and futures, interest rate and foreign exchange contracts and electricity contracts, all plain vanilla contracts and look alike contracts and CFDs. But many stated that products that are highly customised are not suitable for trading on an organised trading venue. One venue suggested that if an OTC derivative was "clearing eligible" then that should be sufficient to require trading on an organised trading venue. It is not necessary to apply any liquidity test as by definition to be clearing eligible instrument must be relatively standardised and capable of being valued on a continuous basis.

3. Introduction of tailored regime for SME markets Opinions range from strong opposition (concern that quality label of RM deteriorates) to support for the idea. A majority was not convinced about the benefits for smaller issuers of a new regulatory regime for SMEs. They were concerned that a new regime risks damaging an already well functioning market structure. This is because the existing categories provide sufficient flexibility but any new category would by definition be more restrictive and it would be difficult to come up with one set of criteria that would not damage current SME markets. Those supporting the Commission proposal in principle believe that in practice it will not be possible to come up with uniform criteria. It was also pointed out that there seems to be little demand by SME issuers for passporting. Operators think that to make any initiative work other factors need to be taken into consideration (tax incentives, willingness to provide liquidity by intermediaries).

They ask for flexibility to remain for platforms operating under national standards (use of national accounting standards). A number of respondents suggested an industry working group (consisting of exchanges, investors, issuers and advisers) should be set up to look at way forward for SMEs. This should consider how to widen the universe of investors that support SMEs in order to drive liquidity, incentivise a wider set of analysts and intermediaries to focus on SMEs and ultimately reduce the cost of public equity capital for this set of issuers. There were very divergent ideas about how an SME could be defined with various respondents suggesting that any attempt would be too restrictive.

4. Authorisation of and increase in organisational requirements for all HFT firms

5. Additional requirements for firms providing sponsored or direct market access

6. Reinforcement of organisational requirements for organised venues Almost all respondents commented that HFT has had positive effect on markets or that there is no evidence that HFT is causing detriment to the market. Views are mixed on the definitions on HFT and the authorisation requirement (a majority supports the latter) while operators widely support non-discriminatory co-location offerings and imposing specific risk controls on firms and platforms. They warn against being overly prescriptive and while many operators support the use of circuit-breakers some would prefer measures such as market-wide stock-by-stock price limit regimes or pre-trade risk limits. There were polarised views about whether circuit breakers should be harmonised or left to individual venues to determine. Regarding tick sizes most operators are against regulatory measures and feel this should be left to competition while a minority would support developing a regime in cooperation with the industry.

7. Introduction of order-to-execution ratio, [also minimum resting period and requirement to provide liquidity] A majority of operators opposes these measures citing concerns about liquidity, appropriate risk management, market quality and a possible penalising of less liquid stocks (where due to a stock being thinly traded the order-to-execution ratio may be high). Requiring resting times in the order books was widely rejected as it was stated that this would have a dramatically negative effect on price formation. It would lead to wider spreads to compensate increased risk and would lead to liquidity moving to opaque markets. Some responses were more supportive of order to transaction ratios. Although a majority pointed out this measure was impractical as it would be difficult to prescribe a ratio for all instruments. Some argued that limiting ratios of orders could also have some unintended negative effects. For example, it may encourage participants to generate additional trades for the purpose of reducing the ratio.

8. Harmonised application of pre-trade transparency waivers, reduction of post-trade delays and extension of transparency to shares traded only on MTFs or OTFs (including new SME markets) Where views are split in this area it is pretty much between the traditional exchanges on the one and the operators of alternative venues on the other hand. On the pre-trade waivers the former support more consistency while the latter question the necessity to do anything and emphasise the importance of retaining a principles-based approach. Some exchanges favour displaying stubs while MTF operators and other exchanges are concerned about an increase in trading costs. Some exchanges favour a minimum order size for the reference price waiver with MTFs in opposition. Exchanges favour keeping the current thresholds for the LIS pre-trade waiver while MTFs consider the threshold as being too high. Large majorities are supporting treating IOIs as orders, the prohibition for embedding fees and also reducing post-trade delays with some being concerned about

reporting manual trades inside one minute. Almost all agree that transparency should apply to "equity like" instruments. A number of respondents opposed requirements being applied to UCITS as these prices are negotiated on their daily NAV and not through supply and demand. A majority of respondents supports transparency for shares traded on MTFs only while there is little support for a specific SME regime.

9. Calibrated pre- and post-trade transparency regime for bonds, structured finance products, and derivatives Respondents are generally in favour of the concept with some exchanges being concerned that limiting transparency requirements to bonds with a prospectus or admitted to trading would serve as a disincentive for publishing a prospectus and admitting such bonds. Therefore they want the requirements to apply to OTC bonds as well. Almost all stressed that requirements must be individually calibrated to different instruments. Some are against pre-trade transparency in the OTC space due to concerns regarding front-running and generally applying something meaningful. For pre-trade transparency to apply to these products for some business models quotes may need to be indicative rather than firm. A number of venues suggested criteria for determining whether pre-post trade transparency should apply.

10. Unbundling of data, ESMA guidance on "reasonable price", introduction of Approved Publication Arrangements Respondents strongly favour the introduction of APAs and the proposed criteria for establishing them. The majority support further standards to address the quality, availability and consistency of data. Some respondents voice concerns regarding mandating formats by legislation. Almost all respondents agreed with proposals for unbundling of trade data and making data free after 15 minutes. Views are mixed on an application of an APA regime to non-equities where some respondents suggest doing this at a later stage. The proposals on reducing the cost of data are welcomed but are considered insufficient by one respondent. On disaggregation of data views are mixed with some respondents strongly in favour with others concerned about additional costs. Strong views were expressed regarding the reasonable cost of data with some respondents vigorously demanding a definition and strict enforcement of reasonable costs with others strictly opposed demanding to leave the setting of costs to market forces.

11. Consolidated tape by approved commercial provider(s) Views are split along the lines of exchanges opposed and MTF operators in favour of the introduction of a consolidated tape. Exchanges do not consider a tape as necessary, economically viable, an outdated concept and creating a single point of failure. There were also some concerns expressed that the proposal was unclear about the main issue which is who would bear the cost of a consolidated tape under options A and B. Option C was most supported as it allows competition and innovation. Little value was seen by the exchanges in a pre-trade consolidated tape as prices would not be actionable, so it will only create confusion and it would not be viable due to latency issues. Most thought that given the lack of conformity for non-equities transparency, they see even less feasibility of a consolidated tape in this area. The MTF operators consider a consolidated tape as necessary and by majority favour Option A or B. MTF operators also cautiously support a pre-trade tape for equities while there seems to be no appetite for a non-equity tape.

12. Mechanism for banning products, services or activities Some support based on the provision of clear criteria and proper analysis before taking a decision with others thinking that banning should be approached with great caution. Also some respondents agreed that CCPs not accepting a product for clearing could be taken as an indicator although such a decision may not always be due to excessive risks associated with the product as other

considerations play a role as well. Others held the banning of uncleared OTC derivatives to be the wrong approach. Incentives should be used instead.

Most thought that banning should be approached with great caution. It should only be in response to specific and demonstrated market failure. If banning is provided for it needs to be coordinated. One respondent referred to the FSA paper on product intervention sets out some useful criteria. Banning of uncleared OTC derivatives was argued by a number of respondents to be the wrong approach. Incentives should be used instead.

13. Reinforcement of oversight of positions in derivatives, including possible position limits A number of responses express a preference either for position management or support leaving the setting of position limits to exchanges. Many respondents argued that breaking down positions by type of entity and also breaking down positions between hedging and speculation is not practicable and will be misleading. It is also very difficult in practice to adopt a common client identifier system. Several made the point that position reporting is important but needs to cover OTC transactions.

14. Third country regime There were limited responses on this issue and those responses diverged. Some supported development of a third country regime. Others were concerned about a "strict equivalence" test for third country firms in the EU. This could be viewed as protectionist leading to retaliation in third countries threatening access of EU firms. Some rejected an EU regime and Member States should rather maintain the ability to grant access to 3rd countries.

15. Common minimum rules for administrative sanctions and requirement for criminal sanctions There was some support for common rules in this area.

16. Extension of transaction reporting to all instruments admitted to trading on organised venues and all OTC instruments the value of which correlates with these, as well as commodity derivatives A number of respondents stressed that we need to be clearer about the purpose of transaction reporting before extending scope. Transaction reporting should only be of information that is necessary for regulators and can be analysed. There is a risk of flooding regulators with information that is not useful. Before extending the scope it must be considered whether there is a clear regulatory reason for seeking transaction reports for an instrument. For commodities derivatives, a majority of respondents expressed the view that position reporting is the correct tool to monitor market abuse and not transaction reporting. Transaction reporting should only apply to products which need to be monitored on a transaction by transaction basis. Therefore it is a mistake to require transaction reporting rather than position reporting for commodity derivatives. Others also expressed doubts about whether a harmonised transaction reporting regime for commodity derivatives not possible given their diversity. One respondent specifically criticised an extension to instruments the value of which correlates with admitted instruments as disproportionate. Most respondents agree with proposal to extend transaction reporting to depositary receipts.

17. Require reporting through Approved Reporting Mechanisms and enable reporting of derivatives through trade repositories Most respondents agreed that ARMs have the potential to enhance the quality and reliability of data. Most agreed with the possibility of reporting through trade repositories but had concerns about such reporting leading to double

reporting. Most agreed trade repositories should be approved as ARMs if they are performing that function.

18. Direct reporting to ESMA after transition There were mixed views about proposal, a number of respondents thought it was desirable but some queried whether it was practicable and were concerned about costs.

19. Market operators to store order data Most agreed with this proposal for market operators to store order data for a specified period as it would be useful for regulators. There were mixed views about harmonisation of storage requirements with some respondents thinking this would be beneficial while others criticise that a one size fits all approach is not feasible and that costs would outweigh the benefits.

20. Market operators to report on behalf of their non-MiFID members Many respondents opposed an obligation being placed on the trading venue arguing it should be placed on the entity itself. Further there were concerns that having obligations performed at the trading venue level could increase the risk of double reporting of transactions.

21. System of position reporting by types of traders on commodity derivative markets Two respondents support disclosing harmonised position information because they believe greater transparency is desirable. Both ask for an alignment of rules with the US. One respondent did not consider extending the disclosure of harmonised position information to all OTC commodity derivatives as feasible while another one thought this was desirable to provider for a level-playing field.

22. Narrow scope of commodity derivative exemptions Responses on this issue were limited and varied. There was some support for commission proposals to narrow exemptions but one respondent felt the exemptions should be preserved.

23. Classify emission allowances as financial instruments Two respondents considered this classification as helpful even if it would not remove all imperfections. Another respondent strongly opposed such classification as it would exclude certain companies from the market and as it would make the mechanism more costly and complicated.

24. Require the application of key MiFID principles for national Article 3 regimes One respondent suggested that it should be clarified that CDF providers are covered under MIFID.

26. Narrow list of non-complex products, specify when investment advice is independent, and require annual assessment of the advice provided There was opposition to abolition of execution only regime or further restriction of non-complex products while the latter also received some support.

28. Reinforce information obligation in relation to complex products and strengthen associated reporting requirements Two responses, one considering the provision of additional data as virtually impossible with the other supporting daily reporting to the retail investor.

30. Require trading venues to publish data on execution quality and improve information to clients on best execution There was some support for publishing data on execution quality. But there was quite some agreement to the suggestion that the content of execution policies need to be improved as they are often not sufficiently informative and difficult to read. One respondent advocated obliging firms to connect to venues offering better execution opportunities.

31. Strengthen role of directors in relation to internal control functions and when launching new products and services Just one response agreeing with the suggestions.

32. Require specific arrangements for portfolio management and underwriting Responses on this issue were limited. There was not much support for further measures on underwriting. It was pointed out that conflicts of interest provisions for firms already address the issues that can arise from underwriting.

33. Minimum regime for telephone and electronic recordings Responses on this issue were limited. Most supported harmonised requirements for telephone and electronic recording and for records to be kept for a minimum period.

Retail investor associations (approximately 10 replies)

1. Align requirements for venues and introduce OTFs Very few answers. No extension of "admission to trading" to new venues. No support for OTF (this would add complexity and confusion); rather, low thresholds to OTC trading should be introduced (globally and for each operator); above the threshold, operators should switch to RMs, MTFs or SIs (and the category of SI is also questioned). Support for alignment RMs/MTFs.

2. Mandatory trading of clearing eligible and sufficiently liquid derivatives on organised venues Two associations support mandatory trading on RM and MTF (no OTF). Role for ESMA to detail criteria. Possible mandatory trading on RM/MTF to include Forex, CDS and IRS. Transparency does not hurt liquidity and the crisis concerned the most illiquid product being also most opaque.

3. Introduction of tailored regime for SME markets Answer from two associations. Support need to promote SME, but need to look for evidence on MiFID impact.

4. Authorisation of and increase in organisational requirements for all HFT firms Answer from two respondents. Support specific regime for HFT firms. Possibility to ban HFT disturbing markets and investors is mentioned.

5. Additional requirements for firms providing sponsored or direct market access Agreement from two respondents.

6. Reinforcement of organisational requirements for organised venues No answer.

7. Introduction of order-to-execution ratio Support from two respondents to require orders to rest on the order book for a period of time.

8. Harmonised application of pre-trade transparency waivers, reduction of post-trade delays and extension of transparency to shares traded only on MTFs or OTFs (including new SME markets) Answer from two associations. Reference price waiver to be deleted.

Large in scale waiver to be left untouched, no evidence of decrease of investors' order size (rather orders are sliced by intermediaries). Support extension of transparency to MTF.

9. Calibrated pre- and post-trade transparency regime for bonds, structured finance products, and derivatives Mixed views Some respondents oppose pre and post trade transparency for corporate bonds, citing insufficient liquidity and fragmented issues. Many respondents note that pre and post trade transparency are currently sufficient for energy derivatives. Some argue that the introduction of trade repositories will be sufficient to improve post trade transparency. Many argue that pre and post trade requirements should only apply to liquid derivatives and not to bespoke products, as their characteristics differ and prices reflect other factors such as counterparty credit risk. Many note that post trade reports should be anonymous. Some note that OTC transactions are typically referenced to observable market prices.

10. Unbundling of data, ESMA guidance on "reasonable price", introduction of Approved Publication Arrangements

11. Consolidated tape by approved commercial provider(s) Mixed views. Several respondents consider there is no need to introduce a consolidated tape. Some consider it might support development of certain markets, but stress the need to filter useful information.

12. Mechanism for banning products, services or activities Mixed views. A number of respondents oppose banning of products, as they consider it limits their choice and note there is no systemic risk in most markets. Some urge cooperation with sectoral regulators in such instances.

13. Reinforcement of oversight of positions in derivatives, including possible position limits No answer

14. Third country regime No answer

15. Common minimum rules for administrative sanctions and requirement for criminal sanctions Two answers. Support for criminal sanctions. Administrative fines should be effective and harmonised across EU. Proceeds to be partly used to finance investors' representatives. Sanctions to be publicly disclosed.

16. Extension of transaction reporting to all instruments admitted to trading on organised venues and all OTC instruments the value of which correlates with these, as well as commodity derivatives Two answers. Support for transaction reporting regime for instruments admitted on RMs and MTFs and instruments the value of which correlates with those. Support for transaction reporting on commodity derivatives.

17. Require reporting through Approved Reporting Mechanisms and enable reporting of derivatives through trade repositories No answer

18. Direct reporting to ESMA after transition Two answers: Yes

19. Market operators to store order data Two answers: Yes

20. Market operators to report on behalf of their non-MiFID members Two answers: Yes

21. System of position reporting by types of traders on commodity derivative markets Two answers: Yes.

22. Narrow scope of commodity derivative exemptions No answer.

23. Classify emission allowances as financial instruments Two answers: option to be studied.

24. Require the application of key MiFID principles for national Article 3 regimes Support for the proposal with one respondent preferring the deletion of Article 3.

25. Extend MiFID conduct of business and conflict of interest rules to structured deposits Support for the proposal. MiFID investor protection rules should cover all PRIPs. Some respondents mention the area of 'grey market investments' ('Grauer Kapitalmarkt' in German), investments involving financial participation in different assets (for instance, art objects, real estate, containers, teak plantations) that should be brought under MiFID.

26. Narrow list of non-complex products, specify when investment advice is independent, and require annual assessment of the advice provided Execution only – Mixed views, with three associations supporting the abolition of this regime (they underline the merits of profiling the clients and that investors would be allowed not to provide their personal information and to proceed with any inappropriate transaction and they are concerned about banks pushing retail investors into execution-only despite advising them in order to escape further obligation). Support for narrowing list of non-complex products except from one respondent. Support to split UCITS except from one respondent.

Advice - Support for proposals - Some suggest restricting definition of advice to exclude firms receiving commissions from product providers. Two respondents recommend that any reporting on underlying reasons for advice should not include any clause to reduce responsibility of advisers. Another association disagrees with the proposal to give the underlying reasons for advice to the client in writing due to adverse national experiences. Most support annual monitoring of products recommended (especially when commissions from product providers are received by firms). Others are more prudent; they are concerned about costs or they would leave on-going advice to negotiations between advisors and clients or warn that review of clients' portfolios should not lead to unnecessary adaptations.

27. Apply general conduct of business principles between eligible counterparties and exclude municipalities from the list of professional clients Two answers: Yes

28. Reinforce information obligation in relation to complex products and strengthen associated reporting requirements Support for the proposal. One respondent considers unrealistic to say what might happen to complex products in unpredictable future; clients purchasing risky products should be aware of danger of losses. One respondent advocates a prohibition to actively distribute structured bonds to retail clients.

29. Ban inducements for independent investment advice and portfolio management Suggestion for a large ban of inducements covering any advice. Two respondents underline non-compliance of firms with rules and lack of enforcement (for inducements as well as in other areas).

30. Require trading venues to publish data on execution quality and improve information to clients on best execution Complaint about best execution not being delivered to investors and need of effective supervision. Need to improve pre- and post-trade transparency, to ensure best price for client's orders, to overcome fragmentation, to ensure

proper information to clients about best execution. Two respondents consider that data on execution quality is not useful for retail investors.

31. Strengthen role of directors in relation to internal control functions and when launching new products and services Some respondents agree with strengthened fit and proper criteria; others support Commission's proposals to strengthen organisational requirements and internal control functions.

32. Require specific arrangements for portfolio management and underwriting No answer.

33. Minimum regime for telephone and electronic recordings Some respondents suggest recording of any contacts leading to advice in order to solve any conflicts between intermediaries and clients; it is also suggested a retention period of at least 5 years.

Non-financial corporates (approximately 55 replies)

1. Align requirements for venues and introduce OTFs Respondents generally oppose the introduction of OTF's as they consider it would increase costs, limit trading opportunities, and constrain their choice of instruments. There is concern that the definition of OTF will capture platforms that help tailored deals, and corporate end user platforms. Some respondents welcome increased cooperation between platforms for market surveillance purposes. Some welcome OTF's as they expect them to bring more transparency, but are divided on which MiFID rules should apply.

2. Mandatory trading of clearing eligible and sufficiently liquid derivatives on organised venues Practically all respondents oppose mandatory organised trading, which they consider to be inconsistent with the exemptions proposed under EMIR. There is general concern that organised trading would imply central clearing, so that this obligation would impose central clearing on non-financial companies exempt under EMIR. Some respondents argue that these problems especially arise when physical forwards are reclassified. Physically settled futures should remain out of scope, as they are under Dodd-Frank. There is further concern among many respondents that this would limit the range of non-standardised OTC instruments available. It would also limit the execution choice for end users. Some argue that it would hinder execution of transactions in the desired size. Many also argue that it would increase costs due to margin calls. Some smaller companies may not be able to make the arrangements to trade through an exchange. It would be difficult for non-financials to hedge a combination of exchange traded contracts and continuous adjustments.

3. Introduction of tailored regime for SME markets Some respondents welcome the introduction of SME markets, but do note concern that harmonisation of requirements on these markets may not be appropriate.

4. Authorisation of and increase in organisational requirements for all HFT firms A respondent favours increased requirements on HFT firms as HFT may distort commodity derivatives markets.

5. Additional requirements for firms providing sponsored or direct market access

6. Reinforcement of organisational requirements for organised venues

7. Introduction of order-to-execution ratio

8. Harmonised application of pre-trade transparency waivers, reduction of post-trade delays and extension of transparency to shares traded only on MTFs or OTFs (including new SME markets) Some respondents welcome further harmonisation, but see no need to adjust current thresholds and delays.

9. Calibrated pre- and post-trade transparency regime for bonds, structured finance products, and derivatives Mixed views Some respondents oppose pre and post trade transparency for corporate bonds, citing insufficient liquidity and fragmented issues. Many respondents note that pre and post trade transparency are currently sufficient for energy derivatives. Some argue that the introduction of trade repositories will be sufficient to improve post trade transparency. Many argue that pre and post trade requirements should only apply to liquid derivatives and not to bespoke products, as their characteristics differ and prices reflect other factors such as counterparty credit risk. Many note that post trade reports should be anonymous. Some note that OTC transactions are typically referenced to observable market prices.

10. Unbundling of data, ESMA guidance on "reasonable price", introduction of Approved Publication Arrangements

11. Consolidated tape by approved commercial provider(s) Mixed views. Several respondents consider there is no need to introduce a consolidated tape. Some consider it might support development of certain markets, but stress the need to filter useful information.

12. Mechanism for banning products, services or activities Mixed views. A number of respondents oppose banning of products, as they consider it limits their choice and note there is no systemic risk in most markets. Some urge cooperation with sectoral regulators in such instances.

13. Reinforcement of oversight of positions in derivatives, including possible position limits Most respondents oppose position disclosure. They question the benefits, and there is general concern that it would hurt liquidity, and that individual open positions and business strategies may be inferred. Most respondents oppose position limits. Many favour a position management approach, welcoming harmonisation and more dialogue. If limits were to be imposed, there should be a hedge exemption, and characteristics of products and markets, including the wider EU market, need to be taken into account. A number of respondents oppose using IAS 39.

14. Third country regime Some respondents welcome a third country regime on an exemptive relief basis, but cite concern over access to third countries.

15. Common minimum rules for administrative sanctions and requirement for criminal sanctions

16. Extension of transaction reporting to all instruments admitted to trading on organised venues and all OTC instruments the value of which correlates with these, as well as commodity derivatives Respondents generally do not oppose the extension of the scope of transaction reporting, but stress that there should be no duplication of reporting under REMIT or EMIR. Some welcome aggregate rather than trade by trade reporting.

17. Require reporting through Approved Reporting Mechanisms and enable reporting of derivatives through trade repositories

18. Direct reporting to ESMA after transition

19. Market operators to store order data Some respondents welcome this extension as a sensible accompaniment to the extension of MAD to attempted market manipulation.

20. Market operators to report on behalf of their non-MiFID members

21. System of position reporting by types of traders on commodity derivative markets Most respondents question the need for position reporting, noting that market operators are better placed to oversee the markets. Position reporting would require costly changes to deal capture systems. Many respondents express concern that individual positions may be inferred, and stress that there should be no duplication of regulation or reporting. A number of respondents welcome disclosure of weekly open positions as in the US. A few favour categorisation as commercial versus non-commercial, and others by commercial, banks, other financial, other. With regards to contract design, some note there should be no mandatory physical settlement.

22. Narrow scope of commodity derivative exemptions Almost all respondents oppose narrowing the scope of exemptions as energy companies are not systemically relevant and do not have clients in the MiFID sense. The main concern is that energy companies would need to meet capital requirements under CRD. Narrowing the scope would affect energy companies' business models. It would increase entry costs and hurt competition. Hedging should be exempt. Dealing on own account to help customers hedge their prices should be exempt, and they should be able to offer hedge transactions (brokerage) to clients. Non-financial users and those offering services on an ancillary basis should remain exempt. Some fear regulatory scrutiny of contracts. Some argue that energy companies are already covered by other legislation, notably EMIR. Many oppose reclassifying forwards as financial instruments.

23. Classify emission allowances as financial instruments Respondents generally oppose reclassifying emission allowances, as their main purpose is not investment, but hedging. Many note it would raise costs for compliance buyers. Some favour a specific regime, e.g. through REMIT. There should be no regulatory overlap.

24. Require the application of key MiFID principles for national Article 3 regimes

25. Extend MiFID conduct of business and conflict of interest rules to structured deposits

26. Narrow list of non-complex products, specify when investment advice is independent, and require annual assessment of the advice provided

27. Apply general conduct of business principles between eligible counterparties and exclude municipalities from the list of professional clients Some welcome the application of general principles.

28. Reinforce information obligation in relation to complex products and strengthen associated reporting requirements

29. Ban inducements for independent investment advice and portfolio management

30. Require trading venues to publish data on execution quality and improve information to clients on best execution

31. Strengthen role of directors in relation to internal control functions and when launching new produets and services

32. Require specific arrangements for portfolio management and underwriting Some welcome specific arrangements as there may be conflicting interests between issuer and underwriter.

33. Minimum regime for telephone and electronic recordings Some welcome such a regime, as it could help resolve conflicts, and there currently is divergence under different contracts.

Academics (approximately 10 replies)

1. Align requirements for venues and introduce OTFs Overall support Respondents in this category felt that there was a strong need to introduce a level playing field. They felt that there was a need to eliminate admission to trading loopholes whereby some instruments may be traded on some venues without being admitted to trading, and not on others. All MiFID trading venues and any others that seem relevant should be included. There was strong support for aligning requirements; broker crossing networks (BCNs) should be brought within scope as other venues, otherwise they are operating under a loophole. They should have to comply with the same regulatory requirements as other venues; they have a large market share and should be treated as important. Respondents were strongly against the threshold approach, for fear of arbitrage, market uncertainty, and difficulties in choosing the right threshold, given the wide variation of market sizes across Member States. There is also the question of what would happen if the volume of the venue fell. There was strong support for the principle that all venues performing the same activities should be treated equally – so BCNs should be treated accordingly since they are not innovative in terms of procedures, instead performing a mix of the activities of MTF dark pool and SI functionalities. Respondents felt it might be possible to regulate BCN activities falling into either category separately, without creating a new category, but that BCNs should not be subject to less regulation. However, genuine derivative price crossing mechanisms should not be affected.

