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DG Internal Market and Services working paper

Feedback statement

Pre- and post-trade transparency provisions of the Markets in Financial Instruments Directive (MiFID) in relation to transactions in classes of financial instruments other than shares

This paper was drafted under the sole responsibility of the Directorate General for Internal Market and Services, and does not commit, or necessarily reflect the views of, the Commission.

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1. INTRODUCTION

The European Parliament and the Council have asked the Commission to report on the adequacy of the level of pre- and post-trade transparency in classes of financial instrument other than shares (the Report). The Report, required by Article 65(1) of the Markets in Financial Instruments Directive (MiFID)², is due by 31 October 2007. The Commission is required to report on the possible extension of the scope of the provisions of the Directive concerning pre- and post-trade transparency obligations to transactions in classes of financial instrument other than shares.

The Report will be prepared in accordance with the Commission's initiative on better regulation³ and its guidelines on impact assessment.⁴

The present document constitutes a feedback statement summarising the responses to the European Commission services' call for evidence released in relation to the Report (the Call for Evidence⁵). The Call for Evidence was open for comment until 15 September 2006.

2. OVERVIEW OF THE RESPONSE TO THE CALL FOR EVIDENCE

2.1. Profile of respondents

A total of 59 organisations responded to the Call for Evidence.⁶ A list of the non-confidential respondents and their acronyms is included in **Annex I**, and the full text of

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² Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on markets in financial instruments amending Council Directives 85/611/EEC and 93/6/EEC and Directive 2000/12/EC of the European Parliament and of the Council and repealing Council Directive 93/22/EEC, OJ L 145, 30.4.2004, p. 1 (as amended by Directive 2006/31/EC of the European Parliament and of the Council of 5 April 2006, amending Directive 2004/39/EC on markets in financial instruments, as regards certain deadlines, OJ L 114, 27.4.06, p. 60).

³ See Press Release number MEMO/05/340, Brussels, 27 September 2005 for a succinct summary. See <http://tinyurl.com/to5x6>.

⁴ Impact Assessment Guidelines (SEC(2005) 791. See http://europa.eu.int/comm/secretariat_general/impact/docs/SEC2005_791_IA%20guidelines_annexes.pdf.

⁵ http://ec.europa.eu/internal_market/securities/docs/isd/call_for_evidence_en.pdf

⁶ For the purposes of this feedback statement including all tables and charts, the joint response received from 13 trade associations has been disaggregated into the constituent organisations who have been categorised

the non-confidential responses is available on the Commission's website.⁷ Three confidential responses, from two individual firms and one Ministry of Finance, were received. Late and confidential responses have been taken into account in preparing this feedback statement.⁸

The majority of responses came from trade associations, although some were received from individual firms, regulators, self-regulatory organisations (SROs) and consumer representatives. The range of responses from industry covered all principal sectors in the financial markets, in decreasing numbers: banking and investment banking; exchanges and trading platforms; intermediaries⁹; institutional investors (the 'buy side'); and data vendors. There were also eight responses from regulators and self-regulatory and consumer organisations.

Geographically, responses came from across Member States and there were also responses from EU-wide trade associations as well as from outside the Community.

The sectoral and geographical origin of respondents is set out in **Table 1**.

Table 1: Number of respondents by sector and location¹⁰

Location	(Investment) banking	Buy side	Data vendors	Exchanges/ platforms	Intermediaries	Regulators/ SROs/ Consumer	Total
CZ						1	1
DE	3	1		1	1		6
DK	1				1		2
ES					1	1	2
EU	9	1		2	1	1	14
FI					1		1
FR	1				1	1	3
INT	3						3
IS	1						1
IT	1			3	1	2	7
LU	1			1			2
NL	1						1
NO	1						1
PT						1	1
SE	1						1
UK	3	3		2		1	9
US	2		2				4
Total	28	5	2	9	7	8	59

separately. Where an organisation was part of the joint industry response and also responded separately, it has been counted only once.

⁷ http://ec.europa.eu/internal_market/securities/isd/consultation/mifid_replies_en.htm

⁸ However, one late response, received on 24 October 2006, has not been taken into account in preparing the tables and figures, except Table 1. We do not believe this materially affects the conclusions herein.

⁹ The term 'intermediaries' covers associations describing themselves as securities dealers' associations, as well as those associations and firms representing intermediaries and financial analysts.

¹⁰ For a list of ISO country codes, see <http://www.iso.org/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/list-en1.html>. Groups are classified according to the location of their head office, except that Euronext NV is classified 'EU' rather than 'NL'. Multinational trade associations are designated with the code 'EU' or, for associations not confined to the EU, 'INT'.

2.2. Overall conclusions

Most respondents expressed opposition in varying degrees to the introduction of mandatory transparency obligations in the markets for financial instruments other than shares (non-equity financial instruments). These respondents gave a number of reasons for rejecting mandatory transparency for non-equity financial instruments, the most commonly cited of which were:

- the markets for non-equity financial instruments are functioning well and provide an adequate level of transparency for participants;
- market innovation has contributed to a significant endogenous rise in transparency of non-equity markets, and regulatory intervention could negatively affect these positive developments;
- any problems there may be do not amount to a market failure, warranting regulatory intervention and are unlikely to be resolved by mandatory transparency obligations;
- transparency obligations would undermine liquidity in non-equity markets due to their mainly OTC nature and thereby threaten their continued development;
- there are significant differences between equities and non-equity financial instruments which include how they are traded, by whom and how often, all of which impact on the optimum level of transparency;
- it is premature to discuss mandatory transparency for non-equity financial instruments when the effects of the MiFID regime on equities has not yet been seen.

Although most respondents opposing mandatory transparency requirements rejected both pre-and post-trade transparency, respondents tended to be less opposed to post-trade transparency. At the same time, however, many respondents doubted whether post-trade transparency would be useful in markets where some instruments are rarely traded and where a number of factors (eg volume, counter-party, prevailing market interest rates) will influence price.

A smaller number of respondents advocated awaiting the results of MiFID before deciding whether to impose additional transparency requirements beyond equity markets. Such respondents considered that MiFID would have profound impacts on securities markets in the Community and action now would be premature.

Those who were in favour of self-regulatory solutions only expressed a preference for an increase in post-trade transparency, but not in pre-trade transparency.

Those who were open-minded on the need for change tended to advocate separate consideration of retail and wholesale investors and of different types of non-equity securities. They also tended more strongly to favour a moderate level of post-trade

transparency for more liquid corporate bonds, and tended to be against mandatory pre-trade transparency.

Those who were positively supportive of change emphasised that mandatory transparency would lead to greater fairness in price discovery and lessen the information gap between different types of investors. For example, FIN-USE said:

To invest in non-equity financial instruments retail investors must know not only how these markets operate but also they need to receive information about the products and the transactions. Retail investors have access to transaction information in the equities markets but it is very limited in the bond markets. One of the main reasons that prevent retail investors from participating in the bond market is the fact that it is difficult for them to gain access to market information. It is therefore important to improve transparency in non-equities markets if the market is to be successful in relation to retail investors' participation.

While some of these respondents favoured distinguishing between instrument types, FIN-USE said that a complicated system with a number of different delay regimes would be too complicated for investors to understand.

2.3. Geographical and sectoral analysis

Figure 1: Incidence of responses by sector¹¹

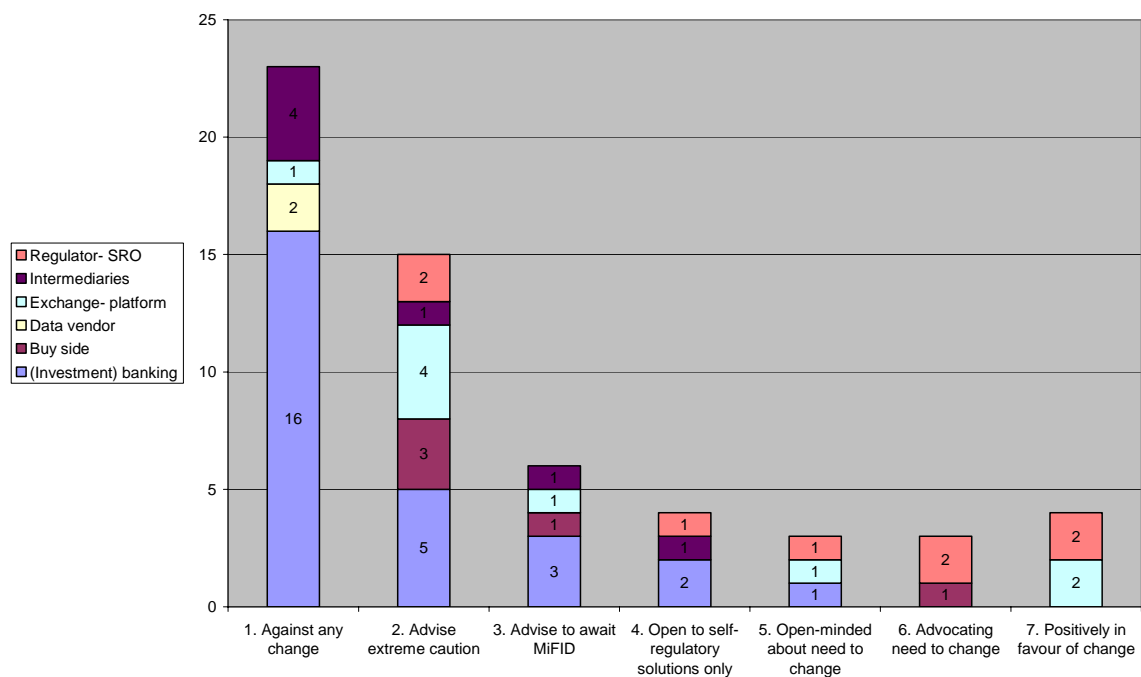


Figure 1 shows the incidence of overall responses according to the seven categories into which responses were classified, by sector. It shows clearly that the most prevalent responses were those opposed to change, and that banking/investment banking and, to a lesser extent, intermediaries, buy-side and exchange/platform responses predominated among those respondents holding this view. It also shows that those advocating change

¹¹ Responses in favour of change in one of pre- or post-trade transparency were classified as in favour of change generally.

tended to be regulators or exchange/platforms. Finally, it shows that responses tended to be polarised, with relatively fewer responses open-minded about the need to change, as opposed to for or against change.

Table 2 shows the degree of opposition to or support for the imposition of mandatory transparency rules to relevant markets according to the sectoral and geographical origin of respondents. Responses were ranked on a scale from 1 (against any change) to 7 (positively in favour of change).¹²

Table 2: Degree of overall support for transparency extension by sector and location^{13, 14}

Location	(Investment banking)	Buy side	Data vendors	Exchanges/platforms	Intermediaries	Regulators/SROs/Consumer	Average
CZ						4.0	4.0
DE	1.3	6.0		3.0	3.0		2.7
DK	2.0				1.0		1.5
ES					1.0	7.0	4.0
EU	2.0	3.0		2.0	4.0	7.0	2.6
FI					1.0		1.0
FR	2.0				2.0	6.0	3.3
INT	2.0						2.0
IS	1.0						1.0
IT	5.0			6.3	1.0	5.5	5.1
LUX	1.0			2.0			1.5
NL	1.0						1.0
NO	1.0						1.0
PT						2.0	2.0
SE	1.0						1.0
UK	1.3	2.0		1.5		2.0	1.7
US	2.0		1.0				1.3
Average	1.8	3.0	1.0	3.4	1.9	4.9	2.6

As can be seen from the table, the strongest opposition came (in decreasing order) from data vendors, the banking and investment banking sector, and intermediaries. The average response in these sectors was either against any change, or advising extreme caution. The buy side was relatively less hostile, urging on average that the effects of implementing MiFID be assessed prior to any change being considered. There was less opposition again from exchanges and trading platforms, which tended towards supporting self-regulatory solutions (though with a wide variance in responses). The group of respondents which on average came closest to supporting mandatory transparency rules was regulators, SROs and consumer organisations. However, even there the response when averaged over all respondents in the group was merely ‘open-

¹² The seven categories were 1 = against any change; 2 = advise extreme caution; 3 = advise to await MiFID; 4 = open to self-regulatory solutions only; 5 = open-minded about need for change; 6 = advocating need for change; 7 = positively in favour of change.