2. Mandatory trading of clearing eligible and sufficiently liquid derivatives on organised venues There was strong agreement for standardised OTC products to be traded in this way, to help eliminate information asymmetries exploited by some participants and increase efficiency. The degree of concentration should be taken into account. For more complex derivatives, it may not be realistic to trade them in this way. OTC trades are different to what MiFID envisages. Large orders should be protected against market impact; this need should be cross-checked with the reality of trading opportunities provided in public, transparent markets. Existing derivatives proposed include benchmark index credit default swaps, some large single-name CDS issues, and sovereign CDS.

3. Introduction of tailored regime for SME markets There was less support for this option, as it was felt that MTFs already catered towards an SME market, with generally less stringent requirements, so that there was no need to create further sub-categorisations as in practice these exist. There was caution on the consequences of such a move.

4. Authorisation of and increase in organisational requirements for all HFT firms Some support for this approach, provided the threshold and definition for automated trading are carefully defined.

5. Additional requirements for firms providing sponsored or direct market access Overall support. Some respondents noted CESR work in this area and the additional risk posed by such arrangements.

6. Reinforcement of organisational requirements for organised venues Overall support. Circuit breakers were seen as effective and co-location a normal commercial arrangement, provided that all can access if they wish to pay. Smaller tick sizes are viewed as a good thing as they reduce volatility, reduce inventory risk, but tick sizes should be similar on all venues.

7. Introduction of order-to-execution ratio Not supported.

8. Harmonised application of pre-trade transparency waivers, reduction of post-trade delays and extension of transparency to shares traded only on MTFs or OTFs (including new SME markets) Overall support. Respondents said that suggested changes to waivers look reasonable, but that large orders should be covered by pre-trade transparency waivers. Several MTFs already are SME markets. Transparency should always be similar when the same instruments are traded; transparency to be extended to MTFs.

9. Calibrated pre- and post-trade transparency regime for bonds, structured finance products, and derivatives For equities, transparency is roundly supported. For other products, this would need to be tailored to the structure of these markets.

10. Unbundling of data, ESMA guidance on "reasonable price", introduction of Approved Publication Arrangements Pre- and post-trade separation supported. This should also help pricing, but some suggest this is still a commercial arrangement that should not be regulated.

11. Consolidated tape by approved commercial provider(s) Opinion was divided on whether or not a consolidated tape was necessary or useful, though a commercial solution was preferred.

12. Mechanism for banning products, services or activities Mixed views. The bans (or possibility of them) could disrupt markets; others sought clarification.

13. Reinforcement of oversight of positions in derivatives, including possible position limits Hard position limits were opposed, with a suggestion to focus more on exposure.

14. Third country regime No comments.

15. Common minimum rules for administrative sanctions and requirement for criminal sanctions Overall support. There should be standardised rules and standardised sanctions to ensure a level playing field.

16. Extension of transaction reporting to all instruments admitted to trading on organised venues and all OTC instruments the value of which correlates with these, as well as commodity derivatives Provided that the definition of 'financial instrument' was completely clear, respondents in this category were strongly in favour of these measures.

17. Require reporting through Approved Reporting Mechanisms and enable reporting of derivatives through trade repositories There was general support for removing transaction reporting loopholes.

18. Direct reporting to ESMA after transition There was some support for this option.

19. Market operators to store order data There was support for this option, so long as the requirements were not overly burdensome.

20. Market operators to report on behalf of their non-MiFID members The respondents supported this proposal.

21. System of position reporting by types of traders on commodity derivative markets No comments.

22. Narrow scope of commodity derivative exemptions No comments.

23. Classify emission allowances as financial instruments No comments.

24. Require the application of key MiFID principles for national Article 3 regimes There was support for strictly limiting the number of exemptions that could be applied.

25. Extend MiFID conduct of business and conflict of interest rules to structured deposits There was support for this measure.

26. Narrow list of non-complex products, specify when investment advice is independent, and require annual assessment of the advice provided There was one suggestion of forfeiting the complex / non-complex distinction in favour of the classification of financial products being discussed in relation to PRIPS taking into account level of risk and time horizon. Respondents felt that execution only services should be allowed where products for simple, low risk products and some felt that where the client was acting purely on their own initiative they should be allowed to undertake these. There was some support for barring execution only services where credit was also granted, especially as highly leveraged transactions may pose systemic risks, but others felt this should be regulated more from the point of view of supervisors ensuring clients posted enough collateral and that firms have enough capital. There was more support for tying the barring of execution only to the definition of complex and non-complex. Respondents opposed the abolishment of execution only services. There was significant agreement that products were not sold on suitability, but simply on fees. Therefore, respondents generally supported disclosure of the basis on which advice is given. Some respondents noted the advantages of requiring qualifications to give advice. There was agreement for recording in writing the logic behind investment decisions.

There was agreement that advice should be updated, but some felt that the situations where this was appropriate needed to be defined.

27. Apply general conduct of business principles between eligible counterparties and exclude municipalities from the list of professional clients There was strong support for introducing a high-level requirement for eligible counterparties to act honestly, fairly and professionally, and to be fair, clear and not misleading. This is seen as fundamental to the financial markets.

28. Reinforce information obligation in relation to complex products and strengthen associated reporting requirements Respondents felt that if advice is provided, then there should be fuller obligations, but that if a portfolio was discretionary, there was less need for such obligations.

29. Ban inducements for independent investment advice and portfolio management General support. Inducements were not seen as acceptable.

30. Require trading venues to publish data on execution quality and improve information to clients on best execution There was some support for these measures.

31. Strengthen role of directors in relation to internal control functions and when launching new products and services There was strong support for all these measures, as culture and the fit and proper test was seen as extremely important.

32. Require specific arrangements for portfolio management and underwriting There was limited support.

33. Minimum regime for telephone and electronic recordings There was support for these measures on the basis that it is already common in several MS and that this would be beneficial to all the parties involved.

<u>Service Providers (approximately 22 replies)</u>

1. Align requirements for venues and introduce OTFs Concern was expressed by some respondents that a definition of admission to trading could lead to unintended or inadvertent consequences unless carefully considered. A majority of respondents agreed with the new OTF category but raised concerns that: there is still a lack of clarity about the objective of the category being so broad; it needs further clarification/definition otherwise it will capture post trade activities, retail service providers, receivers and transmitters etc; it does not clearly distinguish for systems that are multilateral and non-discretionary when a system is an MTF and when it is an OTF. There must be a level playing field. Some commented that there is limited evidence of trading shifting outside regulated markets and MTFs to new venues. Many do not support the concept of using thresholds to differentiate between regulatory categories. There was support for the idea of cooperation between trading venues regarding surveillance.

2. Mandatory trading of clearing eligible and sufficiently liquid derivatives on organised venues There was limited support for this option. Opposition was based on the principle that it should be for investors to decide where and how they execute a trade. Also it was argued that rather than using prohibitions, trading on organised venues should be incentivised. It should be for venues and participants to determine when an instrument should be traded on a facility. Some suggested that such a requirement should apply where contracts are mature, liquid and standardised. But nascent markets should be able to operate unneeded regulatory burden. Others suggested if instrument can be cleared there should be a presumption it can be traded on an OTV. Some responses suggested full pre-trade transparency will have a very negative effect on these OTC markets.

3. Introduction of tailored regime for SME markets There were limited responses on this issue. One response suggested that such a category is unnecessary and instead it is necessary to promote investor interest in SMEs.

4. Authorisation of and increase in organisational requirements for all HFT firms There was support for these proposals. One respondent suggested the automated trading definition may be too broad and needs to distinguish between algorithms that take control away from the participant and simpler forms where the participant retains control over the method, manner and timing of order entry and execution. Another suggested that it should be made clearer that automated trading is trading where a computer is helping to deliver best execution and/or risk management on criteria such as minimising market impact, completing block trades. HFT is a

specific computer trading activity that focuses on high throughput and low latency. The current definitions do not reflect this distinction.

5. Additional requirements for firms providing sponsored or direct market access There was support for these requirements being imposed on such firms.

6. Reinforcement of organisational requirements for organised venues There was support for requirements for more effective stress testing and circuit breakers.

7. Introduction of order-to-execution ratio There was little support for minimum resting periods, minimum tick sizes, order to transaction ratios or a requirement for HFT to provide ongoing liquidity. It was argued that resting periods for orders will have unintended consequences. A minimum tick size is not necessary and we can't prescribe a one size fits all approach. One respondent argued that high order to transaction ratios do not damage but benefit the market. Therefore, resting times and order to transaction ratios are misguided and detrimental. One response pointed out that any requirement to provide liquidity cannot work if market is crashing. A firm would be out of business in hours if it had to provide competitive quotes in such situations. This proposal fails to understand the rationale for market making – to provide liquidity in normal conditions.

8. Harmonised application of pre-trade transparency waivers, reduction of post-trade delays and extension of transparency to shares traded only on MTFs or OTFs (including new SME markets) There was support for more uniform application of waivers. Also there was support for actionable indications of interest being covered by the pre-trade regime. There were mixed views about whether order stubs should benefit from a pre-trade waiver.

9. Calibrated pre- and post-trade transparency regime for bonds, structured finance products, and derivatives A number of responses commented that it is unclear what non-equity products are intended to be covered under the proposals. Unlike equities, non-equity instruments potentially cover a wide universe of products. Apart from more definition of the scope more information is necessary about the proposed calibration. One response agreed with extension of transparency to other instruments where there is transparency in other major markets e.g. certain bonds and securitised instruments. Another response suggested the proposed public quoting obligation goes far beyond the US and also the regime for equities in the EU and will dissuade market making. So it is not useful. Some argued that significant costs have been ignored in the proposals. Increased transparency in dealer markets (as opposed to order driven markets) is likely to be counterproductive. Also, it is not helpful in markets with limited numbers of buyers and sellers (such as corporate bond markets where investors hold their bonds until maturity). Pre-trade transparency requirements need to take into account the needs of buyers and sellers and the effect of proposals on liquidity. One response opposed further transparency especially for OTC energy markets as these are not retail markets and there is a lack of recognition of differences regarding participants.

10. Unbundling of data, ESMA guidance on "reasonable price", introduction of Approved Publication Arrangements Most responses supported the proposed APA regime and the criteria for approval. There was some support for extending the APA regime to non-equities. There was wide support for prescribed standards to harmonise the quality, content and format of post trade reports. Some suggested prescribing a consistent format is essential. One suggested ISO 20022 already prescribes standards for format of reports that could be used. Another that there should be greater consistency in post trade data regarding the use of time stamps. There was some support for prescribing standards to harmonise content and format also for non-equities. A number of responses suggested the concept of "reasonable

cost" needs to be further defined under the Directive. There is a monopoly and so this is the only effective means of addressing the issue. A contrary view was suggested that the cost of data should be left to competitive forces. A number of responses supported the idea that making information available after 15 minutes will reduce costs. One response did not agree that unbundling of data will help reduce costs. There was some support for extending standards and proposals to non-equity markets where there are many different sources of data.

11. Consolidated tape by approved commercial provider(s) Most believe the case for a consolidated tape has not been made out. Most support was for option C on the basis that it will allow competition, innovation, responsiveness to client demands and will prevent risk of a single point of failure. There was some limited support for Option B. One made the point that the consolidated tape was proposed in the US in the 1970s but it seems unlikely if today's technology was available then that US would have adopted such an approach. Not possible or very difficult to have a consolidated tape for non-equities and need for it and evidence of a problem does not exist. For non-equities will have trade repositories. One provider argued that the consolidated tape should include pre-trade information but most argued there is no clear case for a consolidated tape for pre-trade data and it is not feasible for latency issues. It was also argued that it will be important to also place obligations on data providers to aggregate.

12. Mechanism for banning products, services or activities Concerns were raised about banning of products.

13. Reinforcement of oversight of positions in derivatives, including possible position limits There was disagreement about limits as to how much prices can fluctuate. This would threaten an orderly process especially for energy derivative markets. There was opposition to imposition of position limits.

14. Third country regime There was some opposition to such a regime on the basis that it fails to recognise that many EU firms need to use non EU firms to access non EU markets.

15. Common minimum rules for administrative sanctions and requirement for criminal sanctions There was some support for more harmonisation of administrative sanctions.

16. Extension of transaction reporting to all instruments admitted to trading on organised venues and all OTC instruments the value of which correlates with these, as well as commodity derivatives There was support for further clarification of what is a transaction. Respondents were not convinced about extending requirements on transaction reporting. Some argued it is mainly relevant to equities and equity related instruments. For example, the risk of market abuse relating to interest rates and foreign exchange is much lower. For other asset classes different tools are required. There was support for the use of client identifiers. But some argued that passing through of client identifiers is not practical. One suggested increased use of the Business Identifier Code (BIC) (ISO 9362) which is already the basis for entity identification in transaction reports under MiFID. There were doubts that a trader identifier would work and there is no common identifier that can be used for all traders. There were doubts about whether reporting of orders will work as many orders are not submitted to or by investment firms.

17. Require reporting through Approved Reporting Mechanisms and enable reporting of derivatives through trade repositories There was support for the use of ARMs.

18. Direct reporting to ESMA after transition A number of respondents did not support this proposal.

20. Market operators to report on behalf of their non-MiFID members The practical issue was raised that the market operator will not have all of the necessary data to be able to make a transaction report under MiFID.

22. Narrow scope of commodity derivative exemptions There was some opposition to removing the specialist commodity exemptions as no regulatory failure has been identified and there is no appropriate regulatory regime developed for commodity firms, especially no appropriate capital regime.

23. Classify emission allowances as financial instruments There was some opposition with the argument being made that these are spot contracts.

24. Require the application of key MiFID principles for national Article 3 regimes A number of responses disagreed with proposals to apply MiFID type obligations to firms "receiving and transmitting orders". Some firms only receive instructions from clients and pass these on to a broker. They should only be required to pass a fit and proper test for authorisation and be under a duty to act in the best interests of the client.

25. Extend MiFID conduct of business and conflict of interest rules to structured deposits There was some support for this proposal.

26. Narrow list of non-complex products, specify when investment advice is independent, and require annual assessment of the advice provided There was opposition to abolition of the execution only regime. This was on the basis that clients should have the choice of receiving advice or not and deletion of the possibility for execution only would be detrimental to investors. A number of responses argued that all UCITS products should be non-complex. Also that further clarity is required about instruments currently included or excluded under article 19(6).

27. Apply general conduct of business principles between eligible counterparties and exclude municipalities from the list of professional clients Some responses opposed applying principles to ECP clients as it is unnecessary and they have the contracts and resources to protect themselves. There was also opposition to further limiting the ECP regime according to products or other criteria. Some pointed out that the Commission has failed to appreciate that many new and OTC markets do not involve retail but wholesale clients. Therefore underlying assumptions for some proposals are not correct. There was support for classifying local authorities as professional investors. But a need to clearly define what is meant by municipalities, as it can mean very diverse associations.

28. Reinforce information obligation in relation to complex products and strengthen associated reporting requirements There was some support for strengthened reporting requirements but only where the adviser and customer agree to it. It was argued it is not necessary for eligible counterparties. There was support for quarterly valuations of complex products.

29. Ban inducements for independent investment advice and portfolio management There was support for advisers being required to consider a sufficient range of products and for the rationale for advice being set out in writing. But review of investments should not be

automatic but a matter for agreement with clients. For portfolio management there should be disclosure of inducements not a ban.

30. Require trading venues to publish data on execution quality and improve information to clients on best execution There were mixed views about whether data on execution quality would be very useful. Some believe it would be helpful for firms. Others argued it should be mandatory. There was support for the idea that information to clients on best execution should be improved.

31. Strengthen role of directors in relation to internal control functions and when launching new products and services There was support for proposals in this area.

32. Require specific arrangements for portfolio management and underwriting

33. Minimum regime for telephone and electronic recordings (129-132)

There was support for further harmonisation. One respondent argued facilities are available to retain records for 10 years. Another thought 3 years was a reasonable period to retain records.

Others (approximately 55 replies)

1. Align requirements for venues and introduce OTFs Support for creation of OTFs including from issuers, capturing all transactions and that these are suitably regulated in line with RMs and to avoid arbitrage. Limited support for possibility of genuinely ad hoc OTC trading to be excluded. Generally strong support for the measures proposed, though opposition to forcing non-financial counterparties to clear derivatives. One respondent felt that OTFs should only be used for a minority of bilateral OTC transactions, with RMs and MTFs absorbing the remainder of activity. One respondent cautioned against including venues whose sole purpose is to arrange tailor-made, non-standardised products. Opposition to automatic conversion of OTFs to MTFs.

2. Mandatory trading of clearing eligible and sufficiently liquid derivatives on organised venues Considerable support for cleared, standardised, eligible and sufficiently liquid derivatives to be traded on regulated markets. Large size of OTC markets hampers price formation. ESMA to take into account large buy/ sell-side imbalances into account. All commodity derivatives should be exchange traded. Call for position limits, especially in the case of food derivatives. Blame against excessive speculation for commodity prices. Support for OTC markets to be subject to proposed transparency requirements. On respondent suggested following EMIR. Some concerns regarding non-financials and support for exempting them.

3. Introduction of tailored regime for SME markets Some opposition on grounds of the difficulty of developing a definition.

4. Authorisation of and increase in organisational requirements for all HFT firms Broad support for more regulation of HFT, and concern that some market players might have access to information earlier than others. There was some concern regarding the potential negative effectives of HFT.

5. Additional requirements for firms providing sponsored or direct market access Agreement on additional requirements and desire to maintain level playing field. General support for these measures.

6. Reinforcement of organisational requirements for organised venues Call for risk controls re. automated trading, introduction of circuit breakers, specification of minimum order sizes and general concern of any party having privileged access to information. General support for further organisational and oversight requirements.

7. Introduction of order-to-execution ratio Some support among those providing responses.

8. Harmonised application of pre-trade transparency waivers, reduction of post-trade delays and extension of transparency to shares traded only on MTFs or OTFs (including new SME markets) General support for increasing transparency in line with G20 commitments. Some are against maintaining large in size waivers.

9. Calibrated pre- and post-trade transparency regime for bonds, structured finance products, and derivatives There is very strong support for pre- and post-trade transparency to be strengthened regardless of the venue to improve price formation and reduce information asymmetries. "Burden of proof that higher transparency will reduce liquidity should be on those arguing against!" Some called for the transparency proposals to go even further. Only one respondent felt that current transparency requirements were sufficient.

10. Unbundling of data, ESMA guidance on "reasonable price", introduction of Approved Publication Arrangements General support. Calls to guarantee the quality of data; support for publication through a single consolidated tape. While transparency and data consolidation is seen as a priority in equity markets, there is support for extending the measures to bonds, structured products and standardised derivatives. There was support for reducing the cost of data, unbundling data, and widespread concern about the contribution of market fragmentation to the increasing cost of data, with some calling for harmonisation of information and format. There were calls to learn from the US consolidated tape. Respondents called for EMIR / MiFID consistency.

11. Consolidated tape by approved commercial provider(s) There is strong support for this measure, with many raising concerns about market fragmentation increasing costs. There was further support for this measure, with some saying that this is of such high priority that the EU cannot wait for commercial providers to step in, with several respondents favouring the centralised non-profit solution. Only one respondent felt that there was no need for a consolidated tape, preferring rather the improvement and harmonisation of existing data.

12. Mechanism for banning products, services or activities There was significant support, but generally only in the case of clearly defined situations. One respondent did not support this measure, preferring more stringent initial criteria for product approval. One respondent felt that banning products should be based less on the effect on the market as a whole, but rather on the underlying product. In general, respondents felt that banning a product should only be used as an exceptional measure.

13. Reinforcement of oversight of positions in derivatives, including possible position limits There was some support for the adoption of hard position limits, but only in limited and clearly pre-defined situations. There was significant concern that more and more actors in commodity markets were not commercial but financial players whose participation in the markets is fundamentally removed from the physical realities of the actual commodities involved. There was support for applying position limits both at firm and vehicle level.

14. Third country regime There was general support provided there was a strict assessment of equivalence, and fears that without such a regime, access to capital could be limited.

15. Common minimum rules for administrative sanctions and requirement for criminal sanctions There was some support, though also some concern about shifting blame from institutions to individuals. There was support for whistleblowing functions. Some felt that administrative sanctions alone would not act as a deterrent unless they were significantly increased in scale. Respondents proposed transparency in respect of sanctions against firms.

16. Extension of transaction reporting to all instruments admitted to trading on organised venues and all OTC instruments the value of which correlates with these, as well as commodity derivatives There was concern among respondents to ensure that MAD be extended to encompass the relationship between the impact of commodity derivative markets.

17. Require reporting through Approved Reporting Mechanisms and enable reporting of derivatives through trade repositories A number of respondents agreed with the clarification and waiving requirements.

18. Direct reporting to ESMA after transition There was some support for direct reporting to ESMA, provided there is sufficient resource involved.

19. Market operators to store order data There was some support for market operators being obliged to store data.

20. Market operators to report on behalf of their non-MiFID members (72)

21. System of position reporting by types of traders on commodity derivative markets There was general support for position trading by types of traders in order to assess impact and the expected support for the trading of the vast majority of commodity derivatives on exchanges, in line with most respondents' calls for significant extension of transparency requirements. However, one respondent had concerns about confidentiality of order initiators.

22. Narrow scope of commodity derivative exemptions There was some support for these measures, although one respondent felt that the current regime should be maintained.

23. Classify emission allowances as financial instruments There was some support amongst respondents who answered this question.

24. Require the application of key MiFID principles for national Article 3 regimes There was support for the application of key MiFID principles.

25. Extend MiFID conduct of business and conflict of interest rules to structured deposits There was general support for extending the rules.

26. Narrow list of non-complex products, specify when investment advice is independent, and require annual assessment of the advice provided There was some support for these measures, including informing clients of the basis on which advice is given, although some had concerns about the cost of more documentation. Some favoured intermediaries simply confirming if the advice they gave was on a one-off or long-term basis, with requirements in line with this. A few responses felt that execution only regime should be abolished. There was general support for investors knowing the basis on which advice was given.

27. Apply general conduct of business principles between eligible counterparties and exclude municipalities from the list of professional clients Some respondents feared this would adversely affect municipalities if they were simply classed as retail investors and most

proposed keeping the current classifications. There was limited support for a different categorisation that recognised the fact that such bodies manage public debt.

28. Reinforce information obligation in relation to complex products and strengthen associated reporting requirements Aside from seeking clarification on what constitutes a complex product, respondents supported the additional information reporting requirements.

29. Ban inducements for independent investment advice and portfolio management There was some support and some opposition to banning inducements, with some calling for evidence of investor detriment in this respect. In addition to those who suggested banning inducements, some said that there should be very clear disclosure of any direct or indirect inducements.

30. Require trading venues to publish data on execution quality and improve information to clients on best execution Respondents generally supported the requirement to publish this data.

31. Strengthen role of directors in relation to internal control functions and when launching new products and services There was support for reinforcing the importance of directors and strengthening of the regime in relation to control functions, but some felt that the current regime simply needed firmer enforcement by supervisors.

32. Require specific arrangements for portfolio management and underwriting There was strong support for reducing and disclosing conflicts of interest. There was a mixture of support and opposition to the title transfer collateral arrangements proposed changes in respect of professional clients. There was generally more support for allowing professional clients to act on the same basis as they currently do.

33. Minimum regime for telephone and electronic recordings Some opposed this because of the prior need to document in writing, however there was also support.

24. ANNEX 14: COMPARISON OF MIFID REVIEW WITH RELATED US NEW REGULATION

In July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act was signed into law. This Act aims to promote the financial stability of the United States by improving accountability and transparency in the financial system, to end too big to fail, to protect the American taxpayer by ending bailouts, and to protect consumers from abusive financial services practices.

In order to achieve this, the Dodd-Frank Act mandates the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC) to write rules for a number of key parts of the financial sector. The most important of these is the area of OTC derivatives, where the SEC and CFTC were previously prohibited from setting financial rules. The SEC has regulatory authority over security-based swaps, while the CFTC has primary regulatory authority over all other swaps, such as energy and agricultural swaps. Other areas where new rules are being introduced include clearing and settlement, and trading rules.

The CFTC and SEC are required to act jointly to define key definitional terms and market intermediaries, as well as prescribe requirements for trade repository recordkeeping, and books and records requirements.

The SEC and CFTC are required to consult with each other and the Federal Reserve Board in the non-joint rulemakings (and with the other prudential regulators on capital and margin rules). The CFTC, SEC and U.S. prudential regulators also are consulting with foreign regulatory authorities on the establishment of consistent international standards with respect to products and entities in this area.

Most of these rulemakings are required to be completed within 360 days of enactment of the Dodd-Frank Act, which means by July 15, 2011. Both SEC and CFTC are likely to miss this deadline in a number of areas. The SEC and CFTC have published many proposed rules for consultation. In some areas, no proposals are as yet available.

As things stand, the proposed revisions in the MiFID and the draft rules of the CFTC and the SEC would ensure very close alignment between the EU and the US. In terms of legislative approach, the structure whereby Dodd-Frank establishes general rules leaving the details to SEC and CFTC is somewhat similar to the European Lamfalussy structure. However, in Europe the rule making powers for the European agencies are more limited. Another notable difference between Europe and the US is that there is no distinction between securities and commodity derivative markets in Europe, and monitoring and enforcement are done at the national level and not at EU level.

In terms of content, the Dodd-Frank act places restrictions on proprietary trading for banks, lays down rules for derivatives clearing and derivatives trading, and rules for consumer protection. These areas are covered by different pieces of EU legislation.