¹³ Footnote 11 applies to this table.

¹⁴ All averages are weighted according to the number of respondents in each category.

mindful about the need for change', rather than positively in favour, and there was also a wide variance among individual responses.

Geographically, respondents (particularly regulators and some exchanges and platforms) from Spain, France, Italy and the Czech Republic were considerably more positive towards mandatory transparency than respondents from other jurisdictions. The strongest opposition tended to come from respondents in northern Member States, and Portugal, as well as from EU-wide and international respondents. It is notable, however, that no single geography had an average response stronger than 'open-minded about need for change'.

3. RESPONSES TO PARTICULAR QUESTIONS

3.1. Question 1: Do you have any comment on the proposed scope of the Report?

There was strong support from the great majority of the 53 respondents to this question for the Commission's approach to scoping the Report, in particular for the propositions that:

- instrument markets should be considered separately;
- pre- and post-trade transparency should be considered separately; and
- a range of choices, beyond simply applying MiFID equity transparency provisions or not, should be considered.

Other responses included comments that the proposed scope failed to include a prior investigation whether there were any market failures in the markets under consideration, that a cost-benefit analysis should be part of the report and that any problems with transparency were related not to the absence of information but to its availability (or lack thereof) to retail investors.

3.2. Question 2: Do you consider this classification scheme to be sufficient for the purposes of the review?

The majority of the respondents to this question considered the classification scheme to be sufficient for the purposes of the review. Nevertheless, a small number of respondents have made useful proposals for adaptation of the scheme. These have been taken into account in the revised classification scheme in **Annex II**. Nevertheless, the difficulty of offering a single classification scheme, especially in the area of OTC credit derivatives, was highlighted by ISDA:

We question whether it is even realistic to imagine that there is any scheme that could effectively compel the publication of comparable, useful data across even this subset of the OTC derivatives market. Even if the mandatory transparency were limited to a very small subset of these instruments meeting some objectively defined category of terms, it would be of questionable value given the possibility for a market participant to negotiate different terms for its trades that it does not wish to report and the influence of counterparty credit related factors in pricing. In addition, the rapidly evolving nature of the markets would require constant monitoring in order to ensure that the chosen contract specifications remain up to date.

3.3. Question 3: Do you consider there are possible policy rationales for mandatory transparency we have not listed?

Just under half of the 41 respondents to this question said that the policy rationales for mandatory transparency were overstated. More than one quarter agreed with the policy rationales as stated and a small number said either that the rationales were understated, or made other comments. The respondents who believed that the rationales were overstated gave the following reasons:

- evidence of market failure should be the only policy rationale under consideration;
- rationales against mandatory transparency are missing from the analysis, while the rationales in favour were well explicated;
- technological development might make mandatory transparency easier to implement, but cannot be a rationale in itself.

Among those respondents who agreed with the policy rationales or made other comments, some nevertheless observed that each policy rationale ought to be analysed in the context of a proven market failure, while some suggested dividing the rationale ‘investor protection’ so as to consider wholesale and retail investors separately.

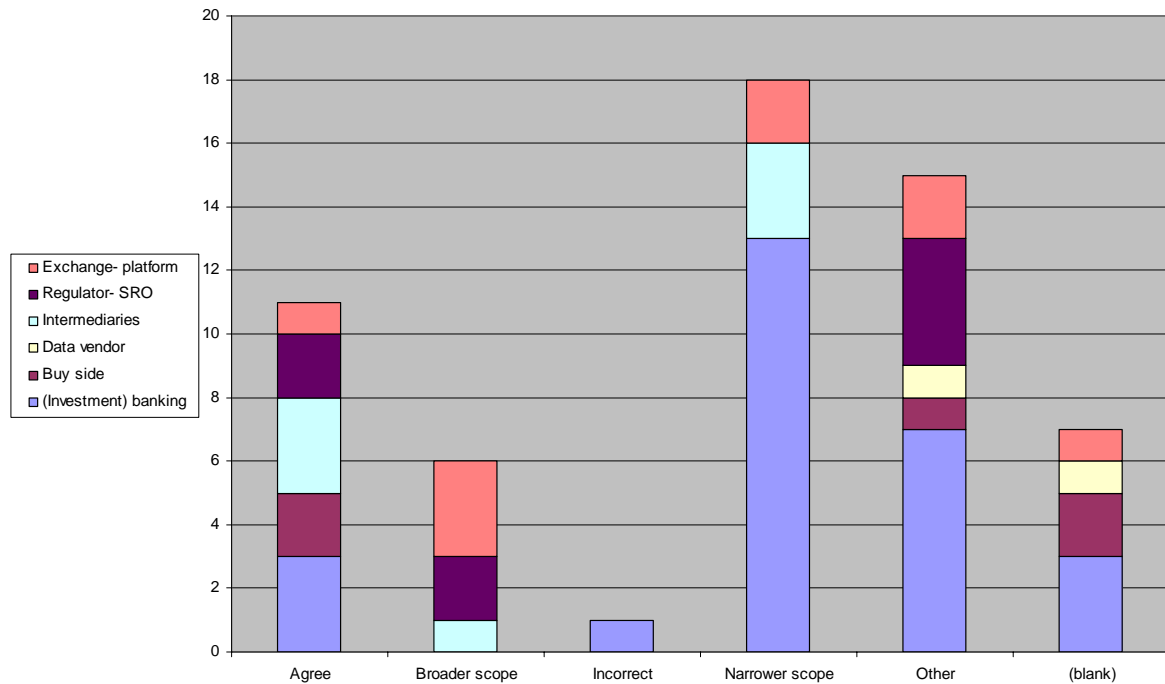
The respondents who said that the policy rationales were understated suggested including the need for appropriate market supervision, the potential for transparency to mitigate price movements in distressed markets, and rationales for non-mandatory transparency requirements.

A number of respondents pointed out that the existence of information asymmetries was not *per se* evidence of a market failure, as such asymmetries may be necessary in order to incentivise firms to collect or produce information about particular issuers or about market conditions.

3.4. Question 4: Do you agree with our proposals for prioritisation of the review?

More than one third of the 50 respondents who responded to this question favoured a narrower scope for the prioritisation of the review and a slightly lesser number did not express a view but instead made other comments on the proposed prioritisation. Against that, only six respondents favoured a broader scope. About twice as many agreed with the proposal put forward (see **Figure 2**).

Figure 2: Review prioritisation by sector



A large majority of respondents favouring a more narrow scope came from the banking and investment banking sector, with some support from intermediaries and exchanges and trading platforms. Respondents asking for a broader scope were mainly exchanges and trading platforms, with some regulators and intermediaries also favouring a broader scope. Among the nearly one third of respondents with other comments, about an equal number were regulators and (investment) banks.

The respondents favouring a narrower scope that is, fewer instruments to be included in the prioritisation, commented as follows:

- only the first three categories of instruments (ie cash bonds) should be included because that is where retail investors are most active;
- cash government bonds should be excluded because they represent the most liquid and most transparent part of the non-equity market and therefore are least in need of change;
- cash high yield corporate bonds, asset-backed securities and securitisation transactions should be excluded;
- all funds and securities representing funds should be excluded.

The respondents favouring a broader scope that is, more instruments to be included in the prioritisation, commented as follows:

- supranational and emerging market bonds should be included;

- exchange-traded funds (ETFs), certificates, warrants, stock index derivatives, equity index options should be included;
- covered bonds and the bond repurchase ('repo') market should be included;
- money market instruments should be given the same priority as cash investment grade corporate bonds.

As an example, Euronext stated:

[E]xcluding ETFs and warrants/certificates from the scope *a priori* does not seem appropriate. These instruments are indeed heavily traded by retail investors. These two types of products nevertheless have different characteristics as regards their market, hence different needs for transparency could be determined.

An important part of the transactions in ETFs is done OTC with very limited transparency. Regarding the business done on exchange by retail investors, rules differ greatly from one country to the other. In that context, we consider that mandatory pre- and post-trade transparency is important for such products...

Of the respondents who agreed with the proposed prioritisation, some commented that more evidence was required on the extent of retail participation in the various instrument markets, that no failures were evident in those markets, and one suggested adding financial bonds as a sub-class.

Some other responses received were to the effect that regulation in one sector and not others would shift liquidity to the latter, and that a fact-finding exercise was required on the nature of the market in the various types of instruments before any prioritisation could be undertaken.

3.5. Question 5: To what extent do you consider there to be:

a. observable or demonstrable problems with respect to the possible policy rationales for transparency identified above in relation to one or more of the instrument markets under review?

Thirty-five of the 52 respondents to this question reported no observable or demonstrable problems in the markets under review. Of the remaining respondents, five said there were problems and 12 made other comments.

The great majority of respondents reporting no problems in the markets under review came from the banking and investment banking sector. The extent to which this sector supports the view that there are no problems in these markets is underlined by the fact that investment banks represented just under half of all respondents to the call for evidence, but made up two thirds of the respondents reporting no problems. There were no responses from this sector in support of the view that there were problems.

In their comments, many respondents reporting no problems referred to the conclusions of the UK Financial Services Authority¹⁵ with regard to the corporate bond market, in particular its conclusion that there is no evidence of substantial market failures related to

¹⁵ See updated bibliography in Annex III

transparency in wholesale bond markets based in the UK. The 13 TAs, in their joint response, said

In terms of the current debate, ... Commissioner [McCreevy]'s various comments on 'better regulation' have raised industry expectations that the burden of proof will not be on the industry to demonstrate that regulation is not necessary, rather, if the Commission's Report contains any recommendations to mandate transparency, these will be accompanied by credible economic evidence pointing to:

- The presence of significant market problems that are unlikely to be mitigated by market forces over a reasonable period of time; and
- A strong likelihood of a net economic benefit from any regulatory action.

A number of respondents stated that any issues in the retail sector were better solved through investor education. Respondents also pointed to the lack of evidence of a clear market failure to support their view that there were no observable problems.

Of those respondents who did identify problems in the markets under review more than half were regulators, SROs or consumer representative organisations. These were also the only sector with more responses in support of the view that there were problems than of any other view.

The problems identified mainly related to the information gap between retail and professional investors, especially in the area of derivatives, asset-backed securities (ABS) and corporate bonds and securitised derivatives, which could result in problems of investor protection.

The Italian Banking Association (ABI) set out the case for mandatory transparency in terms of potential problems in some detail:

The lack of mandatory transparency on bonds, unlike shares, could cause problems for intermediaries in complying with the stringent best execution standards laid down by MIFID, which as we know will apply to all financial instruments.

Let us cite two practical examples in which the absence of the obligation to make pre- and post-trade data available to the public at a reasonable cost could give rise to problematic situations.

First, as to lack of pre-trade transparency, consider an order taker that participates indirectly via various brokers in two or more execution venues for a given security and wants to maintain control of the trading process. Without up-to-date information on offers and quotes in the various venues, such an order taker could find it impossible to identify the venue which, order by order, offers the best terms for execution (as it does not participate directly). Or else it will have to acquire this information, but at a higher cost than the 'commercially reasonable' price that MIFID institutes for equity markets.