There are no provisions in the proposed EU legislative reforms that would require EU banks to limit their OTC derivatives business. The Dodd-Frank Act prohibits federal assistance to any swap dealer or major swap participant. Insured banks are exempt if they limit their derivatives activities to hedging and dealing in interest rate swaps, foreign exchange transactions and a limited class of other derivatives business. Dodd-Frank also introduces the Volcker rule, restricting the proprietary trading operations of bank groups.

EU rules for derivatives clearing are being introduced through EMIR, which may apply to all derivatives (not just OTC). EU rules for derivatives trading are being introduced through MiFID, which captures all financial instruments trading (not just derivatives). Consumer protection is also being improved through MiFID, the notable difference with the US being that there will be no separate agency to supervise consumer interests.

The SEC provides an overview of its regulatory proposals here http://sec.gov/spotlight/dodd-frank.shtml

The CFTC proposals can be found here http://cftc.gov/LawRegulation/DoddFrankAct/index.htm

- **TABLE 50: Comparison US and MiFID proposed revisions of regulations**

Area of Comparison	Current and proposed legislation in the US	Proposed revisions in the MiFID
0. General		
Both the EU and the US are introducing a new type of trading platform which seeks to regulate all types of organised trading. In the US, this type of platform, the SEF, is limited to derivatives trading while in Europe, the OTF will also be used for trading in all financial instruments. While in the US a platform needs to reach a certain volume before it is fully regulated (e.g. in terms of transparency), in Europe all trading platforms will be in scope. In line with the G20 commitments, the US and the EU are mandating that derivatives need to be traded on platforms. Both the US and the EU are intending to increase transparency in the derivatives markets by mandating trading to move on to transparent organised venues. The scope of derivatives covered in the EU and the US would broadly include all derivatives which are clearing eligible and sufficiently liquid for trading on organised platforms, and the type of platforms that would be eligible to trade these instruments are set up according to the same basic structure. In both the US and the EU, trading on platforms needs to be transparent. The transparency requirements differ depending on the nature of the instrument (shares, bonds, and derivatives). For pre-trade transparency, the US requires pre trade transparency only for shares traded on exchanges or larger ATSs. For other instruments pre-trade transparency is required of the trading venue. The EU will require more harmonised pre-trade transparency for all financial instruments and irrespective of the type of venue (whether traded on a regulated market, MTF, OTF or bilaterally over the counter). For post trade transparency, the US requires post trade transparency for shares and bonds, and, with Dodd-Frank, derivatives. The EU will require post trade transparency for all financial instruments and again irrespective of where the instrument is traded. The US already has a consolidated tape in place for shares. A similar system will be set up in Europe for shares, but provided for by competing firms. Post trading information in the bonds markets is already being published in the US through the TRACE system. Regulators in both the US and the EU will have full access to records at all stages in the order execution process, from the initial decision by the investor to trade, through to its execution. This will be achieved by		

an audit trail in the US, and in Europe by making the order trail fully accessible to competent authorities upon request through recordkeeping of orders by trading venues and by requiring reporting of transactions by investment firms to competent authorities. With regards to commodity derivatives, position limits are already in place in the US agricultural futures markets. The US supervisor (the CFTC) has been empowered by the Dodd- Frank Act to extend these position limits to other commodity derivatives markets including energy and OTC markets, whenever appropriate. Similarly in the EU, position limits would be set by national competent authorities under the coordination of ESMA where needed, with the possibility of harmonisation by the Commission in delegated acts. While the US already has a system that makes traders' positions by categories of traders visible to the market, in the EU there will be a similar system implemented through the platforms. The US Rules currently provide various exemptions for third country firms allowing them to provide services in the US in certain situations and under defined conditions. If a third country firm wishes to engage in any activity beyond the situations defined in the exemptions it will need authorisation. There is no special authorisation regime for third country firms. Unlike the US rules, the EU does not provide for any exemptions for third country firms to provide services in the EU in defined situations. Instead it is proposed that third country firms must be authorised under a specific third country regime if they wish to provide any services in the EU. Finally, both the EU and the US are working to strengthen organisational requirements and best execution rules.		
1. Developments in market structures		
Organised trading venues	US regulation distinguishes between securities and non-security markets. This distinction also applies to swap markets (i.e. OTC derivatives markets), where there is a distinction between security based and non-security based swaps. This distinction follows the competences of the SEC and CFTC. In order to ensure that all derivatives are traded in an organised way, the Dodd Frank Act has introduced the "Swap Execution Facility" (SEF). Both the SEC and CFTC have presented proposals to further define this concept for their respective markets. The final form has not yet been determined. A SEF would be a form of organised trading facility, bringing together multiple participants and excluding single-dealer platforms. This platform would be subject to real time post-trade transparency with delays for large trades ("block trade exemptions"). The level of pre-trade transparency will depend on the type of trading model the SEF definition will	EU regulation does not distinguish organised trading venues in terms of financial instruments traded thereon. Venues for trading shares, bonds, and derivatives are defined in a general way. Irrespective of the types of instruments traded, organised trading which currently takes place OTC would be moved onto "Organised Trading Facilities" (OTF). Operating such a system that brings together buying and selling interests and orders would become a regulated activity a ssuch. If an OTF should wish to allow trading in sufficiently liquid derivatives and eligible for clearing, it needs to meet requirements on multilateral participation (exluding single –dealer platforms) and pre- and post-trade transparency.

	encompass. It is thought that for the most liquid swaps a SEF would be similar in operation to a traditional exchange, whilst for less liquid swaps the operation would be more similar to that of an execution facility. For very illiquid swaps the SEF would process, and confirm/affirm trades.	
Broker systems	A broker trading system, such as a crossing system, needs to be registered as an Alternative Trading System. Below a threshold of 5% of trading volume in all securities the system trades, lighter requirements apply. Above that level, the system is considered a significant market whose best prices in shares should be transparent. Pre-trade transparency also applies for shares and only where the threshold of 5% is met. For the moment, the threshold is to be calculated on a security by security basis. However, a system that trades more than the volume threshold in a substantial number of securities could be considered to be a significant market.	Matching of client orders by brokers will be brought under increased regulation. The operation of such crossing networks would be a form of Organised Trading Facility. This regime is limited to non-proprietary dealing. Broker systems are regulated based on the nature of their activity. No thresholds apply.
Trading of OTC derivatives	Dodd-Frank requires mandatory centralised clearing of all liquid and sufficiently standardised derivatives. End users are exempt from this requirement when hedging commercial risk. There is also an exemption for block trades under certain conditions. Eligibility of instruments for mandatory clearing is to be determined by CFTC and SEC. Clearable swaps would be required to be traded either on a SEF, or a designated contract market (DCM). The latter is similar to the concept of regulated markets in Europe, except they are limited to futures trading. The platforms would need to make firm quotes accessible to all. Trading could take place in an order book, on a request for quote or on a voice basis.	EMIR requires centralised clearing for derivatives trading that occurs OTC and on certain venues. ESMA will determine clearing eligibility. All financial instruments eligible for clearing and that are sufficiently liquid would need to be traded on an organised platform. This includes the existing regulated markets (RM), multilateral trading facilities (MTF), and other OTF. Eligibility requirements are to be reviewed and implemented by ESMA.

Market surveillance requirements	Operators of national exchanges are required to have independent monitoring functions. In addition, the self regulatory organisation FINRA carries out oversight in securities markets. SEFs would have to comply with a number of core principles, which include that they monitor trading.	All venues and facilities will have the obligation to monitor trading in order to identify market abuse. Operators of regulated markets, MTFs and other organised trading facilities (OTFs) which trade the same financial instruments would be required to cooperate and exchange information in order to better detect market abuse and misconduct.
Automated and HFT trading and related issues	The Dodd-Frank Act gives the SEC and CFTC the authority to prohibit trading practices deemed to disrupt fair and orderly markets. The CFTC and SEC are currently reviewing rules on Automated Trading and HFT. They are working together with the markets to consider recalibrating the existing market-wide circuit breakers. The SEC is assessing its circuit breaker pilot program for trading in individual securities. They are also considering additional mechanisms, such as a limit up/limit down procedure for individual trades. SEC requirements focus on exchanges and larger Alternative Trading Systems (ATSs). The SEC has placed requirements on firms providing direct electronic access to markets. This restricts the giving of so called unfiltered or naked access to markets. The SEC has not proposed: - order to transaction ratios - minimum tick sizes; or - the flagging of algorithms in orders. The CFTC has published proposals targeted at specialist automatic trading rules as part of the rules for the newly introduced Swap Dealers and Major Swap Participants. Proposed rules include procedures governing use, supervision, maintenance, testing and inspection of programs. They would apply to all algorithms in use,	Persons involved in "automated and high-frequency trading" who are a direct member of a regulate dmarket or MTF will be required to be authorised and supervised as investment firms. There will be specialist rules for firms involved in algorithmic trading including compliance, risk controls, and notification to regulators of algorithms. In addition firms will be required to flag the use of algorithms in transactions and orders. Firms providing direct electronic access to clients will need to meet various compliance and risk management requirements. Market operators (i.e. operators of regulated markets and MTFs) will need to have risk controls in place dealing with capacity and resilience of their systems and to reduce risks from algorithmic trading and direct electronic access. They will also need circuit breakers in place. Market operators will need to give equal and fair access to co-location facilities. Market operators will also need to ensure that orders do not exceed specified order to transaction executed ratios and trades are not below prescribed minimum tick sizes. Technical details need to be set by ESMA.

	including those sourced from third parties.	
2. Pre- and post-trade transparency & data consolidation		
Equity markets	In the US the Consolidated Tape Association (CTA) oversees the dissemination of real-time trade and quote information in New York Stock Exchange and American Stock Exchange listed securities. All exchanges which trade in these securities send their trades and quotes to a central consolidator where the Consolidated Tape System (CTS) and Consolidated Quote System (CQS) data streams are produced and distributed worldwide in real time. Combined, these data feeds provide the market with pre- and post-trade transparency information. This information includes real-time information on the best-priced quotations and real-time reports of trades as they are executed. There is a general exception from the public display requirement for a block size order. Trading platforms publicly report their executed trades in the consolidated trade data. The SEC has proposed requiring real-time disclosure to include the identity of dark pools and other ATSs on the reports of their executed trades. This should help investors to identify where liquidity is.	In the EU, a post-trade consolidated tape system for all types of financial instruments would be set up. The conditions for the application of the pre-trade transparency waivers would be clarified. The large in scale waivers, including stubs of large orders, would be reviewed. Post trade information would need to be published as close to instantaneously as technically possible. Real time reporting would be shortened from 3 to 1 minute(s), and systems are to publish data live rather than in batches. The delays for deferred post trade publication for large transactions would be reduced, the intra day period would be shortened from 3 to 2 hours, and the intra day transaction size threshold would be lowered.
Bonds and Asset Backed Securities	In July 2002 FINRA introduced the Trade Reporting and Compliance Engine (TRACE). The system captures and disseminates consolidated information on secondary market transactions in publicly traded TRACE-eligible securities (investment grade, high yield and convertible corporate debt) representing all over-the-counter market activity in these bonds. The TRACE does not provide pre trade data and only provides post trade information; such as date, time, price, quantity. The TRACE does not provide data on exchange executed transactions. There is a delay of 15 to 30 minutes depending on how trades are	Calibrated pre and post trade transparency requirements would be extended to all bonds and structured products with a prospectus or which are admitted to trading either on a regulated market or MTF.

	confirmed and executed. TRACE has been recently extended to some of the ABS products.	
OTC Derivatives including Swaps	CFTC and SEC proposals aim to increase pre-trade transparency for swaps, notably the order data provided by SEFs. In their draft rules RFQ trades would need to be made available to one person for security based swaps, and to five for all other swaps. Real time prices and volume disclosure for all cleared and non cleared swaps will be required to enhance post trade transparency. Data is anonymised so that the identity and positions of participants cannot be deduced by others and delays for block trades are foreseen.	Calibrated pre- and post-trade transparency requirements would be extended to all derivatives eligible for central clearing, and post-trade requirements to all those submitted to trade repositories..
3. Commodity derivatives markets		
Position Transparency	The CFTC currently publishes the Commitments of Traders (COT) report on a weekly basis. The reports provide a breakdown of each Tuesday's open interest for markets in which 20 or more traders hold positions equal to or above certain reporting levels established by the CFTC. The data is broken down into four categories of traders: Producer/Merchant/Processor/User; Swap Dealers; Managed Money; and Other Reportables..	Organised trading venues would be required to publish harmonised position information to regulators in detail, and the public in aggregate for markets with a given number of active participants. The positions would be broken down into different categories of traders according to tehir regulatory status.
Position Limits	Under the Dodd-Frank Act, the CFTC is required, as appropriate, to impose position limits on energy, metal and agricultural commodity derivatives. The mandate given to the CFTC to exercise this discretionary power is broad: to combat excessive speculation, to prevent market manipulation, to ensure sufficient market liquidity, and to preserve the price discovery function of the underlying market. After a heated debate, the CTC has recently proposed rules to limit the amount of positions, other than bona fide hedge positions, that may be held by any individual trader in 28 core commodity derivatives contracts traded on organized trading venues and their economically equivalent OTC	The MiFID review also aims at reinforcing oversight and transparency of commodity derivatives markets, notably by requiring regulators to assert comprehensive oversight over positions, including in the shape of position limits when deemed necessary. Platforms should adopt limits or alternative arrangements in support of market integrity and liquidity, which could be harmonised through Commission delegated acts.

	derivatives. These rules are now open up for public comment for two months.	
Regulated vs. exempt entities	The Dodd-Frank Act creates an end-user clearing exception that exempts clearing for a swap transaction if one party to the transaction is not a financial entity, is using the swap to hedge or mitigate commercial risk, and notifies the SEC of CFTC how it meets its financial obligations for the non-cleared swaps. The Dodd-Frank Act provisions for Major Swap Participants and Swap Dealers do not apply when dealing activity remains below the de minimis exception thresholds set by SEC and CFTC.	Dealing on own account in financial instruments (excluding by executing client orders, as a market maker, or as a member or participant of a regulated market or MTF) and the provision of investment services relating to commodity derivatives as an ancillary activity to another main commercial business will continue to be exempt. The specific exemption for commodity derivative trading firms would be deleted.
Spot carbon trading	A Federal interagency working group mandated by the Dodd-Frank Act recommends carbon oversight is brought under the existing financial regulation. This would apply to carbon derivatives markets and closely linked derivative markets, such as those based on energy commodities.	Emission allowances would be classified as financial instruments, harmonising their legal status across the EU, and bringing the spot and derivatives markets for these contracts under an integrated regulatory framework.
4. Transparency towards regulators		
Scope of transaction reporting	The reporting of transactions to regulators is generally done through data transmission by exchanges, self regulatory bodies, and other market participants such as trade repositories. Reporting requirements may differ for different types of instruments. OTC trades, including in bonds and in the future also asset backed securities, are sent directly to FINRA. This uses the same system as for post trade transparency, TRACE. In line with the enhancements to the swaps market, the Dodd Frank Act also introduces the requirement for the reporting of swaps data to central Swap Data Repositories. In addition to providing centralised storage of contracts data, regulatory bodies will have access to this data for monitoring purposes. The CFTC would rely on data stored in the swap data repositories to carry out its surveillance duties.	Investment firms are required to send details on all transactions in financial instruments traded on regulated markets to regulators. The scope of transaction reporting would be extended to include transactions in all financial instruments that are admitted to trading on an MTF or other OTF, financial (OTC) instruments the value of which depends on or can influence the value of financial instruments that are admitted to trading, and commodity derivatives. Trade repositories could report derivatives transactions on behalf of investment firms.

Information on the order book	In the US, reporting obligations extend to both transactions and orders. A route report needs to be sent each time an order is transmitted for further handling. The SEC is working on the set up of an audit trail to give the regulators an overview of the entire order book among different trading platforms. For Nasdaq and OTC equity securities there is an integrated audit trail of order, quote, and trade information, the Order Audit Trail System (OATS).	Order information would not need to be reported, but would need to be stored by the platforms under general data requirements. Such information would then be accessible upon request to regulators.
5. Investor Protection		
Conduct of business rules and internal organizational requirements	The Dodd Frank Act provides for the SEC to strengthen investor protection via enhanced broker dealer regulation. This includes requirements on enhanced duty of care, classification of clients, and enhanced/harmonised rules for the SEC to investigate and prosecute cases of misconduct. Conduct of business rules are also introduced for the newly defined Major Swap Participants and Swap Dealers.	The MiFID revision provides enhanced clarification of the conduct of business rules already present in the MiFID. This includes specific rules on investment advice, inducements, classification of clients, and dealing on own account. The high level principle to act honestly, fairly and professionally would apply to dealings with all types of clients. Requirements to disclose inducements would be enhanced.Inducements for portfolio management would be prohibited and investment advisers would be prevented from describing themselves as independent if they receive inducements..
Best execution	In the US, execution platforms are required to route orders in equities to another platform if the order can be executed at better terms there. Market participants have access to a consolidated tape for equities. Execution venues are required to publish execution quality data. The broker must evaluate the orders it receives from all customers in the aggregate and periodically assess which competing markets, market makers, or electronic communications networks (ECNs) offer the most favourable terms of execution. There are specific best execution requirements for Major Swap Participants	In the EU, the obligation to provide best execution falls on the investment firm and applies to all financial instruments. In addition to the requirements on brokers to ensure best execution for clients, brokers must also provide information to clients clearly setting out how they satisfy the best execution requirements for their clients. Execution venues will be required to publish data on execution quality concerning the financial instruments they trade.

	and Swap Dealers in the Dodd Frank Act.	
Third country access	Foreign persons wishing to provide investment services into the USare exempted from the need to be registered as a broker/dealer in the US in various defined situations, for example: 1) where the foreign person provides certain services to an investor in the US as a result of unsolicited or indirect contacts from the US investor, 2) where the foreign person provides investment research to institutional investors in the US, 3) where the foreign person directly contacts investors in the US but the resulting transaction is then executed through a US broker or dealer, 4) where the foreign person directly contacts certain categories of persons (e.g. registered broker dealers, banks, certain international organisations), even where transactions are not executed through a US broker or dealer, 5) where a foreign private adviser has less than 15 US clients and less than $25 million of assets under management attributable to clients in the US. If the foreign firm provides services beyond these exemptions or has physical operations in the US (such as an office or branch) it will usually need to be registered as a broker dealer. No special regime exists for foreign authorised branches. There is no concept of mutual recognition of securities regulatory systems under U.S. laws.	MiFID contains no equivalent exemptions for third country firms to provide services in Europe in such situations. Instead, it is proposed to require third country firms to be authorised under a special regime for such firms. The MiFID revision will introduce a third country regime by which the provision of services to retail clients by third country firms always requires the establishment of a branch in the Union. The provision of services without branches is only limited to non-retail clients. Based on a decision of the national competent authority that the third country firm is subject and complies with legal requirements in a number of relevant areas (authorisation, criteria for appointment of managers, capital, organisational requirements), access to the EU could be granted subject to appropriate cooperation agreements between the relevant third country authority and the EU competent authority and compliance by the firm with key MiFID operating and investor protection conditions. The proposal recognises that EU investors can receive services by third country firms at their own exclusive initiative.

25. ANNEX 15: COMPARISON MIFID REVIEW AND KEY IOSCO PRINCIPLES

25.1. Overview

The International Organization of Securities Commissions (IOSCO) is an association of organisations that regulate global securities and futures markets. IOSCO members are committed to developing, implementing and promoting adherence to internationally recognised and consistent standards of regulation, oversight and enforcement in order to protect investors, maintain fair, efficient and transparent markets, and seek to address systemic risks.

In the last two years, IOSCO has conducted specific review work in areas of key market interest (e.g. Conflicts of Interest, Direct Market Access and Transparency of Structured Products). Presented below is a high level overview of where the MiFID revision extends into areas for which IOSCO has developed international principles and/or where it has done review work on those principles.

25.1.1. Principles for Direct Electronic Access to Markets August 2010

http://www.iosco.org/library/pubdocs/pdf/IOSCOPD332.pdf

Key themes and details from IOSCO Principles/ Review Work	**Alignment with the MiFID revision.**
• Published in August 2010, in this paper IOSCO discusses the current market practises regarding direct electronic access also known as direct market access (DMA). A number of principles and specific provisions are proposed which are designed to enhance the controls over direct electronic access. • Although the details are of a technical nature, the following provide an overview of the key areas of focus. • Intermediaries: should have binding robust agreements in place with clients and minimum standards establishing the customer's creditworthiness, knowledge of applicable market rules and ability to comply and ability to correctly use the order entry system. They should identify DMA customers to the markets to assist in surveillance. They should also ensure they have in place risk management controls over the client's trading. • Markets: should provide intermediaries with adequate real time information to enable the intermediaries to introduce effective monitoring and risk assessment controls. They	• The majority of principles are already addressed in the existing MiFID provisions, which contains rules on the types of firms which may be admitted as members of regulated markets. • The MiFID proposals will introduce specific requirements in relation to DMA access used by Automated Trading firms. Intermediaries who provide DMA for Automated Trading firms will be required to have in place robust risk controls and filters to detect errors or attempts to misuse facilities.

should have systems and controls designed to minimize market integrity concerns (e.g. disorderly trading) arising from direct access customers' activities. • Clearing firms: should have operations and technical capabilities to manage risks arising from direct access.	

25.1.2. Guidelines for the Regulation of Conflicts of Interest Facing Market Intermediaries November 2010

http://www.iosco.org/library/pubdocs/pdf/IOSCOPD342.pdf

Key themes and details from IOSCO Principles/ Review Work	**Alignment with the MiFID revision.**
• In November 2010, IOSCO published a paper exploring guidelines for regulating conflicts of interest. The paper builds on existing regulation and best practice from around the world (including provisions already contained in the MiFID) and sets out key areas for global harmonisation and improvement. IOSCO has identified the following as key areas: • Active involvement by senior management of market intermediaries; • Clear and concise policies to be adopted by intermediaries; • Adequate disclosure to be made; • Information barriers (Chinese walls) need to be created; • Effective procedures to manage conflicts of interest must be put in place; • Separation of remuneration for activities that entail conflicts of interest; • Maintaining record of activities from which conflicts of interest have previously arisen and how they were managed.	• Existing MiFID provisions for managing conflicts of interest are contained in Articles 13(3) and 18 of the MiFID Level 1 and Articles 21 to 25 of the MiFID Level 2. These provisions are aligned with the guidelines provided for in the IOSCO paper. • Whilst current provisions are already provided for, implementation in member states differs. In line with the general IOSCO objective of harmonization of conflicts of interest rules, the MiFID review provides ESMA with powers to implement technical standards to further promote the uniform application of these provisions.

25.1.3. Issues Raised by Dark Liquidity October 2010

http://www.iosco.org/library/pubdocs/pdf/IOSCOPD336.pdf

Key themes and details from IOSCO Principles/Review Work	Alignment with the MiFID revision.
• In October 2010, the technical committee of IOSCO published a consultation report into Dark Pools. The report provides six draft principles to address regulatory concerns: • The price and volume of firm bids and offers should generally be transparent to the public; • Information regarding trades executed in dark pools or as a result of dark orders entered in transparent markets should be transparent to the public; • Transparent orders should have priority over dark orders at the same price within a trading venue; • Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders; • Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information to understand how their orders are handled and executed; • Regulators should periodically monitor dark pools and dark orders in their jurisdictions to ensure the efficiency of price formation on displayed markets, and take appropriate action as needed.	• MiFID already contains pre and post trade transparency requirements, which ensure that firm quotes and transactions are made public. It also contains the obligation for financial firms to report all trades in financial instruments that are admitted to trading on regulated markets to competent authorities. • The MiFID proposals would extend pre trade transparency to actionable indications of interest (i.e. an indication of interest that includes all necessary information to agree on a trade). • Also, post trade information would be published as close to instantaneously as is technically possible. Large orders would need to be published no later than the end of the trading day, and only the very largest trades that occur late in the trading day would need to be published before the opening of the following trading day. • In addition, execution venues would need to publish data on execution quality concerning financial instruments they trade.

25.1.4. Transparency of Structured Finance Products July 2010

http://www.iosco.org/library/pubdocs/pdf/IOSCOPD326.pdf

Key themes and details from IOSCO Principles/ Review Work	Alignment with the MiFID revision.
• This report follows a period of consultation and review by the technical Committee of IOSCO; it lists the factors that market authorities should use in determining	• The MiFID proposals would extend pre- and post-trade transparency requirements to all trades in structured products with a prospectus or which are admitted to

which structured finance products should be made transparent, and how this could best be implemented. • In response to the survey part of the review, IOSCO found that most market participants felt that a carefully developed post-trade transparency regime with a phased implementation would be beneficial to market efficiency. • In their conclusions and recommendations IOSCO state that jurisdictions may wish to consider some form of post trade transparency regime. Such a regime would include the publication of trade-by-trade transparency information or publication of aggregate trade information (such as high, low, and average prices) on a periodic basis. • In addition to the proposals on post-trade transparency, IOSCO note that some member jurisdictions may find it helpful to also consider factors such as the availability and quality of information about the underlying assets of Structured Finance Products, including through indices.	trading either on a regulated market or MTF, whether executed on regulated markets, MTFs, organised trading facilities or OTC. These new requirements would be differentiated by asset class.

25.1.5. Task Force on Commodity Futures Markets

Final Report – March 2009 https://www.iosco.org/library/pubdocs/pdf/IOSCOPD285.pdf

Report to the G-20 – June 2010 http://www.iosco.org/library/pubdocs/pdf/IOSCOPD324-325.pdf

Key themes and details from IOSCO Principles/ Review Work	**Alignment with the MiFID revision.**
• The Task Force on Commodity Futures Markets was set up in 2008 by the G-8 Finance Ministers, as a response to concern over price increases and volatility in oil and food products. Covering a wide range of markets and participants the work by the Task Force touches both physical market and financial market regulators. • The Task Force's most relevant recommendation is to ensure that futures	• In its Communication of 2 June 2010, the Commission set out a wide range of initiatives touching upon commodity derivatives markets. The review of MiFID is an integral part of this effort and complements others such as the proposal on short-selling and certain aspects of credit default swaps and the review of the Market Abuse Directive. • The MiFID proposals would:

market regulators have the necessary legal framework to detect and take enforcement action with respect to manipulation. • (Other recommendations are improvements in transparency with respect to the availability and quantity of information on commodities, greater cooperation and the sharing of information among futures market regulators, and meeting regularly for the purpose of informal sharing of concerns on trends and developments in commodity markets as well as the sharing of market surveillance and enforcement approaches.)	(a) Require organised commodity derivative trading venues to design contracts in a way that ensures convergence between futures and spot prices; (b) Modify or remove the exemption in the MiFID for commercial firms active in commodity markets and who provide investment services; (c) Increase transparency by: – requiring trading venues to make available to regulators (in detail) and the public (in aggregate) harmonised position information by type of regulated entity to the public; – requiring the disclosure of harmonised position data by type of regulated entity for all OTC commodity derivatives; – extending transaction reporting to commodity derivatives that are not admitted to trading or traded on a regulated market, a MTF or an organised trading facility.

26. ANNEX 16: NUMBER OF INVESTMENT FIRMS AND CREDIT INSTITUTIONS IN THE EU

We set out below the universe of investment firms in the EU. These data have been collected via a survey of the national competent authorities. Only data from Lithuania were not available — the data on its distribution of activities is based upon the median from across those 26 Member States reporting and the number of authorised firms in Lithuania (which is known).

The data relate to the position at 30th June 2010 (or as at 31st December 2009 when more recent data was not available).

– **TABLE 51**: The Universe of EU Investment Firms

	Reception and transmission of orders	Execution of orders on behalf of clients	Portfolio management	Investment advice	Underwriting and placing	Dealing on own account	Total Number of Investment Firms
Austria	197	-	64	199	-	-	199
Belgium	39	18	32	34	29	11	48
Bulgaria	56	55	30	61	23	20	61
Cyprus	69	50	51	45	14	37	84
Czech Republic	26	24	14	23	14	15	26
Denmark	46	38	38	85	1	13	90
Estonia	7	7	6	6	6	3	8
Finland	54	31	37	53	18	10	59
France	72	43	9	35	25	28	81
Germany	611	607	513	690	49	310	706
Greece	65	55	38	63	19	22	67
Hungary	16	24	11	15	5	13	26
Ireland	113	47	94	114	11	24	144
Italy	52	24	47	105	56	17	113
Latvia	5	5	16	4	4	-	20
Lithuania	17	11	13	17	6	5	21
Luxembourg	103	83	75	99	6	11	111
Malta	43	20	34	43	32	3	64
Netherlands	211	75	195	235	9	21	276
Poland	25	25	23	16	13	21	48
Portugal	12	9	33	30	8	2	37
Romania	60	60	50	47	31	35	60
Slovakia	17	17	14	16	4	8	18
Slovenia	24	21	20	22	20	22	24
Spain	93	54	65	124	65	43	151
Sweden	113	100	97	103	38	21	142
United Kingdom	2,237	1,064	884	2,171	376	409	2,337
	4,383	2,567	2,503	4,455	882	1,124	5,021

We set out below the universe of credit institutions authorised to provide investment services in the EU. These data have again been collected via a survey of the national competent authorities. The data relate to the position at 30th June 2010. Here, data on Belgium, Germany, Luxembourg, Lithuania and the Netherlands were not available. These gaps have been filled in the same way as above in order to gauge the approximate size of the overall number of banks authorised to be active.

– **TABLE 52:** The Universe of Credit Institutions Providing Investment Services in the EU

	Reception and transmission of orders	Execution of orders on behalf of clients	Portfolio management	Investment advice	Underwriting and placing	Dealing on own account	Total of CIs providing investment services
Austria	769	722	781	781	180	722	*781*
Belgium	58	53	38	56	51	49	66
Bulgaria	22	22	na	na	na	11	25
Cyprus	11	8	7	9	3	7	12
Czech Republic	12	12	6	12	12	11	12
Denmark	112	99	106	154	154	154	154
Estonia	3	3	2	3	2	2	5
Finland	171	156	112	165	151	144	*307*
France	237	79	98	190	224	142	275
Germany	1,024	931	672	985	902	863	1,164
Greece	22	17	10	13	14	16	23
Hungary	11	19	7	16	15	18	20
Ireland	13	11	7	9	4	12	18
Italy	693	529	203	684	686	528	712
Latvia	19	18	10	8	6	17	21
Lithuania	10	9	7	10	9	8	11
Luxembourg	82	75	54	79	73	70	148
Malta	7	7	7	7	7	3	8
Netherlands	109	99	72	105	96	92	196
Poland	34	21	2	11	10	20	47
Portugal	49	38	56	63	41	38	77
Romania	8	7	8	7	7	7	14
Slovakia	11	11	9	11	11	11	11
Slovenia	15	13	12	14	14	15	15
Spain	53	47	35	39	28	45	207
Sweden	78	74	18	76	27	69	141
United Kingdom	46	45	39	44	38	45	46
	3,679	3,125	2,378	3,551	2,765	3,119	4,516

27. ANNEX 17: LITERATURE REVIEW OF MARKET IMPACT OF HFT AND AUTOMATED TRADING

Source: Europe Economics

Hendershott, Jones and Menkveld (2010) note that nearly every large broker-dealer offers a suite of algorithms to its institutional customers to help them execute orders and reduce the market impact of orders, not least by slicing large orders into smaller pieces.[cdlxxxii] These algorithms constantly monitor market conditions across different securities and trading venues, are highly sophisticated and typically determine the timing, price, quantity and execution venue. A mix of active and passive strategies is generally employed, using both limit orders and marketable orders, and hence algorithmic traders are sometimes liquidity demanders and sometimes liquidity suppliers.

Hendershott and Riordan (2009) note that the trading process is central to efficient risk sharing and price efficiency and investigate how algorithmic trading is used and what role it plays in the price formation process.[cdlxxxiii] Using a sample of DAX stocks, with data identifying whether or not each trade's buyer and seller generated their order with an algorithm, the authors find that algorithmic traders are more sensitive to human trading activity than humans are to algorithmic trading activity, which is consistent with algorithmic traders closely monitoring the market for trading opportunities.

Brogaard (2010) investigates the behaviour and impact of high frequency traders, finding that they tend to follow a price reversal strategy driven by order imbalances and do not seem to systematically engage in a non-HFT anticipatory trading strategy.[cdlxxxiv] Furthermore, HFTs appear to follow a distinct strategy that bears little resemblance to strategies followed by other types of traders.

The impact of automated trading and HFT on the market is currently an active area of research and hence the volume of literature available at present is limited. Nonetheless, we have reviewed a number of working papers and published articles that have sought to assess the impact of automated and high frequency trading on market characteristics such as liquidity and volatility. A discussion of these papers is provided in the following paragraphs.

Impact on liquidity

Hendershott, Jones and Menkveld (2010) note that there has been a rapid growth in automated trading since the mid-1990s and that there has been a dramatic improvement in liquidity over the same time period. However, the authors state that it is not at all obvious a priori that automated trading and liquidity should be positively related. The authors note:

"If algorithms are cheaper and/or better at supplying liquidity, then AT may result in more competition in liquidity provision, thereby lowering the cost of immediacy. However, the effects could go the other way if algorithms are used mainly to demand liquidity. Limit order submitters grant a trading option to others, and if algorithms make liquidity demanders better able to identify and pick off an in-the-money trading option, then the cost of providing the trading option increases, in which case spreads must widen to compensate. In fact, AT could actually lead to an unproductive arms race, where liquidity suppliers and liquidity demanders both invest in better algorithms to try to take advantage of the other side, with measured liquidity the unintended victim."

As a result of the theoretical uncertainty regarding the relationship between automated trading and liquidity, a growing body of empirical literature has considered the issue. Indeed, mindful of the fact that correlation between automated trading and liquidity does not imply causation, Hendershott, Jones and Menkveld (2010) investigate the issue on the basis of NYSE data. The authors find that, for large stocks in particular, algorithmic trading narrows spreads, reduces adverse selection, and reduces trade-related price discovery. Hence, the evidence suggests that algorithmic trading leads to liquidity improvements and enhances the relevance and informative content of quotes. However, no significant effect is identified for smaller-cap stocks, a finding that the authors suggest may be explained by weak instrumental variable and a consequent lack of statistical power rather than the idea that there may truly be no effect.

Based on probity models of algorithmic trading, Hendershott and Riordan (2009) find that algorithmic traders are more likely to initiate trades when liquidity is high (where high liquidity is measured by narrow bid-ask spreads and higher market depth). They further find that while liquidity demanding trades of algorithmic traders are not related to volatility in the prior 15 minutes, algorithm-initiated trading is negatively related to volume in the prior 15 minutes. These results suggest that algorithmic traders monitor liquidity and information in the market, consuming liquidity when it is cheap and supplying liquidity when it is expensive. Hence, algorithmic trading helps to smooth out liquidity over time.

Impact on volatility

Hendershott and Riordan (2009) note that while, in theory, the demanding for liquidity by algorithmic traders during times when liquidity is low could result in an exacerbation of volatility; there is no evidence of this from their empirical analysis. Similarly, while algorithmic trading could theoretically exacerbate volatility by not supplying liquidity when the liquidity dries up, they again find no evidence for this hypothesis and, in fact, find the opposite to be true.

Brogaard (2010) finds that there is only a very limited change in the trading levels of high frequency traders in response to volatility increases and suggests that high frequency traders may dampen intraday volatility. Similarly, Hasbrouck and Saar (2010) find, using data in the millisecond environment, that algorithmic trading is especially beneficial in reducing volatility for small stocks during stressful times.[cdlxxxv]

Gsell (2008) using a simulation approach to assess the impact of algorithmic trading. He finds that that specific algorithmic trading concepts considered in the simulation have an impact on both prices and volatility.[cdlxxxvi] More specifically, low latency showed the potential to significantly lower market volatility while large volume orders had a negative impact on prices. However, Gsell emphasises that only simple algorithmic trading strategies have been implemented within the simulation environment to date and hence it is not valid to conclude that the algorithms actually implemented by traders are not capable of handling large order volumes appropriately. It is further noted that more sophisticated algorithms might actually have a lower impact on the market than those implemented to date.

However, Zhang (2010) finds that HFT may be harmful to market volatility.[cdlxxxvii] In particular, he finds that HFT is positively correlated with price volatility after controlling for various exogenous determinants of volatility, based on a sample of US stocks. He finds that the positive correlation is stronger among the largest 3,000 stocks by market capitalisation and among stocks with high institutional holdings. The correlation is found to be stronger during periods of high market uncertainty.

Impact on price formation and price discovery

Hendershott and Riordan (2009) examine the return-order flow dynamics for both algorithmic trades and human trades. The authors find that algorithmic liquidity demanding trades play a more significant role in discovering the efficient price than do human trades. The magnitude of effect appears to be quite significant: algorithm-initiated trades have a more than 20 per cent greater permanent price impact than human trades. Similarly, Brogaard (2010) finds that high frequency traders add substantially to the price discovery process.

Hendershott and Riordan (2009) also examine the role of the quotes of algorithmic traders in the price formation process, finding that the quotes of algorithmic trader are relatively more important in the price formation process than the share of trading volume would suggest. The authors also find that algorithmic traders contribute more to the efficient price by having more efficient quotes and algorithmic traders demanding liquidity so as to move the prices towards the efficient price.

Brogaard (2010) finds that high frequency traders provide the best bid and offer quotes for a significant portion of the trading day and do so strategically so as to avoid informed traders, but provide only one-fourth as much book depth as non-high frequency traders.

28. ANNEX 18: SUMMARY OF TRACE INITIATIVE AND ITS ANALYSIS

Source: Europe Economics

In July 2002 the National Association of Securities Dealers (NASD) initiated the Trade Reporting and Compliance Engine (TRACE) system.

TRACE was fully phased in by January 2006, and offers real-time, public dissemination of transaction and price data for all publicly traded corporate bonds — including intra-day transaction data and aggregate end-of-day statistics (most active bonds, total volume, advances and declines and new highs and lows).[cdlxxxviii] This data is available through all major market data vendors and on certain public websites. TRACE currently captures and disseminates secondary market transaction information in over 30,000 eligible securities from 2,000 firms regulated by the US Financial Industry Regulatory Authority and registered to trade corporate bonds.[cdlxxxix]

Impact of TRACE on the corporate bond market

The introduction of TRACE transaction reporting and the subsequent shift in the post-trade transparency of the US corporate bond market provide a unique experiment for assessing the impacts of transparency. Three seminal studies examined the impacts of the TRACE reporting system on the US corporate bond market shortly after it was initiated.[cdxc]

Edward, Harris, and Piwowar (2007) analyse the transactions costs of all bond trades reported to TRACE in 2003, including both retail and institutional trades. They estimate cross-sectional regressions where the dependent variable is the bond spread and explanatory variables include variables indicating whether the bond was price transparent. They also employ a pooled time-series model, in which they compare transactions costs for bonds that became transparent under TRACE with those for comparable bonds that were either never TRACE-transparent, or were TRACE-transparent throughout the whole period.

Goldstein, Hotchkiss and Sirri (2006) conduct a real scale experiment in which they form a sample of 90 BB rated bonds, for which transparency was introduced, and compare it to a matched sample of bonds for which transparency was not introduced to identify the effects of transparency.

Bessembinder, Maxwell and Venkataraman (2006) focus on institutional trades (bonds traded by insurance companies), and compare the transaction costs for bonds with prices disseminated by TRACE with non-disseminated bonds.

The studies all employ similar methodologies for assessing the impacts of TRACE, comparing the changes in transactions costs over time for different samples of bonds – those transparent under TRACE and those not. This method, known as difference in difference analysis,[cdxci] enables the effects of TRACE to be isolated from other possible changes over time and thus provides a robust way of evaluating the impacts of increased transparency.

The conclusions of the three studies are very similar:

(a) Bid-ask spreads decrease with trade size. When estimating the transactions costs for the respective samples, the authors found that larger trade sizes incurred smaller transactions costs. This result contrasts with the results obtained in the equity market,

where transactions costs increase with risk and thus trade size. The authors suggest that this is explained by the differences in the two market structures, with the most important difference being transparency; smaller traders in an opaque market are less able to accurately evaluate the costs they pay.

(b) Increased transparency under TRACE significantly reduces transaction costs (spreads). With the exception of a few trade size groups, the spreads of all bonds whose prices become transparent under TRACE decline by more than those of the control groups. Goldstein et al. find that this effect is strongest for small and intermediate trade sizes (between 101 and 250 bonds). These results are consistent with investors' ability to negotiate better terms of trade with dealers once they have access to broader bond-pricing data. These results suggest that public traders benefit significantly from price transparency. If transactions costs are a deterrent to retail interest, it can be expected that retail interest should increase with lower transaction costs associated with transparency. In addition, Bessembinder et al. find this effect evident even with large institutional trades.

(c) Increased transparency does no effect trading volume. Goldstein et al. (2006) were the only authors to measure the impact of increased transparency on both average daily trading volume and average number of trade per day, and they find it to be insignificant for all trade sizes, as well as for investor and inter-dealer trades.

(d) Increased transparency does not reduce liquidity. Goldstein et al. (2006) find that increased transparency has either a neutral or positive effect on liquidity, as measured by trading volume or estimated bid-ask spreads. Edwards et al. argue that given the great liquidity observed in the relatively more transparent equity markets (where the management of inventory problems is arguably greater), and their empirical results, it is extremely unlikely that increased bond market transparency would lower liquidity.

(e) Additional transparency is likely to encourage the creation of more efficient market structures and innovative dealing strategies that can further reduce transactions costs.

In addition to these general conclusions, Bessembinder et al. also find the large dealer cost advantage and market chares previously documented in other studies (see Schultz 2001) is reduced post-TRACE, which may have implications for the competitiveness of the bond market.

Consistent with the existence of liquidity externalities, Bessembinder et al. document that trading costs for non-TRACE eligible bonds decreased after transaction reporting was initiated through TRACE in July 2002. For non-TRACE eligible bonds issued by firms in the same industry as a firm with at least one bond issue eligible for TRACE reporting the reductions in trading costs are larger.

The table below summarises the empirical results for the three studies on the impacts of TRACE in the US corporate bond market.

– **TABLE 53:** Summary of the empirical results obtained for the US bond market

Study	Data	Measurement of transaction cost	Transaction cost decrease with trade size?	Transparency reduces transaction costs?	
				Basis points (per trade size)	Per cent
Bessembinder et al. (2006)*	Institutional (insurance company) trades in corporate bonds	One-way trading	Yes for eligible bond transactions > $1 million Yes for non-eligible bond transactions ≥ $4 million	3.4bp ($2 million) 7.5bp ($5 million) 2.8bp ($4 million) 4.0bp ($5 million) 9.5bp ($10 million)	50% 20%
Goldstein et al. (2006)†	BBB-rated bonds	Dealer round-trip (DRT)	Varies with trade size and pre-dissemination level of activity	0 – 67bp	
Edwards et al. (2007)‡	All corporate bonds	One-way trading	Yes (includes eligible and non-eligible)	0.9bp ($10,000) 2.9bp ($20,000) 3.8bp ($100,000) 2.2bp ($1 million)	25% (trades of 1,000 bonds) 7-10% (trades of smaller sizes)

* Use National Association of Insurance Commissioners (NAIC) data set.

† Use TRACE data set. Includes 99.9% of 4888 total bonds trades (0.01% pertains to trading activity on NYSE's Automated Bond System, not reported through TRACE)

‡ Use TRACE data set. Model uses an iterated weighted least-squares method requiring that a bond trade at least nine times s.t. estimates may not be representative of less active bonds i.e. 20% (5,369 of 27,342) of bonds are excluded.

Other Impacts of TRACE

TRACE data show strong retail participation in all credit qualities. For the past seven years, approximately 68 per cent of overall customer transactions are below $100,000 in par value, the size widely used by the industry to distinguish between retail and institutional trades. While retail-sized transactions represent a large part of reported trades, they account for approximately 1.8 per cent of par value traded. Retail-sized transactions, especially those in Investment Grade securities, have significantly contributed to the recent increases in the number of trades: TRACE now records twice as many retail sized transactions as it did in October 2008.[cdxcii]

29. ANNEX 19: OVERVIEW OF MAIN LEGISLATIVE INITIATIVES IN THE FIELD OF SECURITIES MARKETS

30. N MARKETS

Name of Directive/Regulation

	MiFID	*MAD*	*Short selling*	*Prospectus*	*ICSD*	*EMIR*	*Transparency Directive*
Main objective of the text or its revision in case of existing text	To improve transparency of financial markets for market participants and regulators, especially in the areas of bonds and derivatives, to extend market requirements to broker facilities, to regulate new forms of algorithmic trading and to increase the powers of regulators and to raise the level of investors protection	To extend the scope of MAD to instruments traded on newer types of markets, broker facilities and OTC, to extend and improve the disclosure of information to the market regarding instruments admitted to trading on those various markets and facilities and reinforce the prevention, detection, investigation and sanctioning of insider trading and market manipulation	To provide increased transparency to regulators and market participants on short selling activities for equities and sovereign bonds, to prevent settlement risk and to enable national regulators and ESMA to intervene in case of emergency to restrict or forbid certain practices	To improve the disclosure of comprehensive pre-market information by publishing a prospectus when securities are offered to the public or admitted to trading on a regulated market	To reinforce the investors protection in case of fraud or operational dysfunctioning by an investment firm resulting in an ability of this investment firm to render financial asset held on behalf of retail investors	To improve the safety and transparency of OTC derivatives markets by mandating reporting of OTC derivative contracts to trade repositories and clearing through central counterparties (CCP)	To harmonise the transparency requirements in relation to information about issuers whose securities are admitted to trading on a regulated market.
Topics	In	In	In	In	In	In	In
General structure of markets							
authorisation	✓						
organisational requirements	✓						✓
organisation of trading	✓						
market surveillance by	✓	✓					✓

Name of Directive/Regulation

	MiFID	*MAD*	*Short selling*	*Prospectus*	*ICSD*	*EMIR*	*Transparency Directive*
Main objective of the text or its revision in case of existing text	To improve transparency of financial markets for market participants and regulators, especially in the areas of bonds and derivatives, to extend market requirements to broker facilities, to regulate new forms of algorithmic trading and to increase the powers of regulators and to raise the level of investors protection	To extend the scope of MAD to instruments traded on newer types of markets, broker facilities and OTC, to extend and improve the disclosure of information to the market regarding instruments admitted to trading on those various markets and facilities and reinforce the prevention, detection, investigation and sanctioning of insider trading and market manipulation	To provide increased transparency to regulators and market participants on short selling activities for equities and sovereign bonds, to prevent settlement risk and to enable national regulators and ESMA to intervene in case of emergency to restrict or forbid certain practices	To improve the disclosure of comprehensive pre-market information by publishing a prospectus when securities are offered to the public or admitted to trading on a regulated market	To reinforce the investors protection in case of fraud or operational dysfunctioning by an investment firm resulting in an ability of this investment firm to render financial asset held on behalf of retail investors	To improve the safety and transparency of OTC derivatives markets by mandating reporting of OTC derivative contracts to trade repositories and clearing through central counterparties (CCP)	To harmonise the transparency requirements in relation to information about issuers whose securities are admitted to trading on a regulated market.
market operators							
trade transparency to market participants	✓	✓	✓			✓	✓
trade transparency to regulators	✓		✓			✓	✓
Specific clauses for SMEs/SME markets	✓	✓		✓			
Commodities markets	✓	✓					
Transaction reporting	✓					✓	✓

Name of Directive/Regulation

	MiFID	*MAD*	*Short selling*	*Prospectus*	*ICSD*	*EMIR*	*Transparency Directive*
Main objective of the text or its revision in case of existing text	To improve transparency of financial markets for market participants and regulators, especially in the areas of bonds and derivatives, to extend market requirements to broker facilities, to regulate new forms of algorithmic trading and to increase the powers of regulators and to raise the level of investors protection	To extend the scope of MAD to instruments traded on newer types of markets, broker facilities and OTC, to extend and improve the disclosure of information to the market regarding instruments admitted to trading on those various markets and facilities and reinforce the prevention, detection, investigation and sanctioning of insider trading and market manipulation	To provide increased transparency to regulators and market participants on short selling activities for equities and sovereign bonds, to prevent settlement risk and to enable national regulators and ESMA to intervene in case of emergency to restrict or forbid certain practices	To improve the disclosure of comprehensive pre-market information by publishing a prospectus when securities are offered to the public or admitted to trading on a regulated market	To reinforce the investors protection in case of fraud or operational dysfunctioning by an investment firm resulting in an ability of this investment firm to render financial asset held on behalf of retail investors	To improve the safety and transparency of OTC derivatives markets by mandating reporting of OTC derivative contracts to trade repositories and clearing through central counterparties (CCP)	To harmonise the transparency requirements in relation to information about issuers whose securities are admitted to trading on a regulated market.
Powers of regulators							
market surveillance	✓	✓	✓	✓			✓
oversight of positions	✓						✓
ban on product and services	✓		✓				✓
Conduct of business rules							
authorisation	✓					✓	
corporate governance	✓						✓
organisational requirements for specific activities	✓					✓	✓

Name of Directive/Regulation

	MiFID	*MAD*	*Short selling*	*Prospectus*	*ICSD*	*EMIR*	*Transparency Directive*
Main objective of the text or its revision in case of existing text	To improve transparency of financial markets for market participants and regulators, especially in the areas of bonds and derivatives, to extend market requirements to broker facilities, to regulate new forms of algorithmic trading and to increase the powers of regulators and to raise the level of investors protection	To extend the scope of MAD to instruments traded on newer types of markets, broker facilities and OTC, to extend and improve the disclosure of information to the market regarding instruments admitted to trading on those various markets and facilities and reinforce the prevention, detection, investigation and sanctioning of insider trading and market manipulation	To provide increased transparency to regulators and market participants on short selling activities for equities and sovereign bonds, to prevent settlement risk and to enable national regulators and ESMA to intervene in case of emergency to restrict or forbid certain practices	To improve the disclosure of comprehensive pre-market information by publishing a prospectus when securities are offered to the public or admitted to trading on a regulated market	To reinforce the investors protection in case of fraud or operational dysfunctioning by an investment firm resulting in an ability of this investment firm to render financial asset held on behalf of retail investors	To improve the safety and transparency of OTC derivatives markets by mandating reporting of OTC derivative contracts to trade repositories and clearing through central counterparties (CCP)	To harmonise the transparency requirements in relation to information about issuers whose securities are admitted to trading on a regulated market.
Investors protection							
product information	✓						
protection of investments					✓		
control of inducements	✓						
Algorithmic and automated trading							
Authorisation	✓						
risk control requirements	✓						

1 The Mifid review is based on the "Lamfalussy process" (a four-level regulatory approach recommended by the Committee of Wise Men on the Regulation of European Securities Markets, chaired by Baron Alexandre Lamfalussy and adopted by the Stockholm European Council in March 2001 aiming at more effective securities markets regulation) as developed further by Regulation (EU) No 1095/2010 of the European Parliament and of the Council, establishing a European Supervisory Authority (European Securities and Markets Authority): at Level 1, the European Parliament and the Council adopt a directive in co-decision which contains framework principles and which empowers the Commission acting at Level 2 to adopt delegated acts (Art 290 The Treaty on the Functioning of the European Union C 115/47) or implementing acts (Art 291 The Treaty on the Functioning of the European Union C 115/47). In the preparation of the delegated acts the Commission will consult with experts appointed by Member States with the European Securities Committee. At the request of the Commission, ESMA can advise the Commission on the technical details to be included in level 2 legislation. In addition, Level 1 legislation may empower ESMA to develop draft regulatory or implementing technical standards according to Art 10 and 15 of the ESMA Regulation which may be adopted by the Commission (subject to a right of objection by Council and Parliament in case of regulatory technical standards). At Level 3, ESMA also works on recommendations, guidelines and compares regulatory practice by way of peer review to ensure consistent implementation and application of the rules adopted at Levels 1 and 2. Finally, the Commission checks Member States' compliance with EU legislation and may take legal action against non-compliant Member States.