As to post-trade transparency, it could be difficult or quite costly for the intermediary to monitor 'execution quality' when it reviews its execution policy.

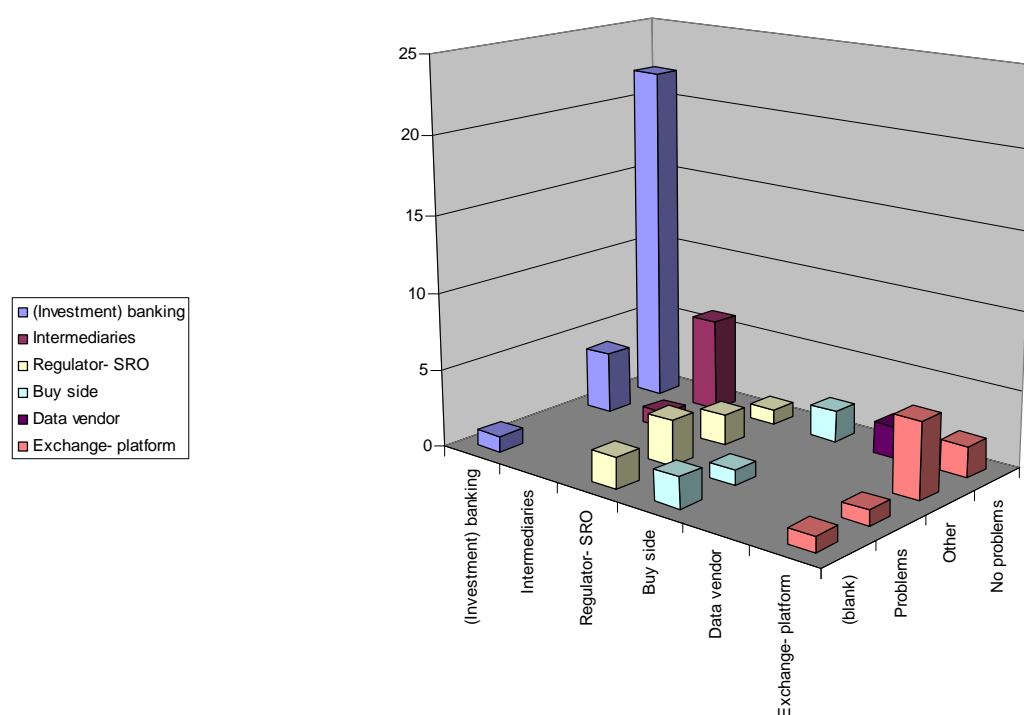
Finally, lack of transparency, in fact, could seriously hamper retail investors' direct participation in the market and compromise their ability to monitor their brokers' activities and compliance with best execution requirements, consequently widening the gap between 'informed' and 'uninformed' investors. In general, mandatory transparency adapted to the type of security (excessive transparency could produce a market failure, i.e. no trading, for securities that need liquidity support) will bolster above all the confidence of investors who are at an informational disadvantage (as a rule, retail investors), and thus favour their participation.

BVI also submitted evidence of concerns relating to the pricing of securitised derivatives, and the rescission of unprofitable trades in relation thereto, on trading platforms.

Of the respondents who chose to make other comments, some acknowledged there may be problems with regard to the retail sector and the small-scale buy-side, which a degree of post-trade transparency might solve. However, there was also support for the view that the current level of transparency should be retained and that problems such as low retail participation would not be solved through additional transparency requirements. One respondent commented that the concept of ‘problems’ in this context had to be defined first, and one observed that an evaluation was required of which problems transparency may solve and which it may create.

For more details of the profile of responses to this question consult **Figure 3**.

Figure 3: Problem identification by sector



b. evidence that mandatory pre- or post-trade transparency would solve any of those problems?

A majority of respondents said that there was no evidence that pre- or post-trade transparency would solve any of the problems identified, including all but one of the respondents who failed to identify any problems. That particular respondent said that any deficiencies should be addressed by industry.

Nearly all of the respondents who identified problems expressed the view that some level of mandatory transparency would improve protection of retail investors, although one said there was not enough evidence available on the issue. One respondent said that the lack of transparency in the derivatives, ABS and corporate bond segments of the market

left investors exposed, while another cautioned that the level of transparency would have to be adapted to the relevant instrument market in order to avoid a collapse in liquidity.

EFFAS commented on the extent to which transparency may be relied upon in providing greater investor protection:

We would like to reiterate in the strongest way that the Commission should not believe that any of these suggested changes (particularly in post-trade transparency) is likely to address the real problems facing retail investors in fixed income instruments: untraded instruments are likely to remain so, though their 'fair' price might be marginally easier to construct.

What is needed to protect retail investors is some form of requirement that the sellers of specialised retail product should have to post a price at all times, at which they would be willing to repurchase any such product. This kind of approach would better protect retail investors in two ways: it would prevent the marketing of some of the more egregiously mispriced product occasionally still found today, and it would increase retail interest in such product that would still be available by increasing confidence in its liquidity.

Of the respondents who made other comments, most expressed concern about the link between transparency, liquidity and prices and said that more evidence was required on this.

A number of respondents addressed directly the problems of retail investors who have been 'caught out' by sudden drops in the value of corporate and government bonds of defaulting issuers, such as Parmalat and Cirio corporate bonds and Argentine sovereign debt. Those respondents tended to suggest that the problem in those cases was caused not so much by a lack of market transparency applicable as by unsuitable products being sold to retail customers. They pointed out that timely and consistent application of the MiFID suitability and appropriateness regime would be of assistance in this regard. They also adverted to the importance of increasing investor education.

ICMA said that to the extent that 'execution-only' retail business¹⁶ remained a concern, it was worth noting that being a professional investor (ie with access to market transparency data) was no guarantee of protection from loss, and that mandated post-trade transparency was unlikely to be an effective regulatory protection for 'buy and hold' execution-only retail investors.