2 Directive 2004/39/EC (MiFID Framework Directive)

3 Directive 2006/73/EC (MiFID Implementing Directive) implementing Directive 2004/39/EC (MiFID Framework Directive)

4 Regulation No 1287/2006 (MiFID Implementing Regulation) implementing Directive 2004/39/EC (MiFID Framework Directive) as regards record-keeping obligations for investment firms, transaction reporting, market transparency, admission of financial instruments to trading and defined terms for the purposes of that Directive (OJ L 241/1 2.09.2006)

5 Monitoring Prices, Costs and Volumes of Trading and Post-trading Services, Oxera, 2011

6 See (COM (2010) 301 final) Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The European Central Bank: Regulating Financial Services For Sustainable Growth, June 2010

7 See G-20 Leaders' statement of Pittsburgh Summit, 24-25 September 2009, http://www.pittsburghsummit.gov/mediacenter/129639.htm

8 As a result, the Commission issued (COM (2009) 563 final) Communication by the Commission on ensuring efficient, safe and sound derivatives markets: future policy actions, 20 October 2009

9 See (COM (2010) 484) Proposal on Regulation on OTC derivatives, central counterparties and trade repositories, September 2010

10 See Report, High-level Group on Financial Supervision in the EU, chaired by Jacques de Larosière, February 2009, and Council conclusions on strengthening EU financial supervision, 10862/09, June 2009

11 Specific national discretions which have not been used by any Member State will not be part of this impact assessment.

12 On transparency for non equity markets; commodity derivatives related work-streams; high frequency trading; waivers from pre-trade transparency & dark pools/crossing networks; best execution/conduct of business rules; and data consolidation/consolidated tape. See Annex 10 for the list of participants.

13 The summary is enclosed in Annex 12

14 See responses to public consultation on the review of MiFID: http://circa.europa.eu/Public/irc/markt/markt_consultations/library?l=/financial_services/mifid_instruments&vm=detailed&sb=Title

15 See Annex 10 for the full list of the reports published by CESR on the MiFID related issues

16 These studies have been completed by two external consultants that were selected according to the selection process established within the rules and regulations of the European Commission. These two studies do not reflect the views or opinions of the European Commission

17 In accordance with the rules for the elaboration of impact assessments the minutes of the last meeting of the steering group have been submitted to the Impact Assessment Board together with this impact assessment.

18 Annex I Section C of Directive 2004/39/EC

19 See Thomson Reuters Europe Monthly Market Share Report from January 2010 to December 2010 by countries

20 BIS Quarterly Review, June 2011

21 BIS Quarterly Review, June 2011

22 See CESR Technical advice dated 29 July 2010 and Report to the Minister for the Economy, Industry and Employment on the Review of the Markets in Financial Instruments Directive (MiFID), Pierre Fleuriot, February 2010, p 29 and Interview with J.Hardt, L'Echo, 12 January 2010

23 A systematic internaliser is an investment firm which, on an organised, frequent and systematic basis, deals on own account by executing client orders. It is a form of bilateral trading. See Article 4.1(7) of Directive 2004/39/EC (MiFID Framework Directive)

24 See MiFID: Spirit and Reality of a European Financial Markets Directive, Celent and Goethe Universitat Frankfurt am Main, September 2010 p 49 and Report to the Minister for the Economy, Industry and Employment on the Review of the Markets in Financial Instruments Directive (MiFID), Pierre Fleuriot, February 2010, p 31.

25 Technical Advice to the European Commission in the context of the MiFID Review – Equity Markets, CESR/10-802, 29 July 2010, pp 34-35. Based on data collected by CESR from 11 investment firms.

26 See Tradenews article on " US dark pool regulations on ice as volumes grow" dated 4 February 2011 and US broker Rosenblatt Securities' annual report on US dark trading

27 According to the Act, "swap execution facility means a trading system or platform in which multiple participants have the ability to execute or trade swaps by accepting bids and offers made by multiple participants in the facility or the system..."

28 Findings regarding the market events of May 6, 2010; Report of the Staffs of the CFTC and SEC to the Joint Advisory Committee on emerging regulatory issues; 30 September 2010

29 Article 2.1(d) of the of Directive 2004/39/EC (MiFID Framework Directive) for persons who are only dealing on their own account

30 Technical Advice to the European Commission in the context of the MiFID Review – Equity Markets, CESR/10-802, 29 July 2010

31 High Frequency Trading Technology, A TABB Anthology, TABB Group, August 2009

32 The September 2009 G20 summit concluded that "all standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest."

33 A dark order can be defined as an electronic order that can be automatically executed and for which there in no pre-trade transparency, cf. Issues raised by dark liquidity, Consultation Report, IOSCO, CR05/10, October 2010, p 4.

34 As regards to trading in equity markets, trading under pre-trade waivers have slowly increased over the last years from c.6% in 2008 to nearly 10% end of 2009. This means that as of today a bit more than 90% of trading on organised public markets is pre-trade transparent. OTC trading is not subject to any pre-trade transparency requirements. Mention trading executed on BCN which is included in OTC trading figures.

35 MiFID: Spirit and Reality of a European Financial Markets Directive, Celent and Goethe Universitat Frankfurt am Main, September 2010.

36 It should be noted that the % of OTC trading in the equities markets is subject to debate as trades in the OTC space are not reported in a reliable way. This will be addressed by improving the content of the transaction reporting (see Annex 9.4). According to a recent Association for Financial Markets in Europe report (Market Analysis, The Nature and Scale of OTC Equity Trading in Europe, April 2011), the often reported 40% of European equities trading that is over-the-counter ('OTC') is incorrect and have estimated the proportion of equities trading represented by 'real' OTC trades to be actually around 16%.

37 For example, the large in scale waiver was designed to accommodate the need of wholesale market participants to be able to execute large orders without too large a price impact. This waiver is essential in striking the right balance between market transparency and protecting legitimate interests of market participants who are essential contributors to the liquidity of markets.

38 Publication of trade reports must generally take place in real-time, and in any case within 3 minutes, but for large transactions delays between 60 minutes and up to 4 trading days are allowed, depending on the liquidity of the share and the size of the transaction. See Technical Advice to the European Commission in the context of the MiFID Review – Equity Markets, CESR/10-802, 29 July 2010

39 Technical Advice to the European Commission in the context of the MiFID Review – Equity Markets, CESR/10-802, 29 July 2010

40 These instruments are mostly depositary receipts, exchange traded funds and certificates issues by companies.

41 Technical Advice to the European Commission in the Context of the MiFID Review: Non-equity Markets Transparency, CESR/10-799, 29 July 2010

42 Prior to MiFID trade data would typically be available from the incumbent exchange in each Member State while OTC trades were sometimes not reported at all. MiFID on the one hand, has spurred competition among trading and reporting venues while on the other hand, has required post-trade reporting of OTC trades and. This has made the trade data environment more complex with more complete information but originating from far more diversified sources. Therefore, this has made proper trade data consolidation more important. See Technical Advice to the European Commission in the context of the MiFID Review – Equity Markets, CESR/10-802, 29 July 2010 p 28 for further information.

43 See e.g. Rapport du groupe de travail sur la volatilité des prix du pétrole, sous la présidence de Jean Marie Chevalier, Ministère de l'économie et de l'emploi, February 2010, and Rapport d'étape: Prévenir et gérer l'instabilité des marchés agricoles, Jean-Pierre Jouyet, Christian de Boissieu et Serge Guillon, 23 September 2010

44 For example, European Parliament resolution on derivatives markets: future policy actions (A7-0187/2010), 15 June 2010, calls for a ban on "purely speculative trading in commodities".

45 Article 2(1)(i) and (k) of Directive 2004/39/EC (MiFID Framework Directive) exempts the same firms from the Capital Requirements Directive (CRD) as well.

46 See Rapport du groupe de travail sur la volatilité des prix du pétrole, sous la présidence de Jean Marie Chevalier, Ministère de l'économie et de l'emploi, February 2010, p52f.

47 This section also refers to other compliance units under the EU ETS like Certified Emission Reductions (CERs) stemming from the Clean Development Mechanism (CDM) and Emission Reduction Units (ERUs) from Joint Implementation (JI) projects.

48 As created by Directive 2003/87/EC of the European Parliament and of the Council.

49 A key future segment in the primary market, auctions, will come in full under the market oversight regime set out by the Commission Regulation (EU) No 1031/2010 of 12 November 2010 on the timing, administration and other aspects of auctioning of greenhouse gas emission allowances pursuant to Directive 2003/87/EC of the European Parliament and the Council establishing a scheme for greenhouse gas emission allowances trading within the Community, OJ L 302, 18.11.2010, p 1 (the Auctioning Regulation), irrespective of whether the auctioned product qualifies as a financial instrument or not. The Regulation stipulates that auctions shall only be conducted on an auction platform authorised as a regulated market by a MiFID supervisor and in accordance with rules implementing the MiFID to the extent relevant. Under the Regulation, reception, transmission and submission of bids provided by investment firms in that market is also to be governed by the MiFID. Cf. Art. 6(5) and 35 of the Auctioning Regulation. Moreover, to the extent that the allowance derivatives market is within the scope of financial markets legislation, it benefits from the regular safeguards and supervisory arrangements that apply to any other market for commodity derivatives.

50 E.g. Germany and France

51 Article 25(3) of Directive 2004/39/EC (MiFID Framework Directive) and Articles 10 to 14 of Regulation No 1287/2006 (MiFID Implementing Regulation).

52 MAD is likely to be extended to financial instruments admitted to trading or only traded on MTFs as well as to instruments that can influence the price of a financial instrument traded on a regulated market.

53 (COM (2010) 484) Proposal on Regulation on OTC derivatives, central counterparties and trade repositories, September 2010

54 Article 50 of Directive 2004/39/EC (MiFID Framework Directive)

55 Through MiFID, Member States already have the power to carry on site inspections and to request the freezing of assets. Additional powers could consist in giving them the power to ask a judicial authority to enter private premises and seize documents relevant for the enforcement action.

56 See e.g. Article 9 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council, establishing a European Supervisory Authority (European Securities and Markets Authority)

57 CESR Report on the mapping of supervisory powers, supervisory practices, administrative and criminal sanctioning regimes of Member States in relation to the Markets in Financial Instruments Directive (MiFID), CESR/08-220, February 2009.

58 Article 3 of Directive 2004/39/EC (MiFID Framework Directive)

59 See Consultation of Commission services on legislative steps for the Packaged Retail Investment Products initiative of 26 November 2010 and (COM (2009) 204 final) Communication on Packaged Retail Investment Products, April 2009, Update on Commission work on Packaged Retail Investment Products, December 2009 and update in the form a working paper on 16 December 2009.

60 CESR, CEIOPS and CEBS have also developed their thinking concerning the work on PRIPs. See CESR / CEBS / CEIOPS Report of the 3L3 Task Force on Packaged Retail Investment Products (PRIPs), CESR/10-1136 and CEBS 2010 196 and CEIOPS-3L3-54-10, 6 October 2010, p 18

61 Responses to Questions 15-18 and 20-25 of the European Commission Request for Additional Information in Relation to the Review of MiFID, CESR/10-860, 29 July 2010, p 3

62 Article 19(6) of Directive 2004/39/EC (MiFID Framework Directive)

63 This was underlined by 675 replies received from citizens to the MiFID consultation. Investors across Member States vary in their use of execution-only services, but estimates suggest it can reach up to a third of all retail transactions in some Member States (source: Europe Economics).

64 The Final Report, Prepared for: European Commission, Directorate-General Health and Consumer Protection, Synovate, 2011, recently assessed the quality of advice across the EU based on a mystery shopping exercise. Weaknesses emerged in the ability of advisors across the EU to recommend suitable products to investors. Another study, Consumer Decision-Making in Retail Investment Services: A Behavioural Economics Perspective, Final Report, Decision Technology Ltd, N Chater, S Huck, R Inderst, November 2010, sought behavioural economics insights on different factors relevant to investor decision making.

65 Article 26 (b) of Directive 2006/73/EC (MiFID Implementing Directive).

66 Responses to Questions 15-18 and 20-25 of the European Commission Request for Additional Information in Relation to the Review of MiFID, CESR/10-860, 29 July 2010, p 6

67 Responses to Questions 15-18 and 20-25 of the European Commission Request for Additional Information in Relation to the Review of MiFID, CESR/10-860, 29 July 2010, p 8. The report: Consumer Market Study on Advice within the Area of Retail Investment Services – Final Report, Prepared for: European Commission, Directorate-General Heath and Consumer Protection, Synovate, 2011 recently assessed the quality of advice across the EU based on a mystery shopping exercise. Weaknesses emerged in the ability of advisors across the EU to recommend suitable products to investors.

68 See definitions and Annex II of Directive 2004/39/EC for further details

69 A number of alleged cases of misselling of derivatives (normally swaps) and other complex products have involved the relationship between municipalities and large credit institution operating at national level and across the EEA. These cases have emerged in different Member States, such as France (department of Seine-Saint-Denis and others), Italy (City of Milan, Region of Apulia), Germany (a company owned by German cities including Ravensburg and Weingarten) and Norway.

70 CESR Technical Advice to the European Commission in the context of the MiFID review – Investor protection and Intermediaries – CESR/10-859, p 18. Data gathering and analysis in the context of the MiFID review, Final Report for Directorate General Internal Market and Services, European Commission, PricewaterhouseCoopers, 13 July 2010, p 363

71 Articles 13(2) and (3) of Directive 2004/39/EC (MiFID Framework Directive)

72 It has to monitor that firms implement and maintain policies and procedures to detect and minimize the risk of non-compliance with their obligations under MiFID and to assess the adequacy and effectiveness of such policies and procedures. Cf Article 6 of Directive 2006/73/EC (MiFID Implementing Directive)

73 It has to identify risks relating to the firm's activities and set, where appropriate, the level of risk tolerated by the firm. Cf Article 7 of Directive 2006/73/EC (MiFID Implementing Directive)

74 It is required to establish an audit plan to evaluate the overall adequacy of the firm's systems and internal control mechanisms. Cf Article 8 of Directive 2006/73/EC (MiFID Implementing Directive)

75 (COM (2010) 284 Final) Green Paper on Corporate Governance in financial institutions and remuneration policies

76 Responses to Questions 15-18 and 20-25 of the European Commission Request for Additional Information in Relation to the Review of MiFID, CESR/10-860, 29 July 2010, p 4

77 The review of the published annual reports of financial services ombudsmen did reveal some problems arising in relation to discretionary portfolio management services. In particular, these were highlighted by the ombudsmen in Belgium, the Czech Republic, France, Germany, Ireland, Luxembourg, Spain and the UK. In the 2010 Annual Report published by the UK Ombudsman, it noted that the complaints made about discretionary portfolio management services typically involved the following issues: (i) A failing of administration of their portfolio; (ii) The portfolio was not managed in a ways that was initially agreed; (iii) A failure by the manager to diversify the investments made in the portfolio; (iv) A manager that made too many, or too few, changes to the portfolio over a certain period of time. Only a few of the ombudsmen identified the number of cases relating to discretionary management. For instance, the German private banking ombudsman identifies 274 cases relating to discretionary portfolio management (9 per cent of the cases it handled in the securities area, 4 per cent of its total cases workload); in Luxembourg seven of the cases settled related to this area (being three per cent of the total).

78 CESR Technical Advice to the European Commission in the context of the MiFID review – Investor protection and Intermediaries – CESR/10-859, p 6; See also Annex 5.2.11 Table 32

79 Technical Advice to the European Commission in the context of the MiFID Review – Investor Protection and Intermediaries, CESR/10-859, 29 July 2010, p.8

80 Directive 2003/6/EC (Market Abuse Directive)

81 (COM (2010) 484) Proposal on Regulation on OTC derivatives, central counterparties and trade repositories, September 2010

82 (COM (2010) 482) Proposal on short selling and certain aspects of Credit Default Swaps, September 2010

83 (COM (2010) 726) Proposal for a Regulation of the European Parliament and of the Council on energy market integrity and transparency, December 2010

84 (COM (2009)114) Communication for the spring European Council, Driving European recovery, March 2009

85 (COM (2010) 301 final) Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The European Central Bank: Regulating Financial Services For Sustainable Growth, June 2010, p 7

86 (COM (2010) 482) Proposal on short selling and certain aspects of Credit Default Swaps, September 2010

87 (COM (2010) 484) Proposal on Regulation on OTC derivatives, central counterparties and trade repositories, September 2010

88 Directive 2003/6/EC (Market Abuse Directive)

89 (COM (2010) 726) Proposal for a Regulation of the European Parliament and of the Council on energy market integrity and transparency, December 2010

90 Article 51 of Charter of Fundamental Rights of the European Union (2000/C 364/01)

91 Article 9(5) of Regulation (EU) No 1095/2010 of the European Parliament and of the Council, establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC

92 Commission Regulation (EU) No 1031/2010 of 12 November 2010 on the timing, administration and other aspects of auctioning of greenhouse gas emission allowances

93 See Annex 2.1.2 Table 2

94 See Annex 2.1.2 Derivatives markets

95 Report on Trading of OTC Derivatives, OICV-IOSCO, FR03/11, February 2011

96 Principles for Direct Electronic Access, Final Report, IOSCO, FR08/10, August 2010

97 See Goethe Universität report on High Frequency Trading, Prof. Dr. Peter Gomber

98 Consultation paper, Guidelines on systems and controls in a highly automated trading environment for trading platforms, investment firms and competent authorites, 20 July 2011, ESMA/2011/224

99 ICE Futures Europe has started recently to publish information about the open position held by different types of traders for its Brent and gasoil futures and options. Euronext Liffe is expected to follow in the next few months for its soft commodities futures contracts. See article "Transparency boost for Brent", Finnacial Times, 21 June 2011.

100 Article 48 of the Directive 2006/49/EC of the European Parliament and the Council of 14 June 2006 on the capital adequacy of investment firms and credit institutions. The review of the exemptions will take place before their expiry end of 2014.

101 CESR/CEBS Technical Advice to the European Commission on the review of commodities business, CESR/08-752, 15 October 2008

102 G20 Communiqué, Meeting of Finance Ministers and Central bank Governors, Washington DC, 14-15 April 2011

103 Recommendation 10, Report, High-level Group on Financial Supervision in the EU, chaired by Jacques de Larosière, February 2009

104 Regulation No 1287/2006 (MiFID Implemeoting Regulation)

105 See G-20 Leaders' statement of Pittsburgh Summit, 24-25 September 2009, http://www.pittsburghsummit.gov/mediacenter/129639.htm

106 See G-20 Leaders' statement of Pittsburgh Summit, 24-25 September 2009, http://www.pittsburghsummit.gov/mediacenter/129639.htm

107 See G-20 leader's statement of Seoul Summit, 11-12 November 2010, http://www.g20.org/Documents2010/11/seoulsummit_declaration.pdf

108 Based on (COM (2010) 573). Strategy for the effective implementation of the Charter of Fundamental Rights by the European Union, October 2010, particularly the check list.

109 This is based on the banking sector in the EU having operating expenditure of about €448 billion in 2009. OECD, Income statement and balance sheet, OECD Banking Statistics Database, 2010, and EE analysis.

110 Study on the Cost of Compliance with Selected FSAP Measures: Final Report, Europe Economics, January 2009. The data referred to are the medians gathered from a total sample of 40 banks and a further 18 investment banks.

111 A report by Morgan Stanley and Oliver Wyman in the context of US OTC derivative reform indicates that they expect the OTC derivative markets to be significantly reshaped by the reforms (which include similar central clearing requirements to the EMIR legislation in addition to exchange trading of derivatives). In relatioo to spreads, they assume that "the sell-side margin erosion will be largely offset by

increased volumes, improved cost structure and balance sheet efficiency." However, they do also emphasise that an unintended consequence of enforced exchange trading in terms of a severe loss in liquidity are a distinct possibility. (Source: Derivative uncertainty likely to hit banks' revenues, Financial Times, 21 March 2010)

112 See Bessembinder H, Maxwell W and Venkataraman K (2006) 'Market transparency, liquidity externalities and institutional trading costs in corporate bonds' Journal of Financial Economics Vol 82, pp 251 – 288; Goldstein M, Hotchkiss E and Sirri, E (2006) 'Transparency and liquidity: a controlled experiment on corporate bonds' The Review of Financial Studies Vol 20 (2), pp 235 – 273; and Edwards A, Harris L and Piwowar, M (2007) 'Corporate bond market transaction costs and transparency' The Journal nf Finance, Vol LXII (3)

113 Data gathering and analysis in the context of the MiFID review, Final Report for Directorate General Internal Market and Services, European Commission, PricewaterhouseCoopers, 13 July 2010

114 Citadel Securities, Nordic Trading Landscape Evolution – Impact of MiFID on Retail Flow Providers, February 2010; and Data gathering and analysis in the context of the MiFID review, Final Report for Directorate General Internal Market and Services, European Commission, PricewaterhouseCoopers, 13 July 2010

115 The impact of the UK FSA's Retail Distribution Review (RDR) dealing with the regulation of inducements when advice is provided could be used a reference point. It should be mentioned, however, that the RDR proposes more stringent restrictions on the treatment of inducements since it deals homogeneously with inducements provided for in any form of advice (not only independent); furthermore, the RDR deals with products and entities which are not covered under MiFID (i.e. entities providing insurance products). In addition it also includes measures on professional standards (i.e. professional qualifications of advisors). Lastly it should be taken into account that there is a broader population of investment advisors in the UK, including a significant proportion of small advisors. Having said than, it is anticipated that, 23 per cent of UK advisory firms might exit the market as a result of the RDR, with a much higher ratio amongst the smallest advisers (those with annual incomes below €50,000). Overall, adviser numbers would fall by about 11 per cent. This includes, for instance, small providers which are close to retiring and will not find worthwhile to make investments to adapt to the new rules (Retail Distribution Review proposals: Impact on market structure and competition, Oxera, 2010).

116 European Fund Industry Breakfast Briefing, Thomson Reuters and Lipper, Ed Moisson, December 2010

117 Cf. article 4 of Directive 2004/39/EC for legal definitions of terms used in this Directive and annex 4 for glossary of main terms employed in this Impact Assessment

118 The concentration rule set out in Article 14 of Directive 1993/22/EEC (Directive on investment services in the securities field) enables Member States to require orders from investors in that Member Sate to be executed only on regulated markets

119 All European Equities Market Activity by Trade Type (January 2010 to January 2011), Thomson Reuters, 2011: http://thomsonreuters.com/products_services/financial/financial_products/equities_derivatives/europe/market_share_reports/#tab2

120 A systematic internaliser (SI) is an investment firm which, on an organised, frequent and systematic basis, deals on own account by executing client orders. It is a form of bilateral trading. The core requirement for systematic internalisers is to publish firm quotes in shares admitted to trading on a regulated market that are classified as 'liquid' under MiFID when dealing in sizes up to standard market size (Article 27 of Directive 2004/39/EC (MiFID Framework Directive)). To date, only 10 investment firms have been registered as systematic internalisers. CESR data suggests that systematic internalisers do not represent a large proportion of equity trading within Europe – with estimates in the region of 2% of all European equity trading. See: Impact of MiFID on equity secondary markets functioning, CESR/09-355, June 2009.

121 MiFID 2.0: Casting New Light on Europe's Capital markets, Report of the ECMI-CEPS Task Force on the MiFID Review, chaired by Pierre Francotte, Centre for European Policy Studies Brussels, February 2011

[122] Report to the Minister for the Economy, Industry and Employment on the Review of the Markets in Financial Instruments Directive (MiFID), Pierre Fleuriot, February 2010, p 16

[123] Impact of MiFID on equity secondary markets functioning, CESR/09-355, June 2009

[124] See Thomson Reuters Europe Monthly Market Share Reports: http://thomsonreuters.com/products_services/financial/financial_products/equities_derivatives/europe/market_share_reports/#tab2

[125] The organisational requirements for regulated markets are set out in Article 39 of Directive 2004/39/EC (MiFID Framework Directive), while the corresponding requirements for MTFs are provided in Article 13 of the same Directive. The requirements for MTFs and regulated markets to monitor for disorderly conduct or conduct that may involve market abuse can be found in Articles 26 and 43 respectively of Directive 2004/39/EC (MiFID Framework Directive).

[126] See Technical Advice to the European Commission in the context of the MiFID Review – Equity Markets, CESR/10-802, 29 July 2010 and Report to the Minister for the Economy, Industry and Employment on the Review of the Markets in Financial Instruments Directive (MiFID), Pierre Fleuriot, February 2010, p 29 and Interview with J.Hardt, L'Echo, 12 January 2010

[127] Article 13(4) of Directive 2004/39/EC (MiFID Framework Directive) stipulates that an investment firm shall take reasonable steps to ensure continuity and regularity in the performance of investment services and activities. To this end the investment firm shall employ appropriate and proportionate systems, resources, and procedures.

[128] Technical Advice to the European Commission in the context of the MiFID Review – Equity Markets, CESR/10-802, 29 July 2010, p 33.

[129] Directive 2003/6/EC (Market Abuse Directive), on insider dealing and market manipulation. Adopted in early 2003, the Market Abuse Directive (MAD) has introduced a comprehensive framework to tackle insider dealing and market manipulation practices, jointly referred to as "market abuse". The Commission is carrying out a review of the Directive aiming at clarifying some of its provisions and increasing its effectiveness. A proposal for amending the Directive is scheduled to be adopted by the College before the summer.

[130] Broker Crossing Networks are required for example to comply with conduct of business and best execution provisions (Articles 19, 20, 21 and 22 of Directive 2004/39/EC (MiFID Framework Directive)) as well as to publish transactions in shares admitted to trading on a regulated market (Article 28 of Directive 2004/39/EC (MiFID Framework Directive)), to have arrangements in place to prevent conflicts of interest from damaging clients' interests (Article 18 of Directive 2004/39/EC (MiFID Framework Directive)) , and to notify competent authorities when they suspect a transaction might constitute insider dealing or market manipulation (Article 6(9) of Directive 2004/72/EC (Market Abuse Directive)).

[131] Investment firms operating MTFs are subject to the overall organizational requirements applicable to investment firms (Article 13 of Directive 2004/39/EC (MiFID Framework Directive)), as well as additional requirements relating to the trading process to ensure fair and orderly trading (Article 14 of Directive 2004/39/EC (MiFID Framework Directive)). MTFs are required to have monitoring tools in place to detect market abuse cases (Article 26 of Directive 2004/39/EC (MiFID Framework Directive)), and are subject to full pre-trade and post-trade transparency requirements (Articles 29 and 30 of Directive 2004/39/EC (MiFID Framework Directive)).

[132] See MiFID: Spirit and Reality of a European Financial Markets Directive, Celent and Goethe Universitat Frankfurt am Main, September 2010, p 49 and Report to the Minister for the Economy, Industry and Employment on the Review of the Markets in Financial Instruments Directive (MiFID), Pierre Fleuriot, February 2010, p 31.

[133] Article 27 for SIs, Article 29 for MTFs and Article 44 for RMs of Directive 2004/39/EC (MiFID Framework Directive)

[134] Article 26 for MTFs and Article 43 for RMs of Directive 2004/39/EC (MiFID Framework Directive)

[135] Technical Advice to the European Commission in the context of the MiFID Review – Equity Markets, CESR/10-802, 29 July 2010, pp 34-35. Based on data collected by CESR from 11 investment firms.

[136] See Report to the Minister for the Economy, Industry and Employment on the Review of the Markets in Financial Instruments Directive (MiFID), Pierre Fleuriot, February 2010

[137] See Tradenews website and US broker Rosenblatt Securities' annual report on US dark trading

[138] Electronic Trading of Bonds in Europe: Weathering the Storm, Celent, October 2009

[139] PWC estimates based on FESE data, from their report prepared for Commission services.

[140] PWC estimates based on data from UK FSA, from their report prepared for Commission services.

141 Report on trading of OTC Derivatives, OICV-IOSCO, FR03/11, February 2011, p 4

[142] Report on trading of OTC Derivatives, OICV-IOSCO, FR03/11, February 2011, p 6

[143] BIS, Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity in 2007, see http://www.bis.org/statistics/

144 Report on trading of OTC Derivatives, OICV-IOSCO, FR03/11, February 2011, p 9

[145] Report on trading of OTC Derivatives, OICV-IOSCO, FR03/11, February 2011, p 8

[146] BIS Quarterly Review, September 2010 International banking and financial market developments, Bank for International Settlements

147 The September 2009 G20 summit concluded that "all standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest."

148 Dodd–Frank Wall Street Reform and Consumer Protection Act (Pub.L. 111-203, H.R. 4173), 21 July, 2010 is a federal statute in the United States that was signed into law by President Barack Obama. The Act, which was passed as a response to the financial crisis, is the most sweeping change to financial regulation in the United States since the Great Depression. It was named after the two members of Congress, Barney Frank and Chris Dodd, because of their involvement in the drafting of this Act.

[149] According to the Dodd-Frank Act, "swap execution facility means a trading system or platform in which multiple participants have the ability to execute or trade swaps by accepting bids and offers made by multiple participants in the facility or the system…"

[150] Although there is debate about how HFT could be defined, it is perhaps best defined as trading that uses sophisticated technology to try to interpret signals from the market and, in response, executes high volume, automated trading strategies, usually either quasi market making or arbitraging, within very short time horizons. It usually involves execution of trades as principal (rather than for a client) and involves positions being closed out at the end of the day.

[151] Technical Advice to the European Commission in the context of the MiFID Review – Equity Markets, CESR/10-802, 29 July 2010

[152] High Frequency Trading Technology, A TABB Anthology, TABB Group, August 2009

[153] MiFID 2.0: Casting New Light on Europe's Capital markets, Report of the ECMI-CEPS Task Force on the MiFID Review, chaired by Pierre Francotte, Centre for European Policy Studies Brussels, February 2011

[154] Does bad liquidity drive out good liquidity?, Credit Agricole Chevreux, 24 November 2010

[155] Two years after MiFID: No turning back for the equities markets, Celent, June 2009: "In the case of MTFs, the average size of transactions is between 750 and 1,000 shares per trade. This is much lower than the range of 2,500-4,000 shares per trade for the exchanges. "

[156] Issues raised by dark liquidity, Consultation Report, IOSCO, CR05/10, October 2010

[157] The 6 May 2010 "flash crash" is a possible case in point although the specific trigger of events appears not to relate directly to HFT. Cf Report of the staffs of the CFTC and SEC to the joint advisory committee on emerging regulatory issues, Findings regarding the market events of May 6 2010

[158] Micro-structural issues of the European equity markets, CESR/10-142, April 2010

[159] Technical Advice to the European Commission in the context of the MiFID Review – Equity Markets, CESR/10-802, 29 July 2010

[160] Principles for Direct Electronic Access, Final Report, IOSCO, FR08/10, August 2010

[161] MiFID: Spirit and Reality of a European Financial Markets Directive, Celent and Goethe Universitat Frankfurt am Main, September 2010.

[162] Rapport sur la révision de la Directive MiF, AMF, 11 June 2010

[163] (COM (2010) 484) Proposal on Regulation on OTC derivatives, central counterparties and trade repositories, September 2010

[164] (COM (2010) 482) Proposal on short selling and certain aspects of Credit Default Swaps, September 2010

[165] The September 2009 G20 summit concluded that "all standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest."

[166] International Swaps & Derivatives Association et al., Input into the work of the IOSCO Task Force on OTC Derivatives Regulation: Exchange and Electronic Trading ("ISDA Memo") 4 (December 2010) (on file with the IOSCO General Secretariat), quoted in Report on trading of OTC Derivatives, OICV-IOSCO, FR03/11, February 2011

[167] To increase transparency, mitigate systemic risk, and protect against market abuse.

[168] While it is important to consider which different kinds of trading venues correspond to the G20 characterisation of exchanges and electronic trading platforms, this focus on the outcome renders the issue slightly less relevant. Therefore, it is to be anticipated that while different jurisdictions will continue to have diverging execution arrangements and requirements, they will make regulatory choices in favour of certain venues in accordance with internationally agreed principles, thereby minimising the risk of regulatory arbitrage.

[169] Data presented by FESE at a European Commission SME Finance Forum in January 2011

[170] According for instance to Article 2(1)(f) of Directive 2003/71/EC (Prospectus Directive), 'small and medium-sized enterprises' means companies, which, according to their last annual or consolidated accounts, meet at least two of the following three criteria: an average number of employees during the financial year of less than 250, a total balance sheet not exceeding €43m and an annual net turnover not exceeding €50m.

[171] Liquidity is a function of both volume and volatility. Liquidity is positively correlated to volume and negatively correlated to volatility. A stock is said to be liquid if an investor can move a high volume in or out of the market without materially moving the price of that stock. If the stock price moves in response to investment or disinvestments, the stock becomes more volatile.

[172] For instance, concerning the Market Abuse Directive (MAD), some Member States have extended some or all the provisions of this Directive to MTFs. But in some Member States MTFs (e.g. AIM in the UK) benefit from an adapted regime to keep costs of listing down for SME issuers. Some stakeholders argue that if all the MAD obligations are extended without adaptation to instruments only traded on MTFs, small caps listed on, or considering a listing on, this type of markets would face higher costs to access the market (cf. response by European Issuers to public consultation, 27 July 2010, p 2).

[173] Few markets such as London Stock Exchange's Alternative Investment Market (AIM), but recently also Bourse de Luxembourg's EuroMTF attracts even third country issuers (see Bourse de Luxembourg Fact Book 2010, p 81); however, most other markets have only a regional or local focus.

[174] See Mendoza, Securities Regulation in Low-Tier Listing Venues: the Rise of the Alternative Investment Market, Fordham Journal of Corporate and Financial Law, vol. XIII , pp 257, 326, where the example of AIM's subsidiary in Italy, AIM Italia, as a pan-European trading platform is given.

[175] See Articles 14(6) and 40(5) of Directive 2004/39/EC (MiFID Framework Directive)..

[176] One first example for a pan-European equity market for SME's is the cooperation between Munich Stock Exchange and PLUS markets of UK with the aim of generating additional trading volumes and liquidity and potentially also expanding the service to non-equity securities. This network also provides access to all stock admitted to the London Stock Exchange's Alternative Investment Market (AIM).

[177] According to the City of London, as of September 2009, over 3000 companies had joined AIM since 1995, although the current number is substantially lower: fewer than 1300, of which 19% are from outside the UK. Most AIM-quoted companies have small market values – approximately 25% of companies have a value under £5 million and 78% have a market value of less than £50 million. The City's Role in Providing for the Public Equity Financing Needs of UK SMEs, G Openshaw, D Widger, Professor C Mason, L Jones, S Wells, City of London, March 2010, p 31

According to Mendoza, the majority of the delisting in AIM was due to either a listing move to a senior exchange or company takeover/reverse takeover proceedings. According to research cited, only a reduced number of firms delist because their shares have lost considerable value. See Mendoza, Securities Regulation in Low-Tier Listing Venues: the Rise of the Alternative Investment Market, Fordham Journal of Corporate and Financial Law, vol. XIII , pp 257, 283 et seq., in particular p 298.

[178] PLUS-Quoted is also operating in the London market, but focuses on smaller companies (most of its companies have a market cap of around £5 million). Additionally, it contemplates special proceedings for AIM companies' cross-listings. Allegedly, the cost of going and being listed in Plus-Quoted are lower than in AIM. Regulation is also lighter than in AIM. See The City's Role in Providing for the Public Equity Financing Needs of UK SMEs, G Openshaw, D Widger, Professor C Mason, L Jones, S Wells, City of London, March 2010, p 32

[179] An EU-Listing Small Business Act, March 2010, F Demarigny, MAZARS Group, March 2010, p 20 et seq.

[180] Article 27, 29 and 44 of Directive 2004/39/EC (MiFID Framework Directive) provides for the general obligation of systematic internalisers, MTFs and regulated markets to make pre-trade transparency data available. Article 29 and 44 of the same Directive make reference to 'the size or type of orders' and 'the market model for which pre-trade disclosure may be waived', in particular transactions that are concluded 'by reference to prices established outside the systems' of the regulated market or MTF and "transactions that are large in scale". The waivers for pre-trade transparency are further defined in Article 18 and 20 of Regulation No 1287/2006 (MiFID Implementing Regulation).

[181] A dark order can be defined as an electronic order that can be automatically executed and for which there in no pre-trade transparency, cf. Issues raised by dark liquidity, Consultation Report, IOSCO, CR05/10, October 2010, p 4.

[182] Articles 18, 19 and 20 of Regulation No 1287/2006 (MiFID Implementing Regulation)

[183] Issues raised by dark liquidity, Consultation Report, IOSCO, CR05/10, October 2010

[184] Article 28, 30 and 45 of Directive 2004/39/EC (MiFID Framework Directive) provides for the general obligation of investment firms (including systematic internalisers), MTFs and regulated markets to make post-trade transparency data available

[185] Article 28 of Regulation No 1287/2006 (MiFID Implementing Regulation)

[186] The Structure, Regulation and Transparency of European Equity Markets under MiFID, CFA Institute, January 2011

[187] See Technical Advice to the European Commission in the context of the MiFID Review – Equity Markets, CESR/10-802, 29 July 2010

[188] These instruments are mostly depositary receipts, exchange traded funds and certificates issued by companies.

[189] Article 14(1) of Directive 2004/39/EC (MiFID Framework Directive)

[190] Technical Advice to the European Commission in the Context of the MiFID Review: Non-equity Markets Transparency, CESR/10-799, 29 July 2010

[191] Initiatives mentioned by CESR in the bonds market include the data reporting/publication service of the International Capital market Association and price information website "investing-in-bondseurope" by the Securities Industry Financial Markets Association.

[192] Transparency of corporate bond, structured finance product and credit derivatives markets, CESR/09-348, July 2009

[193] Transparency of corporate bond, structured finance product and credit derivatives markets, CESR/09-348, July 2009

[194] Prior to MiFID trade data would typically be available from the incumbent exchange in each Member State while OTC trades were sometimes not reported at all. MiFID on the one hand, has spurred competition among trading and reporting venues while on the other hand, has required post-trade reporting of OTC trades and. This has made the trade data environment more complex with more complete information but originating from far more diversified sources. Therefore, this has made proper trade data consolidation more important. See Technical Advice to the European Commission in the context of the MiFID Review – Equity Markets, CESR/10-802, 29 July 2010, p 28 for further information.

[195] Commodity derivatives are financial instruments as provided in of Annex I Section C (5) to (7) and (10) of Directive 2004/39/EC (MiFID Framework Directive), and Articles 38 and 39 of Regulation No 1287/2006 (MiFID Implementing Regulation)

[196] (COM (2010) 726) Proposal for a Regulation of the European Parliament and of the Council on energy market integrity and transparency, December 2010

[197] Inflation protection is doubtful, Financial Times, 13 December 2010

[198] Food and Agriculture Organization of the United Nations (FAO), Economic and Social Perspectives, Policy Brief 9, June 2010

[199] See for example Rapport du groupe de travail sur la volatilité des prix du pétrole, sous la présidence de Jean Marie Chevalier, Ministère de l'économie et de l'emploi, February 2010

[200] (COM (2010) 301 final) Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The European Central Bank: Regulating Financial Services For Sustainable Growth, June 2010

[201] (COM (2011) 25 final) Tackling the challenges in commodity markets and on raw Materials, February 2011

[202] (COM (2009) 591) Communication from the Commission to the European parliament, the Council, the European Economic and Social Committee and the Committee of the Regions A better functioning food supply chain in Europe and accompanying Commission Staff working document (SEC (2009) 1447) Agricultural commodity derivative markets: the way ahead, 28 October 2009

[203] These commodity traders act as intermediaries, selling commodities on a forward basis, and hedging themselves in both the commodity and derivatives markets. They will therefore also be the counterparty to many derivatives trades. See the website of the Geneva Trading and Shipping Association at: http://www.gtsa.ch/geneva-global-trading-hub/key-figures

[204] The December 2010 average daily volumes for maize futures contracts in Chicago equalled 183,150, while the Paris maize contract average daily volume equalled 1,264 contracts. See: Monthly Agricultural Update and data supplied by NYSE-Euronext, CME Group, December 2010

[205] Task Force on Commodity Futures Markets, Report to G-20 and Final Report, IOSCO, March 2009

[206] Task Force on Commodity Futures Markets, Report to G-20 and Final Report, IOSCO, March 2009

[207] (COM (2010) 484) Proposal on Regulation on OTC derivatives, central counterparties and trade repositories, September 2010

[208] As a result of current negotiations at the Council, the reporting obligation to trade repositories might be extended to all derivatives (currently only OTC derivatives).

209 OTC derivatives markets have grown 10 times (in terms of notional amounts outstanding) between 1998 and 2008. See Commission Staff working paper, (SEC 2009) 905), 3 July 2009 for further information

210 European Parliament resolution on derivatives markets: future policy actions (A7-0187/2010), 15 June 2010 calls on the Commission to develop measures to ensure that regulators are able to set position limits to counter disproportionate price movements and speculative bubbles, as well as to investigate the use of position limits as a dynamic tool to combat market manipulation, most particularly at the point when a contract is approaching expiry. It also requests the Commission to consider rules relating to the banning of purely speculative trading in commodities and agricultural products, and the imposition of strict position limits especially with regard to their possible impact on the price of essential food commodities in developing countries and greenhouse gas emission allowances.

211 Reforming OTC Derivative Markets - A UK perspective, UK FSA and HM Treasury, December 2009, p 33

212 Article 2(1)(i) and (k) of Directive 2004/39/EC (MiFID Framework Directive) exempts the same firms from the Capital Requirements Directive (CRD) as well.

[213] Rapport du groupe de travail sur la volatilité des prix du pétrole, sous la présidence de Jean Marie Chevalier, Ministère de l'économie et de l'emploi, February 2010, p 52f.

[214] CESR / CEBS Technical Advice to the European Commission on the review of commodities business, CESR/08-752 and CEBS 2008 152 rev, 15 October 2008.

[215] This section also refers to other compliance units under the EU ETS like Certified Emission Reductions (CERs) stemming from the Clean Development Mechanism (CDM) and Emission Reduction Units (ERUs) from Joint Implementation (JI) projects.

[216] As created by Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC (13 October 2003).

[217] Carbon trading – an outbreak of fraud in the European emissions trading scheme has battered the credibility of the bloc's chief weapon in the fight against global warming, Financial Times, 15 February 2011

[218] A number of Member States qualify emission allowances as property rights. One Member State, Romania, classified them as financial instruments.

[219] The problem of carbon emissions fraud first came to light in summer 2009, when cases were detected in France, UK and Netherlands. On 28 April 2010, the German authorities carried out a massive raid concerning 230 targets including Deutsche Bank, premises of different companies as well as private houses. The searches were done because of suspicion of tax evasion in connection with the trade of emission rights (value added tax carrousel). This investigation started in spring 2009. Later in the year, investigations were launched and arrests took place also in Belgium and the UK. Lastly, in December 2010, Italian tax police started investigating numerous small Italian firms for VAT fraud in carbon trading resulting in 500 million euros of unpaid tax. Italy's energy markets operator GME suspended spot trade in European carbon permits on 1st December after it said it was looking into "abnormal trading" and "presumed irregular or unlawful behaviour," following record trade in undervalued spot carbon permits. While presenting a serious problem, this type of fraud is not specific to the carbon market and has in the past occurred on other markets as well. The Commission worked closely with Member States to combat this problem, and a new Directive on the application of the VAT reverse charge mechanism for emissions trading was adopted (http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1376) on 16 March 2010 and came into force in April 2010 helping to close off opportunities for fraud. The Directive on reverse charges for emissions trading allows member states to implement, on an optional and temporary basis (up to 2015), a reversal of liability for the payment of VAT (value-added tax) on greenhouse gas emission allowances. The aim is to close off certain forms of tax fraud, in particular so-called carousel schemes whereby supplies are traded several times by different suppliers without VAT being paid to the tax authorities. Applying a "reverse charge" principle allows liability for the payment of VAT on emission allowances and services to be shifted from the supplier (as normally required by EU rules) to the customer. It should be stressed however that if a Member State applying the VAT reverse charge is automatically closing off the possibility to steal VAT from its budget, the national CO2 market can still be used to commit VAT fraud in another Member State who has not opted for the reverse charge mechanism, which explains why a strict control of national registries is of utmost importance.

[220] Directive 2005/60/EC (Anti-Money Laundering Directive) requires credit institutions and investment firms to verify the identity and nature of their clients or counterparties activities and, in doubt, refer the matter to relevant anti-money laundering authorities (cf. Art. 7, 8 and 20 in connection with Art. 2(1)). Given that other participants in the carbon market are not currently covered by the AML Directive, concerns have been raised about the market's exposure to money-laundering risks (cf. La régulation des marchés du CO2: Rapport de la mission confiée à Michel PRADA, Inspecteur général des Finances honoraire, April 2010)

[221] A key future segment in the primary market, auctions, will come in full under the market oversight regime set out by the Commission Regulation (EU) No 1031/2010 (Auctioning Regulation) on the timing, administration and other aspects of auctioning of greenhouse gas emission allowances pursuant to Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowances trading within the Community, OJ L 302, 18.11.2010, p 1 (hereinafter: the Auctioning Regulation), irrespective of whether the auctioned product qualifies as a financial instrument or not. The Regulation stipulates that auctions shall only be conducted on an auction platform authorised as a regulated market by a MiFID supervisor and in accordance with rules implementing the MiFID to the extent relevant. Under the Regulation, reception, transmission and submission of bids provided by investment firms in that market is also to be governed by the MiFID. Cf. Art. 6(5) and 35 of the Auctioning Regulation.

Moreover, to the extent that the allowance derivatives market is within the scope of financial markets legislation, it benefits from the regular safeguards and supervisory arrangements that apply to any other market for commodity derivatives.

[222] E.g. Germany and France

[223] Article 25(3) of Directive 2004/39/EC (MiFID Framework Directive) and Articles 10 to 14 of Regulation No 1287/2006 (MiFID Implementing Regulation).

[224] MAD is likely to be extended to financial instruments admitted to trading or only traded on MTFs as well as to instruments that can influence the price of a financial instrument traded on a regulated market.

[225] Response to the European Commission's call for evidence on the review of Directive 2003/6/EC (Market Abuse Directive), CESR, June 2009, p 6

[226] Task Force on Commodity Futures Markets, Report to G-20 and Final Report, IOSCO, March 2009

[227] In November 2007, the Transaction Reporting Exchange Mechanism (TREM) was set up to facilitate the transactions between EEA financial regulators

[228] Article 25(5) of Directive 2004/39/EC (MiFID Framework Directive)

[229] (COM (2010) 484) Proposal on Regulation on OTC derivatives, central counterparties and trade repositories, September 2010

[230] Article 50 of Directive 2004/39/EC (MiFID Framework Directive)

[231] See e.g. Article 9 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council, establishing a European Supervisory Authority (European Securities and Markets Authority)

[232] Article 41 of Directive 2004/39/EC (MiFID Framework Directive)

[233] This is subject to their general obligations under Community law and relevant international obligations, and provided that national provisions do not result in treatment more favourable than that given to European firms. In practice, this means that third country firms must be subject to a regulatory regime which is at least equivalent to that offered by the MiFID.

[234] Report on the mapping of supervisory powers, supervisory practices, administrative and criminal sanctioning regimes of Member States in relation to the Markets in Financial Instruments Directive (MiFID), CESR/08-220, February 2009.

[235] Report on the mapping of supervisory powers, supervisory practices, administrative and criminal sanctioning regimes of Member States in relation to the Markets in Financial Instruments Directive (MiFID), CESR/08-220, February 2009, pp 22-26

[236] See (COM (2010) 716) Communication from the EC on Reinforcing sanctioning regime in the financial services sector

[237] Consumer Decision-Making in Retail Investment Services: A Behavioural Economics Perspective: Final Report, Decision Technology Ltd et al., November 2010, p 6

[238] See Consultation by Commission Services on legislative steps for the Packaged RetailInvestment Products initiative, 26 November 2010 and (COM (2009) 204 final) Communication on Packaged Retail Investment Products, April 2009, Update on Commission work on Packaged Retail Investment Products, December 2009 and update in the form a working paper on 16 December 2009.

[239] CESR, CEIOPS and CEBS have also developed their thinking concerning the work on PRIPs. See CESR / CEBS / CEIOPS Report of the 3L3 Task Force on Packaged RetailInvestment Products (PRIPs), CESR/10-1136 and CEBS 2010 196 and CEIOPS-3L3-54-10, 6 October 2010, p 18

[240] (COM (2009) 204 final) Communication on Packaged Retail Investment Products, April 2009, Update on Commission work on Packaged Retail Investment Products, December 2009, p 44

[241] Responses to Questions 15-18 and 20-25 of the European Commission Request for Additional Information in Relation to the Review of MiFID, CESR/10-860, 29 July 2010, p 3

[242] Responses to Questions 15-18 and 20-25 of the European Commission Request for Additional Information in Relation to the Review of MiFID, CESR/10-860, 29 July 2010 p 2

[243] Article 19(6) of Directive 2004/39/EC (MiFID Framework Directive)

[244] This was underlined by 675 replies received from citizens to the MiFID consultation. Investors across Member States vary in their use of execution-only services, but estimates suggest it can reach up to a third of all retail transactions in some Member States (source: Europe Economics).

[245] The Final Report, Prepared for: European Commission, Directorate-General Health and Consumer Protection, Synovate, 2011, recently assessed the quality of advice across the EU based on a mystery shopping exercise. Weaknesses emerged in the ability of advisors across the EU to recommend suitable products to investors. Another study, Consumer Decision-Making in Retail Investment Services: A Behavioural Economics Perspective, Final Report, Decision Technology Ltd, N Chater, S Huck, R Inderst, November 2010, sought behavioural economics insights on different factors relevant to investor decision making.

[246] UK Financial Ombudsman Service, Annual Review 2009 – 2010

[247] Ombudsmann der Privaten Banken, Tätigkeitsbericht 2009

[248] Hellenic Ombudsman for Banking-Investment Services, Annual Report 2009

[249] Article 26 (b) of Directive 2006/73/EC (MiFID Implementing Directive).

[250] Responses to Questions 15-18 and 20-25 of the European Commission Request for Additional Information in Relation to the Review of MiFID, CESR/10-860, 29 July 2010, p 6

[251] Responses to Questions 15-18 and 20-25 of the European Commission Request for Additional Information in Relation to the Review of MiFID, CESR/10-860, 29 July 2010, p 8. In addition the Final Report, Prepared for: European Commission, Directorate-General Health and Consumer Protection, Synovate, 2011, recently assessed the quality of advice across the EU based on a mystery shopping exercise. Weaknesses emerged in the ability of advisors across the EU to recommend suitable products to investors.