3.6. Question 6: To what extent could recent and upcoming technological and market developments in relation to the instrument markets under review:

a. contribute to a relatively inexpensive extension of mandatory transparency?

b. render mandatory transparency unnecessary?

Many respondents stated that the pace of technological development in the non-equity markets space has been substantial and has had a positive impact on the overall market transparency. While many respondents acknowledged that the technological developments coupled with MiFID post-trade transparency requirements in relation to

¹⁶ Execution-only business is retail sales without advice of non-complex products including bonds, where suitability or appropriateness tests are not applicable.

shares had the potential of significantly lowering the direct cost of publication in relation of other instruments, they argued that this should not be the real driver of policy. First, it was argued, the main cost resides not in the IT solutions employed for the publication of quotes or trades but in the disclosure of dealers' risk positions. In this sense, the issue of technology is almost orthogonal to the main costs resulting from the introduction of a mandatory transparency regime. Second, it was pointed out by many respondents that imposition of mandatory transparency could stymie the beneficial market developments which have lead to increasing transparency in the recent past. On this view, technological developments seem to enable an evolutionary search of the markets for the optimal levels of transparency which do not threaten damaging liquidity provision.

A small minority of respondents argued that some kind of minimum mandated transparency would be beneficial to the market because the current level of market-led transparency was not enough, was being introduced too slowly or did not 'trickle-down' to the retail investors.

3.7. Question 7: To what extent are non-equity financial instruments different from equities so that lower levels of mandatory transparency in those markets may be justified?

About one third of the 50 respondents who answered this question agreed with the proposition that differences between equity and non-equity financial instruments justified a lower level of mandatory transparency for the latter. Of the remaining two thirds, nearly all made other comments which emphasised the differences between equity and non-equity instruments and also within non-equity instruments. The majority of comments can be summarised as follows:

- debt markets are mainly principal or dealer markets, unlike equity markets which are largely agency or broker markets, and therefore rely on liquidity provision not from end-user orders but from dealer liquidity provision. Dealers provide liquidity in return for privileged access to order flow information, and too much market transparency would reduce the incentive to do so, thus harming liquidity;
- every instrument market (even within non-equity securities) has to be analysed separately because the optimum level of transparency is likely to differ from one to another;
- bond markets are global and can shift elsewhere if there is excessive regulation in one market;
- the fact that there is no mandatory transparency in non-equity markets does not mean that there is no transparency.

In summary therefore, the majority of respondents expressed the view that there were very significant differences not only between equity and non-equity markets, but also within non-equity instruments. In the view of respondents these differences either justify lower mandatory transparency requirements for non-equities or at least prevent them from being treated in the same way.

On the other hand, FIN-USE considered that treating different non-equity instrument markets differently would lead to confusion among investors who could not be expected to understand the details of multiple transparency regimes.

See also the discussion of Question 11 below.

3.8. Question 8: What data sources do you consider relevant to the issues you have raised (if appropriate, cross-refer to your answers below)? Would you or your organisation be prepared to produce any relevant data if necessary?

A number of respondents referred to existing data sources, while others offered to provide data as required. The Commission is grateful for all such offers. The following data providers/sources were identified as potentially relevant:

Bloomberg, Reuters, ICMA's TRAX system, BrokerTec, ICAP (GovPX), MTS (BondVision, MTSNext), IIC (iBoxx), Deutsche Boerse (Eurex, Eurex Bonds), Euronext, ABS Indices (eg by Lehman Brothers and Deutsche Bank), service providers such as ABSxchange, ABSNet, EuroABS, Hypoport AG (EUROPACE), Intex, TREPP, ESF Securitisation Data Report, Senaf, HDAT.

3.9. Question 9: Are there academic or institutional papers or ongoing work that should be considered in preparing the Report not included in our bibliography?

Respondents made a number of suggestions for new or updated items. Please refer to the revised bibliography incorporating those suggestions in **Annex III**.

3.10. Question 10: What conclusions do you draw from the existing academic debate and the ongoing work being conducted by interested parties?

Most of the responses focused on the problem of determining an appropriate level of transparency in view of the assumed transparency/liquidity trade-off. The literature on the subject is not conclusive with good arguments both in favour and against greater transparency. Most respondents stated that mandatory transparency may be more appropriate for some types of markets (usually agency markets) while not so beneficial for dealer markets (such as wholesale bond markets).

Many respondents agreed that maximal transparency is not necessarily desirable, saying that the optimal level of transparency was important and should reflect the market in question considering the different market and product characteristics as well as the type of investors active in the market.

Many respondents pointed out the relative lack of trade data on non-equity markets for empirical studies to be able to support theoretical predictions. Others had concerns about the methodology used in studies showing positive effect of transparency on liquidity in bond markets. Because bonds are traded infrequently, spreads have to be estimated using proxies, for example.

A number of respondents said that increased transparency could be good for clients while increasing costs/decreasing profits for services providers. Also, it was stated that retail clients were likely to gain the larger share of the benefits of greater transparency than institutional clients.

Post-trade transparency was less contested than pre-trade transparency, which the majority of respondents fear might decrease spreads, but in turn drain liquidity, impede market structure, innovation and flexibility, raise competition problems and be detrimental for large orders. Some expressed scepticism that academic models should drive policy-making. For example, ISDA stated:

We do not believe that the results of models, which are abstract simplifications of the real world, can be applied in a literal manner to actual institutions. We believe that it is inappropriate to use divergences between theoretical models and existing institutions as evidence of market failure.

3.11. Question 11: In your view, how applicable is the academic or institutional literature concerning transparency in the cash equities markets to the present discussion?

The majority of answers considered the academic or institutional literature related to equity market transparency generally inapplicable to the debate on non-equity markets, although some considered it a good starting point. The differences between equity and non-equity markets were said to be fundamental for any conclusions from the equity markets debate to be transferable to the non-equity space.