[252] Europe Economics: MiFID Review – Data Gathering and Cost-Benefit Analysis, Appendix 7

[253] Europe Economics: MiFID Review – Data Gathering and Cost-Benefit Analysis, Chapter 7

[254] Article 21 of Directive 2004/39/EC (MiFID Framework Directive) and Articles 44-46 of Directive 2006/73/EC (MiFID Implementing Directive)

[255] For instance, the number of orders cancelled prior to execution or the speed of execution

[256] Technical Advice to the European Commission in the context of the MiFID Review – Investor Protection and Intermediaries, CESR/10-859, 29 July 2010, p 18. Data gathering and analysis in the context of the MiFID review, Final Report for Directorate General Internal Market and Services, European Commission, PricewaterhouseCoopers, 13 July 2010, p 363

[257] Articles 9 and Articles 13(2) and (3) of Directive 2004/39/EC (MiFID Framework Directive); Articles 6, 7 and 8 of Implementing Directive 2006/73/EC (MiFID Implementing Directive)

[258] See (COM (2010) 284 Final) Green Paper on Corporate Governance in financial institutions and remuneration policies; Directorate for Financial and Enterprise Affairs, OECD Steering Group on Corporate Governance, Paper: Corporate Governance and the Financial Crisis: Conclusions and emerging good practices to enhance implementation of the Principles, February 2010, p 20

[259] Responses to Questions 15-18 and 20-25 of the European Commission Request for Additional Information in Relation to the Review of MiFID, CESR/10-860, 29 July 2010, p 4

[260] Articles 13 and 19 of Directive 2004/39/EC (MiFID Framework Directive)

[261] Europe Economics: MiFID Review – Data Gathering and Cost-Benefit Analysis, Chapter 7

[262] Annual Review, financial year 2009 – 2010 of consumer complaints about insurance, credit, banking, savings and investments, UK Financial Ombudsman Service

[263] Annex I, Section A(6) and (7) – Section B(3) and (6) of Directive 2004/39/EC (MiFID Framework Directive)

[264] Some specific practices have recently attracted attention. Based on contributions from CESR (Responses to Questions 15-18 and 20-25 of the European Commission Request for Additional Information in Relation to the Review of MiFID, CESR/10-860, 29 July 2010) and market participants, these practices may be described as follows:

- pre-sounding, i.e. discussion between investment firms and potential investors, prior to any public announcements, in order to assess the likely demand for bond issues. These preliminary contacts may lead to certain investors holding inside information;

- inflating of orders and over-marketing of issues. The former consists of the investors overbidding for new securities in order to receive a good allocation of them in the case of oversubscription; the latter indicates an aggressive marketing by the investment firm concerning an inflated order book. Both practices give an altered picture of the demand for an issue;

- shadow book-building, that is testing the interest of investors before the announcement of an issue. This practice would cause the shortening of the official book-building process and would not allow investors to properly evaluate the new issues.

Other issues sometimes mentioned concern the over-pricing, that is an over-estimation of the issue price and, more in general, a pricing which favours issuers rather than investors (or, also, institutional investors rather than issuers) and the unfair treatment of different investors (or categories of investors) in the allotment of the securities.

[265] Technical Advice to the European Commission in the context of the MiFID Review – Investor Protection and Intermediaries, CESR/10-859, 29 July 2010, p 6

[266] COM (2010) 484 Proposal on Regulation on OTC derivatives, central counterparties and trade repositories, September 2010

[267] More information on the programme can be found on the website of the Competitiveness and Innovation Framework Programme (CIP): http://ec.europa.eu/cip/

[268] See, for instance, the example of Deutsche Börse's Neuer Markt, in: Burghof and Hunger, Access to Stock Markets for Small and Medium Sized Growth Firms: the Temporary Success and Ultimately Failure of Germany's Neuer Markt, October 2003 p 20 et seq.

[269] On the new markets, see Goergen et al., The rise and Fall of the European New Markets: on the Short and Long-run Performance of High-tech Initial Public Offerings, ECGI Finance Working Paper N°27/2003, September 2003.

[270] Mendoza, Securities Regulation in Low-Tier Listing Venues: the Rise of the Alternative Investment Market, Fordham Journal of Corporate and Financial Law, vol. XIII, pp 257, 291.

[271] Mendoza, Securities Regulation in Low-Tier Listing Venues: the Rise of the Alternative Investment Market, Fordham Journal of Corporate and Financial Law, vol. XIII, pp 257, 274.

[272] Article 29 Working Party in its Opinion 1/2006 on the application of EU data protection rules to internal whistle blowing schemes in the fields of accounting, internal accounting controls, auditing matters, fight against bribery, banking and financial crime available at http://ec.europa.eu/justice/policies/privacy/docs/wpdocs/2006/wp117_en.pdf

[273] Article 29 Working Party in its Opinion 1/2006 on the application of EU data protection rules to internal whistle blowing schemes in the fields of accounting, internal accounting controls, auditing matters, fight against bribery, banking and financial crime available at http://ec.europa.eu/justice/policies/privacy/docs/wpdocs/2006/wp117_en.pdf

[274] In response to market demand NYSE LIFFE is currently trialling a similar reporting system for its agricultural contracts (see http://www.euronext.com/fic/000/059/500/595009.pdf). ICE Futures Europe has introduced a similar facility for its oil contracts having a price linkage with US listed contracts, as a condition for continued access to US markets.

[275] See e.g. "Populists vs. theorists: futures markets and the volatility of prices" David Jacks – Explorations in Economic History, June 2006 and Testimony of Steven H. Strongin, Goldman Sachs to the US Senate Subcommittee on Investigations, July 2009

[276] Article 48 of Directive 2006/49/EC on the capital adequacy of investment firms and credit institutions (recast)

[277] While the information available on the size of these firms is limited, it is understood that the majority are small firms or even sole-traders. The latest available data indicates that in Austria, the average annual revenue from the relevant services is €105,000; in the UK the median firm generated €175,000 (with the average firm having revenue of €820,000 with some firms clearly well in excess of that). Furthermore, in a number of cases investment services represent a minority of income for these firms (so that, say, in Germany the majority of revenue is related to insurance and pension products).

[278] Article 9(5) of Regulation (EU) No 1095/2010 of the European Parliament and of the Council, establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC

[279] Most are owned and operated by large investment banks with examples being (with the owner in brackets): Sigma X (Goldman Sachs), DBA (Deutsche Bank), Citi Match (Citi Group), CS Crossfinder (Credit Suisse), NX (Nomura), JPM-X (JP Morgan Cazenove), MS Pool (Morgan Stanley) and UBS PIN (UBS)

[280] In terms of the monitoring of trading we note that it is possible to purchase security market surveillance software from independent software vendors as well as to develop in a bespoke way. For example, SMARTS Group (itself owned by NASDAQ OMX) provides such software (in varying degrees of functionality) to regulators, markets and individual broker-dealers. Subject to the functionality involved, a one-off cost of €200–€600,000 may be applicable per affected entity, with on-going maintenance fees likely to be 20–30 per cent of the initial investment. Considering the six crossing systems that do not have or are not yet seeking MTF status and the 10 to 12 non-MTF electronic platforms, we anticipate one-off costs towards the lower end of this spectrum, €3.2–€10.8 million in aggregate, with ongoing costs of €0.6-€3.2 million

[281] Source: Europe Economics interview with a HFT. In addition this estimate is supported by a response to Micro-structural issues of the European equity markets, CESR/10-142, April 2010, in which it is stated that 35-40 members of a major European exchange for cash equity trading are HFT firms.

[282] We assume that 25 firms would require authorisation (so that senior management were judged fit and proper and capital adequacy tests were passed). Whilst the compliance cost of the fit and proper process would be de minimis for such a small population of firms the cost of holding increased capital may not be. The current levels of capital holding by non-authorised firms is not known — however, we assume an increase in capital holding of €0.75 million per firm and an annual holding cost of five per cent then across the sub-set of 25 firms the on-going cost implication would be €0.9 million per annum.

[283] With regard to the proposed requirement for firms involved in automated trading to notify their competent authority of the computer algorithm(s) they employ, including an explanation of its design, purpose and functioning about the notification of algorithms, it is considered that the costs would be relatively limited. It has been suggested that the development of such a document may take approximately two man-weeks. Assuming that the wage of the IT employee is around €100,000 per annum, this would imply an average cost of

around €4,000 per firm. Assuming that there would be 250 firms affected by this proposal, the total cost would be approximately €1.0m.

[284] LSE (2011), "Trading Services (On- Exchange and OTC) Price List With Effect From 1 April 2011".

[285] LSE (2011), "Trading Services (On- Exchange and OTC) Price List With Effect From 1 April 2011", Page 4.

[286] Based on the number of transactions

[287] We estimate the number of dealers with automated pricing systems to be 54 for bonds and structured products, and 34 for derivatives. Even though dealers may be operating in all markets, we assume that the pricing systems required for derivatives to be substantially different to that for bonds and SFP (based on information received from interviews with dealers), and thus there will not be overlap. This figure is estimated from information received in interviews by Europe Economics, and is in line with the overall assumptions about the number of market participants in each product group.

[288] We estimate the number of smaller dealers with manual pricing systems to be 100 for bonds and SFPs and 76 for derivatives: information received from MTFs and electronic platforms suggests there is a far smaller number of dealers on these platforms with manual pricing systems (on average 3) but that overlap between platforms will not be large (e.g. smaller dealers tend to belong to only one or two platforms), thus putting the total number of smaller, manual dealers at around 176 for platforms in all countries, not just those where Recital 46 has not been exercised (as this does not apply to OTC markets).

[289] Based on information from Data gathering and analysis in the context of the MiFID review, Final Report for Directorate General Internal Market and Services, European Commission, PricewaterhouseCoopers, 13 July 2010, this amounts to approximately 26 MTFs offering bonds and 20 offering derivatives.

[290] We assume roughly the same universe of firms as for pre-trade transparency. Although pre-trade responsibilities only apply to the sell-side, we assume the trade reporting will only be undertaken by one side of the trade (to avoid double counting) and that this would be done by the sell-side (as with equities). We have included 50 additional firms from the buy-side to account for large firms that would be likely to also report trades automatically. Number of affected market participants based on interviews with stakeholders and cross-checked with total number of market participants from FESE and International Financial Services London.

[291] This includes the time spent by smaller firms in manually sending information to the trade reporting platforms, estimated at 1 to 1.5 hours a day per firm for 100 smaller dealers

[292] We estimate the number of major firms that would develop the feeds to be 14; the number of other firms with automated reporting to be 60 (20 dealers and 40 large buy-side firms) and the number of smaller dealers with manual reporting to be 76.

[293] End in sight for European post-trade data impasse, The Trade News, 3 March 2010

[294] For example, Eurex, based in Germany, has contracts for interest rate and equity derivatives and has regulatory provisions to set position limits; and EDX in London has provisions to set limits, although these are not used in practice

[295] To recap, these include NYSE Euronext.Liffe; Eurex; LME; ICE Futures; European Energy Exchange; and European Climate Exchange.

[296] These are Eurex; Borse Italiana; EDX; Mercado Español de Futuros Financieros and NYSE Euronext.Liffe

[297] The 29 MTF and 10 electronic platforms trading derivatives would need to create or enhance surveillance departments that would be responsible for requesting and processing information from traders and their end clients. Depending on the current level of surveillance, these costs may be minimal. If we assume between half and one additional employee (FTE) would be required by each platform to carry out the information requesting and processing role, as well as communicate with the competent authority, then the on-

going cost for MTFs and electronic platforms is estimated at between just under €1.7 million and €3.1 million per year across the EU. These costs estimates are based on between 0,5 and 1 FTE per platform, with compliance staff costs of €80,000 each.

[298] Assumes 250 traders across all MTFs and EPs with a requirement of between 5 and 10 days' time each to handle additional information requests relating to this proposal. The estimate of 250 traders is based on the approximate number of trades in non-commodity derivative markets, in line with our overall assumption on the number of market participants (see our horizontal assumptions).

[299] Note that even if there is some overlap between traders operating on both commodity and non-commodity derivative markets, the on-going costs of reporting would be additional.

[300] If all members of MTF and electronic platforms are required to submit information about the contracts they enter into (and not just a few reporting members, as with position reporting by categories of traders), then the on-going costs of doing so could range between €20 million and €40 million per year. Assuming 1000 traders across all MTFs and electronic platforms, with a requirement of 0.25 to 0.5 FTE per year to handle information requests

[301] Assuming one-off costs of between €75,000 and €100,000 per MTF, and 29 MTFs across the EU, we estimate total one-off costs to range from approximately €2 million to €3 million. Assuming on-going costs of between 1.5 and 3 additional employees and IT maintenance costs, we estimate on-going costs for MTFs of between €3.5 million to €7 million.

[302] If we assume that electronic platforms used for OTC trading of derivatives do not currently have any position or market surveillance systems in place, the costs of being able to set position limits will be relatively large. Based on information from exchanges currently engaged in position management, we estimate one-off costs of setting up electronic systems to collect, store and monitor position information at between €6 million and €10 million across the EU. This assumes the cost of IT systems to be between €600,000 and €1 million across the 10 main electronic platforms. On-going costs of maintaining such systems and staffing surveillance departments are estimated at between €3.2 million and €8.1 million. This assumes between 4 and 10 employees are needed, based on information received from 3 exchanges with surveillance departments, and that on-going IT costs are 10% of one-of IT costs.

[303] Report on the mapping of discretions in MiFID, CESR/09-833, 2010

[304] In the UK (a major centre of OTC derivative trading) the following are excluded: derivatives based upon with a basket of underlying instruments; derivatives on interest rates; derivatives on commodities and foreign currency derivatives.

[305] Finland, Germany and Greece also apply transaction reporting to certain financial instruments not admitted to trading on a regulated market. See Report on the mapping of discretions in MiFID, CESR/09-833, 2010

[306] Europe Economics has modelled the current annual recurring cost in the EU of transaction reporting based upon three components: an internal systems cost; labour costs and data cleaning costs (the latter are frequently at least partly outsourced to ARMs in a number of jurisdictions, e.g. Germany and the UK). Transaction reporting is heavily automated (although the success of that automation does seem to vary somewhat from firm to firm, driven in part by the mix of instruments traded). Labour costs were based upon a ratio of one Full Time Employee (FTE) being able to oversee between 22,000 and 27,500 transactions per day (this is well below the best productivity rate Europe Economics found). Data cleaning costs were proxied by payments to ARMs which were taken as 0.6–1.2 cents per transaction. Internal system costs were related to labour costs in accordance with the market experience that we reviewed.

[307] Indeed, they estimate that the number of transactions in instruments where the primary issuance was on an MTF to be about 6 million in 2009. Of these the majority (about 74 per cent) were reportable anyway due to the adoption of transaction reporting for such trades in certain jurisdictions (in particular, the UK). Once those markets that already have such instruments within scope are excluded they estimate the incremental change in volume of transactions to be about 0.2 per cent of the equity trades currently processed (1.5 million compared to 871 million).

[308] Based upon a population of 25 large firms incurring 5–7.5 days of IT department time, 75 medium firms using 3.5–5 days and 500 smaller firms requiring 2.5–3.5 days we expect that the one-off cost for set-up would be €0.7–1.1 million across the EU.

[309] The publication Derivatives 2010, International Financial Services London, December 2010, identifies 76 per cent of EU-based OTC derivatives trading is conducted from London or Spain (Ireland and Austria are not discretely identified).

[310] Based upon information collected by Europe Economics from the market participants they have interviewed, an investment of up to €2 million (per firm) would be required for the larger market participants (which tend to dominate such trade) to extend reporting from where it is conducted now to the whole EU. Such investment has been scaled back for smaller market participants so that 200 market participants would invest €60-€75,000, 36 would invest €300,000-€400,000 and the largest fourteen (i.e. the so called G14) around €1.5–€1.750 million. This gives an estimated one-off cost of €29–€41 million. To be clear, we are assuming that not all firms authorised to execute client orders (which is over 5,000) would be affected — rather that such activities are concentrated in a smaller number of firms which cover all instruments.

[311] Information from ISDA on OTC transaction volumes (from the 2010 Benchmarking Survey) and from PwC on the share of the largest firms in specific markets lead Europe Economics to estimate a global population for derivatives transactions conducted OTC of 21 million. They estimate that once the EU share is taken the total would be about 13 million. A further reduction is required to limit the population to those derivatives whose value correlates with a financial instrument admitted to trading or are related to the credit risk of a single issuer. This gives an estimate of about 6.5 million individual transactions in the EU per annum before deducting those transactions already being reported.

[312] We use a figure of 1.1 million trades per annum.

[313] Again, Europe Economics uses the ISDA 2010 Benchmarking Survey to provide a global figure and the report Derivatives 2010, International Financial Services London, December 2010 in order to estimate the EU share of this.

[314] It is important to remember that it is the number of transactions executed that matters. If say the notional value outstanding or the gross market value were compared, then OTC commodity derivatives would be only 0.6 per cent or 1.7 per cent respectively of all derivatives traded OTC (based on analysis in Triennial Central Bank Survey, Foreign Exchange and Derivatives Market Activity in 2010, Bank for International Settlements, September 2010

[315] See Press Release: Depositary Receipts Show Resiliency in 2009 on Higher Global Trading Volume, Program Establishment, Capital Raisings and Price Returns, According to BNY Mellon Year-End Industry Report, BNY Mellon Depositary Receipts, 13 January 2010. This gives a figure of 19 billion DRs traded in Europe, which is 0.9 per cent of the total number of equity shares traded in the EU (NB this is shares traded not the number of transactions in shares as discussed before). This represents about 15 per cent of the global total of DRs traded, implying a total value of €281 billion, or 2 per cent of the total value of equity trading in the EU (about €15 trillion in 2009).

[316] Secure data storage can cost up to €10 per GB per annum (see http://www.phion.com/UK/company/Pages/default.aspx and http://www.backupdirect.net/offsite-data-storage by way of illustration).

[317] Based on information from PwC and ISDA

[318] Data gathering and analysis in the context of the MiFID Review, PricewaterhouseCoopers, 13 September 2010, p 323

[319] For example, feedback from one MTF shows the use of an automated system of warnings (with some human oversight) to alert the surveillance team to unusual trading activity.

[320] These include MTFs such as CantorCO2E; GFI EnergyMatch; MF Global Energy; Tullet Prebon Energy

[321] Figure based on Europe Economics research and PWC report. ISDA estimates there are 48 large commodity exchanges worldwide

[322] Feedback from Europe Economics interviews with exchanges that have experience in position reporting by client categorisation suggests that if position reporting already takes place (as in the majority of exchanges) then the additional costs of including client categorisation will be negligible. The only cost that would be incurred would be on the part of the exchanges in compiling a COT report, estimated at about a quarter of a full-time equivalent employee per year. Applying this to 15 commodity exchanges across the EU gives an on-going cost of €300,000 per year.

[323] Using cost information provided by exchanges in the UK, and taking into account the estimated number of MTFs across the EU that currently do not have a position reporting regime, Europe Economics estimate one-off costs of position reporting will be between €130,000 and €195,000. This assumes 13 main MTFs across the EU that do not currently require position reporting, and a one-off cost of developing systems to receive and collate position reports of between €10,000 and €15,000. This incremental costs of a position reporting regime is relatively low as it is assumed that the MTFs already operate some position monitoring systems (e.g. systems that allow them to monitor trading and view deals being executed), and that the additional capacity needed to receive and collate reports will be relatively small.

[324] On-going costs will be greater, given the staff costs required to collate and analyse position information as well as on-going IT maintenance costs. Europe Economics estimates on-going costs at between €1.8 million and €2.4 million per year across the EU. This assumes IT support and maintenance costs of between €1,000 and €1,500 per year, and just between 1.5 and two full-time equivalent employees per year, at €80,000 each.

[325] Feedback from interviews indicates that reporting members are usually a subset of all members, and are mainly clearing firms. For example, only 20 per cent of ICE's members are involved in reporting (approximately 42).

[326] Costs to market participants (reporting traders) will include the time taken to prepare reports, which will depend on how automated their systems are (if systems are linked electronically to the exchange or regulator then reports are sent almost automatically from the back office and on-going costs are largely limited to IT maintenance). In the case of electronic systems, one-off costs of implementing systems will be required. Given the fact that the largest commodity derivate traders already undergo position reporting through exchanges, and the fact that not all members are required to submit reports, we estimate that there are approximately 104 traders across the various commodity derivative MTFs in the EU who would be required to report positions on behalf on their clients. One-off costs for these traders are estimated at between €1.2 and €1.5 million, based on a cost of developing reporting feeds of between €12,000 and €15,000 per trader. On-going costs of IT maintenance and a small staff cost are estimated at approximately €2.2 million per year.

[327] The overall impact of MiFID, UK FSA, November 2006. Values converted to Euros at an exchange rate of £1:€1.18

[328] Article 35 of Commission Regulation (EU) No 1031/2010 (Auctioning Regulation)

[329] Costs estimates provided by Europe Economics based o their previous work relating to the FSAP compliance costs

[330] Based on Europe Economics costs estimates relating to being authorised as an OTF (see above): a one-off cost of €200–€600,000 per affected platform, with on-going maintenance fees likely to be 20–30 per cent of the initial investment

[331] For example, at present only 4% of 114 members of Bluenext, a leading spot carbon exchange in France, are large industrial players with EU ETS compliance duties. Unlike large energy producers, these entities are less likely to develop dedicated trading entities. See La régulation des marchés du CO2: Rapport de la mission confiée à Michel PRADA, Inspecteur général des Finances honoraire, April 2010, p 84.

[332] Some 20% of 114 members of Bluenext, a leading spot carbon exchange in France, may be qualified as non-financial intermediaries. Source: La régulation des marchés du CO2: Rapport de la mission confiée à Michel PRADA, Inspecteur général des Finances honoraire, April 2010, p 84.

[333] Based on The overall impact of MiFID, UK FSA, November 2006 and MiFID Implementation Cost Survey of the UK Investment Industry, LECG, October 2005. Values for both converted to Euros at an exchange rate of £1:€1.18

[334] These estimates have been developed on the basis of MiFID Implementation Cost Survey of the UK Investment Industry, LECG, October 2005. Values converted to Euros at an exchange rate of £1:€1.18

[335] Europe Economics considers that this tightening may affect service providers operating under the Article 3(1) exemption in France, Germany, Greece and Romania. They have assumed that the completion of a more thorough-going authorisation pack would consume one to two days of time. Making due allowance for the differences in income between these Member States (so that the daily cost varies from about €44 in Romania to €178 in the Netherlands) they estimate that such an authorisation process would imply a one-off cost across all of the affected service providers in these countries of between €15 and €30 million.

[336] See reference to the legislative draft that was consulted upon: http://www.bundesfinanzministerium.de/nn_1776/DE/Wirtschaft__und__Verwaltung/Geld__und__Kredit/Kapitalmarktpolitik/18022011-Diskussionsentw-Finanzanlage-anl,templateId=raw,property=publicationFile.pdf; The new statute is expected to be adopted by the German cabinet shortly.

[337] Data for the structured product markets comes from the European Commission (2008), representing 16 Member States. Member States not represented are Bulgaria, Cyprus, Estonia, Greece, Hungary, Lithuania, Luxembourg, Latvia, Malta, Romania and Slovenia. Arete does not publish data on these on the grounds of lack of market development. We judge it unlikely that these uncovered markets are significant, either individually or in aggregate.

[338] Spain and France have only recently overtaken Belgium, which suffered a 43 per cent drop in sales in 2008.

[339] Study on the Costs and Benefits of Potential Changes to Distribution Rules for Insurance Investment Products and other Non-MIFID Packaged Retail Investment Products: Final Report, Europe Economics, September 2010.

[340] In the context of the ongoing work on PRIPS, Europe Economics was mandated by the European Commission to assess the likely cost impact of the application of MiFID's selling rules to deposit-based structured products and to certain types of insurance-based investment product on a combined basis. They estimated the likely one-off impact of this to be €125–€175 million for banks, with recurring costs of €35–€60 million. This took into account the fact that some banks had voluntarily adopted MiFID (or MiFID-like) conduct of business measures. In order to assess the impact relevant here they further disaggregated the impacts arising on structured term deposits separately to the other categories of non-MiFID PRIP (such as unit-linked life insurance investment products) distributed by credit institutions. In their work they found that the gross sales of unit-linked and similar insurance-based investment products exceeded those of deposit-based structured deposits by about three to one. On this basis they assume that the one-off impact on credit institutions of this option would be €31–44 million with recurring annual costs of €9–€15 million.

[341] This market segment has experienced growth at 17 per cent annum between 2006 and 2008. If this trend continued this would imply a total market of €30 billion in 2010, with €27.7 billion distributed through credit institutions.

[342] In general, execution only services involve little face-to-face interaction between providers and their clients. In the UK, for example, a significant proportion of the execution business (upward of 80 per cent) is carried out online.

[343] Retail Investments Product Sales Data (PSD) Trend Report, UK FSA, August 2009

[344] Based on the Eurostat data on the number of households directly investing in stock markets (best proxy for the number of execution only clients) and what we know about market practice in Germany, Italy and Belgium then we have a population 1.6 to 2.2 million clients. Assuming a ratio of 1:99 between Newcits and UCITS implies that perhaps only 16–22,000 customers would be affected by that option. we consider it unlikely that in excess of 50,000 customers would be affected across the EU as a whole. If the transition cost to another platform is taken as €2–€3 per client (based upon the view of a retail bank operating both an execution only platform and one with the in-built functionality for an online appropriateness test), then the one-off cost impact would be about €0.1—€0.15 million. We remind the reader that this is on the assumption that pure execution only providers will discontinue provision of these products because (at the moment) these are not particularly significant in scale.

[345] Source: Datamonitor Global Wealth Model

[346] Analysis based on European Fund Industry Breakfast Briefing, Thomson Reuters and Lipper, Ed Moisson, December 2010 and Datamonitor Market Reports on "Financial Advice" in these countries.

[347] Past studies have found that banks and direct (tied) sales forces normally required 10–15 minutes for product search whereas "whole of market" search has taken 45–60 minutes. Part of the difference is accounted for by the greater investment in technology made by banks and agents facilitating greater process automation and part is due to the restrictions in scope of the search. Nevertheless, there would likely be a consequence (say 10-15 minutes) as additional search time implied for any investment advisers extending their search from a restricted one to something like "whole of market". However, we believe that the practical effect of this policy option here is likely to be limited — indeed those advisers that are tied or multi-tied will be unable to lengthen search strategies, in the short-term at least, and banks providing advice on their own products will have a strong commercial rationale not to extend their search strategies in this way. Equally those that are not tied are likely to be conducting a broad search already. Given this, we do not estimate a cost impact due to the extension of search in this way.