Some respondents suggested that while some levels of transparency are necessary in bond markets, increasing transparency would not have the same effect on price formation and liquidity as in equity markets. Despite the conclusions of equity markets studies, many respondents agreed on the lack of necessity to regulate bond markets, as long as there was no clear evidence of market failure. There was also a call for less regulation regarding instruments offered only for institutional clients.

See also the discussion of Question 7 above.

3.12. Question 12: What similarities, and what differences, are there between US and EU markets that should be borne in mind when seeking to draw inferences from the TRACE experience in the US?

A large number of respondents argued that the impact of TRACE in US as suggested by academic studies (i.e., decrease in spreads without negative turnover effects) was unlikely to be mirrored in Europe where, in contrast with pre-TRACE US markets, there is more pre-transparency and tighter spreads. Furthermore, the reduction of execution costs and more competition between the different types of execution venues were said to be only partially caused by increased transparency in the US.

Different market structure and different market characteristics in the US were highlighted. Differences listed were history; size and liquidity; levels of competition; the key role of primary dealers in Europe; the bigger importance of futures markets than of cash markets in Europe; and retail participation, which is higher in the US than in Europe, where big geographical differences exist. Further, in US markets one would find a unified legal system, a more homogeneous market structure, higher barriers to entry due to more regulation, less electronic trading and more conflicts of interest because of more centralised supervision authorities.

Some suggested that special attention should be given to transparency in countries where greater retail participation may be a concern. Although most actors suggested that initial

fears of a loss in liquidity were not observed in the US, similar fears were raised for European markets which are more fragmented and therefore less liquid although faster growing, especially for the cash bond market. On this view tighter spreads in Europe, together with higher pre- and post-trade transparency than in the US before the implementation of TRACE, would limit the possible beneficial effects of more transparency. It was said that more transparency would not change the structure of the market. Further, it was noted that there are differences between TRACE and MiFID requirements.

A minority of answers emphasised the similarities between markets and considered that the US TRACE experience could be very useful in Europe if the tendency to increase retail participation in non-equities markets continued. In favour of more transparency it was noted that transparency, could lead to a more effective best execution which was the most important factor for achieving market integration.

There is also a debate as to the exact effects of TRACE for American markets. Transparency rules are only partially thought to have contributed to lower transaction costs and more competition on US markets. TBMA, for example, submitted a detailed critique of a number of academic papers¹⁷ which have attempted to show that the introduction of TRACE has lowered spreads and not harmed liquidity. The thrust of TBMA's critique can be set out as follows:

Most of the studies defined and measured liquidity by bid-ask spreads rather than the more direct measure, trade volume. Although spreads are the common measure of liquidity found in academic literature, a narrowing of spreads can be explained by other factors, and does not necessarily indicate increased liquidity. It is not surprising that spreads decrease with transparency. Approximately 98% of trading volume in bonds is institutional in nature and such customers have the market power to force dealers to accept lower prices than the dealers may otherwise believe provides adequate compensation for the risk of committing capital. There is thus a risk that dealers will stop making markets in risky securities for all but their most profitable customers. In particular, the studies that focused on the high-yield sector measured "liquidity" by bid-ask spreads. This market is most vulnerable to reduced liquidity in a price transparency mandated environment, and thus a trade volume analysis in the TRACE price dissemination environment would have been quite useful and relevant.

3.13. Question 13: To the extent that you have identified problems or believe that others might do so, do you agree that only EU-level action would be appropriate in the present case?

Sixteen of the 47 respondents replying to this question agreed that only EU-level action would be appropriate to resolve any problems identified.¹⁸ However, 13 favoured regional action to tackle any problems and 10 responded that no action at all was required, so did not address the question as posed. The remaining respondents made other comments.

Those who supported regional action were almost exclusively strongly against any change. At the same time, support for a European solution was more strongly associated with a positive overall response in favour of change. Some of the respondents in favour of EU-level action qualified their responses by saying that a need for action had to be

¹⁷ See the studies marked with '[TRACE ref.]' in the bibliography in Annex III.

¹⁸ It is important to note that question 13 asked respondents to address the hypothetical case where a problem was identified, even if they themselves did not consider there to be any problems.

established first, or that no action should be taken if it was likely to result in a loss of competitiveness for EU markets.

Support for EU level action came mainly from those exchanges and trading platforms and from those regulators, SROs and consumer organisations that supported mandatory transparency. A majority of respondents from both these groups favoured EU level action. By contrast, support for regional action came almost exclusively from the banking and investment banking sector, with some support from intermediaries. No respondents from any of the other groups favoured regional action.

The respondents in favour of regional action said that the implementation of MiFID and the education of retail investors in the bond market were the main issues to be addressed.

Consult **Table 3** for further details.

Table 3: Degree of support for EU-level action relative to overall support for mandated transparency

	EU-level action	No action	Other	Regional action	No answer	Grand Total
1. Against any change	1	6	1	12	3	23
2. Advise extreme caution	4	3	3	1	4	15
3. Advise to await MiFID	1	1	2		2	6
4. Open to self-regulatory solutions only	2		2			4
5. Open-minded about need to change	3					3
6. Advocating need to change	1				2	3
7. Positively in favour of change	4					4
Grand Total	16	10	8	13	11	58¹⁹

3.14. Question 14: If you have identified problems or believe that others might do so, to what extent do you consider those problems would disappear as a natural product of market evolution in the short-to-medium term?

One third of the 40 respondents who answered this question agreed that any problems identified would be resolved as a result of market developments. Only a small minority said that problems would not disappear of their own accord. The majority of respondents to this question made other comments, mostly to the effect that there were no problems to be overcome. Other comments were split between a range of opinions from support for pre- and post-trade transparency in the retail market to the view that markets should be left to choose whether to evolve towards more transparency.

The respondents who stated that problems would disappear as a natural product of market evolution predicted that transparency would develop in line with market requirements. One respondent from the buy-side qualified its response by saying that only minor problems were likely to resolve themselves.

¹⁹ See footnote 8.