[348] 40-45 million mass affluent or high net worth individuals less the 7 -7.5 million of the wealthy individuals who are already receiving advice on an independent basis.

[349] Based on interviews with medium and large retail orientated banks this seems a reasonable assumption.

[350] Economic contribution of UK financial services 2009, International Financial Services London, December 2009

[351] The European Structured Retail Product Market 2009 Review, Arete Consulting, EUMR09, April 2009

[352] Based on an interview carried out by Europe Economics with a City of London based trade association

[353] Adopting half to three-quarters of a day on average and applying this to the product numbers described above gives an aggregate cost of €50–€87 million (taking a medium-level compliance operative at a cost €65,000 per annum).

[354] Based on Europe Economics past work on the sale of non-MiFID PRIPS

[355] Clients are likely to be involved with multiple product providers. We adopt three–four as a reasonable judgement call. At a cost per contact of €1–€2 this means that such a switch would have an on-going cost of €1.5–€7.7 million.

[356] 7A requirement to notify investors of material change in circumstances is likely to require the modification of systems at product providers. However, we consider this likely to be limited in scale because the affected parties are likely to be involved also in discretionary portfolio management and similar activities where such a requirement is already built-in. We estimate that between 15 and 20 days of an IT professional (annual payroll costs of €100,000) would be necessary for each product provider, including project management of the changes. This would therefore result in a one-off cost of €1.7–€2.7 million.

[357] FSA estimate of incremental compliance costs for Retail Distribution Review proposals, UK FSA, March 2010. These figures combine the cost estimates of AR and DA financial advisers.

[358] The revenue from providing portfolio management services in the EU has been estimated to be at least €40 billion (source: Barnes Reports, "Worldwide Portfolio Management Industry", 2010; this covers twenty Member States). However, this figure is not based upon bottom-up data drawn from the industry itself but rather represents a top-down estimate made by a market research firm. More useful data are available for the UK. Europe Economics understands from a trade association that perhaps three million discretionary portfolio management accounts are operated in the UK, although perhaps only two-thirds of these are active. The total value of these accounts is thought to be about €350-€400 billion in the UK. Whilst fee structures can be complex and tailored to individual client circumstances an approximate annual cost of about 1–1.2 per cent of funds within the portfolio — this implies revenues not exceeding €3.5–4.8 billion in the UK. They understand from the same trade association that the typical UK portfolio manager would not have more than 150 clients (including non-active accounts). Given an estimated three million discretionary portfolio management clients in the UK this implies 20,000 portfolio managers. From analysis of the financial reports of the leading specialist portfolio managers in the UK they believe that there is one member of back-office staff to two portfolio managers, i.e. there are 30,000 workers in the industry in the UK. Applying the average revenue per worker (portfolio managers and back-office combined) of €150,000 gives an implied revenue on discretionary management activity of about €4.5 billion in the UK. This is about two-thirds of the UK-specific figure drawn from the same source as the Europe figure of €40 billion.

[359] In the United Kingdom, although the use of inducements is not currently prohibited by regulation, standard market practice excludes them. The use of inducements is prohibited in Italy.

[360] We estimate the Italian employee numbers as being equivalent (noting that average per capita financial wealth in Italy was €57,711 in 2009 versus £42,500 (€50,150at 1.18:1) in the UK — a ratio of 1.15:1: however, it is not clear that the underlying population of customers is significantly different) to obtain 20,000 as our estimate for Italian portfolio managers. So the total unaffected is 40,000 portfolio managers (with 20,000 back office staff).

[361] We assume that the additional monitoring for this measure would be relatively slight requiring one tenth of an additional FTE compliance staff for every 100 employees. For 60,000 front-office staff, that implies 60 additional compliance staff. At labour cost of €65,000 per additional compliance employee, these additional staff would cost €3.7m.

[362] A €125,000 annual salary equates to about €560 per working day assuming 225 working days in a year

[363] Based on interviews with two trading venues carried out by Europe Economics

[364] There are currently 84 MTFs dealing in instruments other than shares alone. Together with regulated markets and organised trading systems Europe Economics considers that an estimated population of 120 execution venues to be reasonable.

[365] About 2,500 investment firms are authorised to conduct portfolio management services. Over one third of these are located in the UK with another 20 per cent in Germany (see Appendix 11). In addition, we estimate that 2,400 credit institutions are authorised for this service, with Austrian and German banks being particularly prominent.

[366] MiFID Implementation Cost Survey of the UK Investment Industry, LECG, October 2005

[367] MiFID Implementation Cost Survey of the UK Investment Industry, LECG, October 2005

[368] Europe Economics research indicates under 100 non-international equity book-runners active in the first half of 2010. To make allowance for the debt markets and dormant interest (i.e. those firms which would wish to retain a capability even when not active) they assume that 10 per cent of those firms authorised (i.e. a total of 3,647 as described in Annex 16, being 2,765 credit institutions and 882 investment firms) would undertake such a task

[369] Study on the Cost of Compliance with Selected FSAP Measures: Final Report, Europe Economics, January 2009

[370] Only about five per cent of those firms authorised within the EU for underwriting or placing activity are located in Central and Eastern Europe. We take again take 15 per cent to be active (i.e. giving a population of 27 firms against the 13 known to be active in equity issuance in the first half of 2010) and further assume that one quarter of these will require more substantial investment. The estimates of system implementation related to the UK and were not specifically focused on underwriting and placing — therefore we scale this back to €125–€250,000 per affected firm. This implies a one-off cost of €2–€4 million.

[371] Although in some countries without legislative or supervisory requirements, investment firms are required to keep tapes under the rules of regulated markets. For instance in Ireland, the Irish Stock Exchange requires members to operate an effective telephone recording system and in Germany, Deutsche Börse requires specialists to tape every call related to the execution of their tasks.

[372] The legislative proposal is for three years, but the period considered for the cost estimate is to reflect the shorter periods in force in various Member States currently.

[373] Consultation Paper 07/9: Conduct of Business regime: non-MiFID deferred matters (including proposals for Telephone Recording), UK FSA, May 2007

The number of individuals given includes principal dealers and agency brokers (in respect of any type or client or counterparty) and the associated sales functions. The individuals may be working for a number of different kinds of firms, including banks, stockbrokers, investment management firms (including CIS and hedge funds) and insurance companies.

The FSA also states:

We also considered the possibility of imposing similar requirements on other types of individuals working within financial services firms. Roles examined were those of investment managers who do not have dealing authority, research analysts, corporate finance advisors, and retail financial advisors. Our analysis suggested it would be disproportionate on market failure and cost-benefit grounds to impose recording requirements on these functions.

[374] This estimate is based on a number of firms noting that they would not typically authorise the use of mobile phones for the conduct of business even if robust mobile call recording solutions were available. Furthermore, if a mobile phone recording requirement were introduced some firms said they would consider limiting corporate mobiles to senior employees and fund managers to as to avoid recording costs.

[375] See European Commission Impact Assessment Guidelines, http://ec.europa.eu/governance/impact/commission_guidelines/commission_guidelines_en.htm, *Part III: Annexes to Impact Assessment Guidelines ('The Annexes')* (2009)

[376] See 'Box 1: Types of obligation', The Annexes 49-50.

[377] See 'Box 3: Types of required action', The Annexes 51.

[378] See http://ec.europa.eu/governance/impact/docs/eu_cost_model_report_sheet_v2.xls

[379] Information received from interview with a dealer-to-client electronic platform regulated as an MTF.

[380] Please note this is for illustrative purposes only and is based on interviews with market participants rather than the data for a specific product.

[381] Derivative uncertainty likely to hit banks' revenues, Financial Times, 21 March 2010

[382] Citi Investment Research and Analysis (2010), accessed online at http://www.zerohedge.com/article/55-billion-otc-derivative-revenue-question

[383] Derivatives 2010, International Financial Services London, December 2010

[384] Exchange rate average for 2009 (0.71916) from Oanda.com

[385] Derivative uncertainty likely to hit banks' revenues, Financial Times, 21 March 2010

[386] This is of course a very high-level estimate and would vary across derivative types.

[387] As highlighted by Annette Nazareth, Director of the Division if Market Regulation of the SEC. See European corporate bond markets: transparency, liquidity, efficiency, Centre for Economic Policy Research, May 2006

[388] This is corroborated by empirical research by Biais et al in European corporate bond markets: transparency, liquidity, efficiency, Biais et al, Centre for Economic Policy Research, May 2006

[389] Naik et al. (1999) develop a model.

[390] See Bessembinder H, Maxwell W and Venkataraman K (2006) 'Market transparency, liquidity externalities and institutional trading costs in corporate bonds' *Journal of Financial Economics* Vol 82, pp 251 – 288; Goldstein M, Hotchkiss E and Sirri, E (2006) 'Transparency and liquidity: a controlled experiment on corporate bonds' *The Review of Financial Studies* Vol 20 (2), pp 235 – 273; and Edwards A, Harris L and Piwowar, M (2007) 'Corporate bond market transaction costs and transparency' *The Journal of Finance*, Vol LXII (3)

[391] Summary of Responses to the ICMA Survey on Corporate Bond Markets – Liquidity and Transparency, ICMA, June 2010

[392] Summary of Responses to the ICMA Survey on Corporate Bond Markets – Liquidity and Transparency, ICMA, June 2010

[393] Bessembinder H, Maxwell W and Venkataraman K (2006) 'Market transparency, liquidity externalities and institutional trading costs in corporate bonds' *Journal of Financial Economics* 82 (2006) pp 251 – 288

[394] Final Report of the IIF Committee on Market Best Practices: Principles of Conduct and Best Practice Recommendations Financial Services Industry Response to the Market Turmoil of 2007-2008, Institute of International Finance, July 2008.

[395] A report by the International Accounting Standards Board suggested that transactions prices in inactive markets may be inputs when measuring fair value. See IASB Expert Advisory Panel: Measuring and disclosing the fair value of financial instruments in markets that are no longer active, International Accounting Standards Board, October 2008

[396] Transparency of corporate bond, structured finance product and credit derivatives markets, CESR/09-348, 10 July 2009

[397] Lagana M, Perina M, Von Koppen-Mertes I and Persuad A, 'Implications for liquidity from innovation and transparency in the European Corporate bond market', ECB Occasional Paper Series No. 50, August 2006

[398] Articles 14(1) and 39(d) of the Directive 2004/39/EC (MiFID Framework Directive)

[399] Cited in Transparency of corporate bond, structured finance product and credit derivatives markets, CESR/09-348, CESR, 10 July 2009

[400] Source: Bloomberg

[401] Transparency of corporate bond, structured finance product and credit derivatives markets, CESR/09-348, CESR, 10 July 2009

[402] 1 = same as equities; 2 = no Recital 46 but some other requirements; 3 = no apparent transparency

[403] MiFID Transposition state of play, see http://ec.europa.eu/internal_market/securities/isd/mifid_implementation_en.htm

[404] Federation of European Securities Exchanges

[405] Our difference-in-difference analysis, whereby we compare the change in relative spreads between the two groups before and after MiFID, accounts for any group-specific changes that would have occurred across the two time periods. Our student 't-test' for the significance of the difference gave a t-statistic of 205.4, which indicates that the difference-in-difference is significant at all levels.

[406] Non-public domestic and international bond trading turnover in 2009 estimated to be around €8 billion (source: FESE 2009 and Europe Economics analysis)

[407] Our methodology is based on that used in Bessembinder et al (2006) 'Market transparency, liquidity externalities and institutional trading costs in corporate bonds' *Journal of Financial Economics*, Vol 82. We multiply the relative spread saving by the total value of trading in bonds on exchanges where there is currently no MiFID-like transparency.

[408] See for example Data gathering and analysis in the context of the MiFID review Final Report for Directorate General Internal Market and Services, European Commission, PricewaterhouseCoopers, 13 July 2010 and European corporate bond markets: transparency, liquidity, efficiency, Biais et al, Centre for Economic Policy Research, May 2006

[409] Data gathering and analysis in the context of the MiFID review' Final Report for Directorate General Internal Market and Services, European Commission, PricewaterhouseCoopers, 13 July 2010

[410] Transparency of corporate bond, structured finance product and credit derivatives markets, CESR/09-348, July 2009

[411] This timing of the reporting is significantly longer than the Commission envisages and as set out in MiFID (as close to real time as possible).

[412] There have been efforts, however, by brokers to maintain a level of transparency for bonds not admitted to trading on regulated markets (e.g. negotiated exclusively OTC).

[413] Transparency of corporate bond, structured finance product and credit derivatives markets, CESR/09-348, July 2009

[414] NASDAQ OMX Guidelines for Members' On-Exchange Trade and Members' and Non-Members' OTC Trade Reporting in Danish Fixed Income Instruments Version 1.1, September 2008

[415] NASDAQ OMX Guidelines for Members' On-Exchange Trade and Members' and Non-Members' OTC Trade Reporting in Danish Fixed Income Instruments Version 1.1, September 2008

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the data incorporated in the research may not be used for investment accounting activities defined as back office accounting functions customary in the securities industry, including but not limited to, trust accounting, fund accounting, brokerage activities, trading and settlement management and reporting, order execution, inventory control, and general management of financial and operations functions.

[417] In addition, investigation into the existence of impact assessments or analysis relating to similar Frank-Dodd regulations in the US has yielded no results. See for example the list of SEC accomplishments to date, none of which include any formal assessment of the proposals Implementing Dodd-Frank Wall Street Reform and Consumer Protection Act — Accomplishments, see: http://www.sec.gov/spotlight/dodd-frank/accomplishments.shtml

[418] Consultation Paper: Transparency of corporate bond, structured finance product and credit derivatives markets, CESR/08-1014

[419] Occasional paper series no.50: Implications for liquidity from innovation and transparency in the European corporate bond market, European Central Bank (Laganá, Peřina, von Köppen-Mertes and Persaud), August 2006

[420] The credit premium is the additional yield that investors demand as compensation for the risk of default as well as the volatility and unpredictability of this risk.

[421] See, for example, McCoy (2004) who found that in a number of currency markets with very tight quoted spreads decreases in prices increased the number of sellers rather than stabilising buyers), cited in Occasional paper series no.50: Implications for liquidity from innovation and transparency in the European corporate bond market, European Central Bank (Laganá, Peřina, von Köppen-Mertes and Persaud), August 2006

[422] See Bessembinder H, Maxwell W and Venkataraman K (2006) 'Market transparency, liquidity externalities and institutional trading costs in corporate bonds' *Journal of Financial Economics* Vol 82, pp 251 – 288; Goldstein M, Hotchkiss E and Sirri, E (2006) 'Transparency and liquidity: a controlled experiment on corporate bonds' *The Review of Financial Studies* Vol 20 (2), pp 235 – 273; and Edwards A, Harris L and Piwowar, M (2007) 'Corporate bond market transaction costs and transparency' *The Journal of Finance*, Vol LXII (3)

[423] Price Transparency in the U.S. Corporate Bond Markets, J Tempelman, The Journal of Portfolio Management, Vol. 35, Spring 2009

[424] Interviews were conducted with 15 high-yield bond portfolio managers including 9 hedge funds, 4 asset managers and 2 insurance companies

[425] Provided by SIFMA

[426] Price Transparency in the U.S. Corporate Bond Markets, J Tempelman, The Journal of Portfolio Management, Vol. 35, Spring 2009

[427] See for example Latent Liquidity and Corporate Bond Yield Spreads, S Mahanti A Nashikkary M Subrahmanyamz, 8 August 2007, which demonstrates that "the liquidity of the CDS contract influences both the liquidity of the bond and the bond price itself" (p 3).

[428] Price Transparency in the U.S. Corporate Bond Markets, J Tempelman, The Journal of Portfolio Management, Vol. 35, Spring 2009

[429] Bessembinder, H and Maxwell, W (2008) 'Transparency and the corporate bond market' *Journal of Economic Perspectives*, Vol 22, No.2, p 228

[430] Price Transparency in the U.S. Corporate Bond Markets, J Tempelman, The Journal of Portfolio Management, Vol. 35, Spring 2009

[431] Looking at investment advisers not directly employed by credit institutions, FECIF's White Book highlights how few of its members are remunerated on a fee basis. This may be as low as 1–2 per cent in Italy, 3 per cent in Belgium, Germany and Spain and 5 per cent in the Netherlands.

[432] The impact of the UK FSA's Retail Distribution Review (RDR) dealing with the regulation of inducements when advice is provided could be used a reference point. It should be mentioned, however, that the RDR proposes more stringent restrictions on the

treatment of inducements since it deals homogeneously with inducements provided for in any form of advice (not only independent); furthermore, the RDR deals with products and entities which are not covered under MiFID (i.e. entities providing insurance products). In addition it also includes measures on professional standards (i.e. professional qualifications of advisors). Lastly it should be taken into account that there is a broader population of investment advisors in the UK, including a significant proportion of small advisors. Having said than, it is anticipated that, 23 per cent of UK advisory firms might exit the market as a result of the RDR, with a much higher ratio amongst the smallest advisers (those with annual incomes below €50,000). Overall, adviser numbers would fall by about 11 per cent. This includes, for instance, small providers which are close to retiring and will not find worthwhile to make investments to adapt to the new rules (Retail Distribution Review proposals: Impact on market structure and competition, Oxera, 2010).

433 Retail Distribution Review proposals: Impact on market structure and competition, Oxera, 2010

434 European Fund Industry Breakfast Briefing, Thomson Reuters and Lipper, Ed Moisson, December 2010

435 JP Morgan Asset Management, 2010 "The Retail Distribution Review: The challenge and the opportunity for wealth managers".

436 http://www.lipperfmi.com/FERIFMI/Information/Files/Breakfast%20Briefing%20-%20Fund%20Fees%20-%207%20Dec10.pdf

437 The UCITS market by itself is extremely large: with, in the EU, at least €5.1 trillion in assets under management within UCITS and a further €1.7 trillion in non-UCITS investment funds (such as the Spezialfunds in Germany). Source: EFAMA 2010 Fact Book, "Trends in European Investment Funds, 8th Edition".

438 The obligations of systematic internalisers to publish firm quotes are specified in Article 27 of Directive 2004/39/EC, while more detailed requirements, including trade transparency, are laid out in Article 21 to 34 of Regulation 1287/2006.

439 Systematic internaliser is defined in Article 4(1)(7) of Directive 2004/39/EC (MiFID Framework Directive), while Article 21 of Regulation No 1287/2006 (MiFID Implementing Regulation) further specifies criteria for determining whether an investment firm is a systematic internaliser.

440 Articles 25, 29, 30, 44 and 45 of Directive 2004/39/EC (MiFID Framework Directive)

441 In Article 28 of Directive 2004/39/EC (MiFID Framework Directive) and any relevant new Articles referred to in footnote 68 above.

442 By amending article 5 of Regulation No 1287/2006 (MiFID Implementing Regulation).

443 By amending Article 25 of Directive 2004/39/EC (MiFID Framework Directive)

444 Amending Article 25(4) of Directive 2004/39/EC (MiFID Framework Directive) and Article 13(4) of Regulation No 1287/2006 (MiFID Implementing Regulation)

445 CESR has already put forward numerous proposals including a third trading capacity (client facilitation) in addition to those of agent and principal, and standards for mandatory client and counterparty identifiers (Final Advice to the European Commission in the context of MiFID Review on transaction reporting, CESR/10-808)

446 Annex I, section B of Directive 2004/39/EC (MiFID Framework Directive)

447 Annex I, section B(1) of Directive 2004/39/EC (MiFID Framework Directive)

448 The Commission consulted on the possibility to classify this MiFID ancillary service as an investment service in the context of proposals on legal certainty of securities holding and dispositions: G2/PP D(2009) Legislation on legal certainty of securities holding and dispositions, Consultation document of the Services of the Directorate-General Internal Market and Services, 16 April 2004, see: http://ec.europa.eu/internal_market/consultations/docs/2009/securities-law/hsl_consultation_en.pdf and DG Markt G2 MET/OT/acg D(2010) 768690, Legislation on legal certainty of securities holding and dispositions,

Consultation document of the services of the directorate-general internal market and services, see: http://ec.europa.eu/internal_market/consultations/docs/2010/securities/consultation_paper_en.pdf

[449] With an amendment to Annex I, Section A of Directive 2004/39/EC (MiFID Framework Directive)

[450] Organisational requirements and certain conduct of business obligations (notably general information and reporting obligations) would be particularly important in providing this service (Articles 13, 18, 19, paragraphs (1), (2), (3), (7) and (8) of Directive 2004/39/EC (MiFID Framework Directive))

[451] Paragraphs 3.4 and 6.3.

[452] Additional Information in Relation to Responses to Questions 15-18 and 20-25 of the European Commission Request for Additional Information in Relation to the Review of MiFID, CESR/10-860, 29 July 2010

[453] Amending Article 4(1)(5) of Directive 2004/39/EC (MiFID Framework Directive)

[454] Article 4(1)(6) of Directive 2004/39/EC (MiFID Framework Directive).

[455] Article 2(1)(d) of Directive 2004/39/EC (MiFID Framework Directive).

[456] As established in recital 69 of Directive 2006/73/EC (MiFID Implementing Directive).

[457] The definition of "execution of orders on behalf of clients" and "dealing on own account" can be found in Articles 4(1)(5) and 4(1)(6) of Directive 2004/39/EC (MiFID Framework Directive).

[458] Currently article 5(2)(a) of Directive 2006/49/EC provides that a firm does not hold financial instruments on own account if they are precisely matched.

[459] Article 4(1)(6) of Directive 2004/39/EC (MiFID Framework Directive)

[460] Article 9 of Directive 2004/39/EC (MiFID Framework Directive)

[461] See: (COM (2010) 284 Final) Green Paper on Corporate Governance in financial institutions and remuneration policies

[462] Article 9 of Directive 2004/39/EC (MiFID Framework Directive)

[463] New provision in Directive 2006/73/EC (MiFID Implementing Directive)

[464] Article 2 (9) of Directive 2006/73/EC (MiFID Implementing Directive)

[465] Article 13 (3) and 18 of Directive 2004/39/EC (MiFID Framework Directive)

[466] For instance, the Lehman Brothers case

[467] Section 3, Chapter II of Directive 2006/73/EC (MiFID Implementing Directive)

[468] Recital 27 of Directive 2004/39/EC (MiFID Framework Directive)

[469] We note that the UK Financial Services Authority is consulting on a similar proposal for retail clients assets: see Financial Services Authority Quarterly consultation (No 25), UK FSA, July 2010.

[470] Article 19 of Directive 2006/73/EC (MiFID Implementing Directive)

[471] Article 32 (7) of Directive 2006/73/EC (MiFID Implementing Directive)

[472] Article 18 of Directive 2006/73/EC (MiFID Implementing Directive)

[473] Article 23(1) of Directive 2004/39/EC (MiFID Framework Directive)

[474] Tied agents are defined under article 4 (1) (25) of Directive 2004/39/EC (MiFID Framework Directive)

[475] Technical Advice to the European Commission in the context of the MiFID Review – Investor Protection and Intermediaries, CESR/10-859, 29 July 2010, p. 33

[476] Article 23(1) of Directive 2004/39/EC (MiFID Framework Directive)

[477] Article 23(2) of Directive 2004/39/EC (MiFID Framework Directive)

[478] Article 32 (2), second paragraph, of Directive 2004/39/EC (MiFID Framework Directive)

[479] Article 31 (2) of Directive 2004/39/EC (MiFID Framework Directive)

[480] This would imply qualifying the exclusions in Article 1(2) of Directive 2004/39/EC (MiFID Framework Directive) as regards Articles 31 and 32 by stating that the exclusions do not apply in the case of tied agents.

[481] Namely, urging strong measures to counter speculation in commodity derivatives, and opposition to the option raised in the consultation on banning "execution-only" services which allows investors to buy and sell certain non-complex products directly in the market without having to undergo a test of their knowledge and experience.

[cdlxxxii] Does Algorithmic Trading Improve Liquidity?, T Hendershott, C Jones, and AJ Menkveld, American Finance Association Journal of Finance, forthcoming

[cdlxxxiii] Algorithmic Trading and Information, T Hendershott, and R Riordan, NET Institute Working Paper No. 09-08, September 2009

[cdlxxxiv] High Frequency Trading and its Impact on Market Quality, J Brogaard, 5th Annual Conference on Empirical Legal Studies Paper, 22 November, 2010

[cdlxxxv] Technology and Liquidity Provision: The Blurring of Traditional Definitions, J Hasbrouck and G Saar, 30 December 2007

[cdlxxxvi] Assessing the Impact of Algorithmic Trading on Markets: A Simulation Approach, M Gsell, Centre for Financial Studies Working Paper No. 2008/49, June 2008

[cdlxxxvii] High-Frequency Trading, Stock Volatility, and Price Discovery, F Zhang, December 2010

[cdlxxxviii] Public dissemination of trade information was initially limited to investment grade bonds (rated BBB and above) with issue sizes greater than $1 billion, due to concerns that the dissemination of such data for smaller and lower grade bonds might have an adverse impact on liquidity.

[cdlxxxix] Expansion of TRACE in the U.S. fixed-income OTC market, NO Persson, Director, TRACE and Fixed Income Strategy, FINRA

[cdxc] See Bessembinder H, Maxwell W and Venkataraman K (2006) 'Market transparency, liquidity externalities and institutional trading costs in corporate bonds' *Journal of Financial Economics* Vol 82, pp 251 – 288; Goldstein M, Hotchkiss E and Sirri, E (2006) 'Transparency and liquidity: a controlled experiment on corporate bonds' *The Review of Financial Studies* Vol 20 (2), pp 235 – 273; and Edwards A, Harris L and Piwowar, M (2007) 'Corporate bond market transaction costs and transparency' *The Journal of Finance*, Vol LXII (3)

[cdxci] The difference between the changes in transaction costs over time for Trace and non-Trace bonds represents the isolated impact of TRACE.

[cdxcii] Expansion of TRACE in the U.S. fixed-income OTC market, NO Persson, Director, TRACE and Fixed Income Strategy, FINRA