3.15. Question 15: In respect of both pre- and post-trade transparency, are the four options²⁰ the right ones to consider, and in particular should other options be considered?

Among the 43 respondents who answered this question, answers were fairly evenly divided between those who considered the options to be considered were the right ones, and those who gave some other response. Those who gave another response tended to think that consideration of options was premature, on the basis that a market failure had not been identified which would justify any action.

AMTE suggested there was a need to build an aggregate risk positions disclosure system. The Association considered that information on net positions by trading venue may assist in improving search liquidity. This respondent suggested the Commission undertake further work on the technical modalities of such a system.

BVI stated that a broader approach to transparency was needed which includes product and issue-based concerns and provides for a reasonable level of information regarding price formation and price development mechanisms. BVI pointed to particular concerns relating to lack of disclosure as to derivative securities, stating that separate specification of the effective margin is needed in the information materials to be provided to investors. BVI also called for periodic reporting obligations with specific regard to securities listed on regulated markets.

Other respondents focused on timing and thought that an option of no change, but keeping the situation under review, should be considered.

3.16. Question 16: Would you, in light of your answers to the other questions, favour any of the four options in relation to pre- and post-trade transparency (or another option you might propose for consideration) in respect of transactions in any of:

- **cash government bonds;**
- **cash investment-grade corporate bonds;**
- **cash high-yield corporate bonds;**
- **asset-backed securities;**
- **credit default swaps, interest rate swaps and bond futures; or**
- **any other financial instrument you consider relevant?**

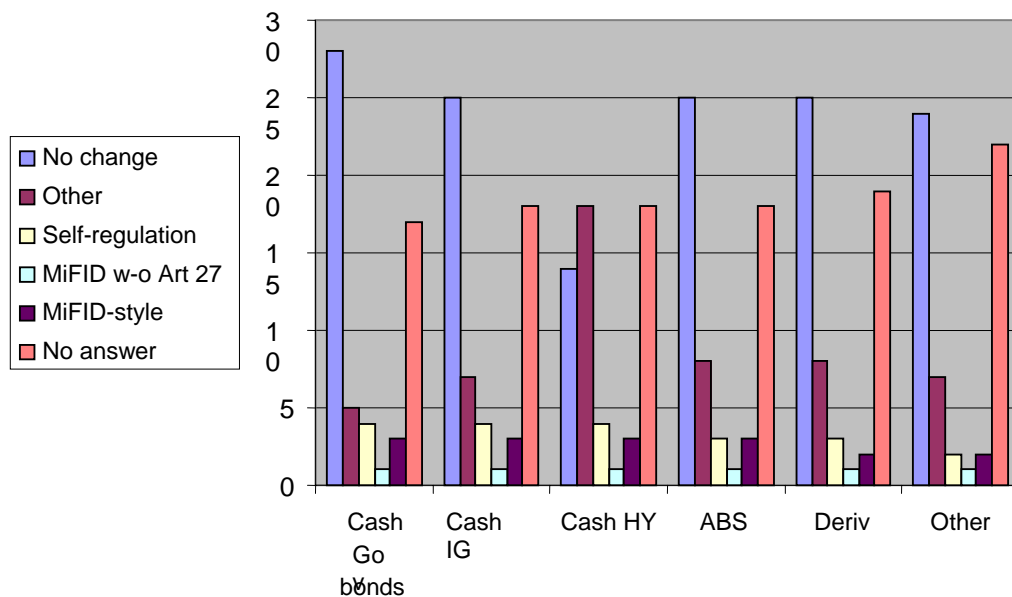
²⁰ The four options for pre-trade transparency were: • a ‘no-change’ option; • an option relying on self-regulation to deliver the objectives determined as discussed in the Call for Evidence; • a mandatory MiFID-like system of pre-trade transparency, but without an equivalent of Article 27; • a full mandatory MiFID-like system. The four options for post-trade transparency were: • a no-change option; • an option relying on self-regulation to deliver the objectives determined as discussed above; • a mandatory TRACE-like system where all transactions are reported with a minimal delay; • a mandatory MiFID-like system where volume information about trades is reported, but with a flexible system of delays according to volume.

The preponderance of responses was in favour of no change in all instrument classes, both in relation to pre- and post-trade transparency. Nevertheless, there were some interesting differences between respondents' attitude to transparency in different instrument classes, and also as between pre- and post-trade transparency.

On the pre-trade side, support for the 'no change' option was highest in the government bond instrument class. These markets are deep and liquid and most market participants consider that there is adequate pre-trade transparency in the market-place. Cash investment-grade, asset-backed securities (ABS) and derivatives (credit default swaps, interest rate swaps and bond futures) had similar profiles though with slightly less support, while the 'other instruments' had a higher rate of non-responses. The main anomaly is the cash high-yield instrument class, where there were a significant number of 'other' responses. This was mainly because some of the 13 trade associations who responded jointly have commissioned research on certain aspects of the high-yield market, and effectively reserved their position. This research is expected to be completed by the end of November and those associations have undertaken to keep the Commission informed of its progress.

Figure 4 shows the degree of support for the various options with respect to pre-trade transparency according to the instrument.

Figure 4: Support for options by instrument²¹ class: pre-trade transparency



On the post-trade side, support for the 'no change' option was highest in the government bond, with similar levels of support for that option in the ABS, derivatives and other instrument classes.

²¹ The six instrument classes used are: Cash government bonds; cash investment-grade; cash high-yield; Asset-Backed Securities; Derivatives; and Other instruments.

The main difference compared to pre-trade transparency is the very much higher support for ‘other’ options in respect both of investment-grade and high-yield cash corporate bonds. For cash investment-grade corporate bonds, this ‘other’ response represented largely that of the 13 trade associations who responded jointly. They expressed in-principle support for the notion of an industry-led initiative to enhance transparency for retail investors, and stated they would be happy to enter into talks with the Commission during the course of the review on how this might be delivered.

For its part, the ICMA went further and stated that:

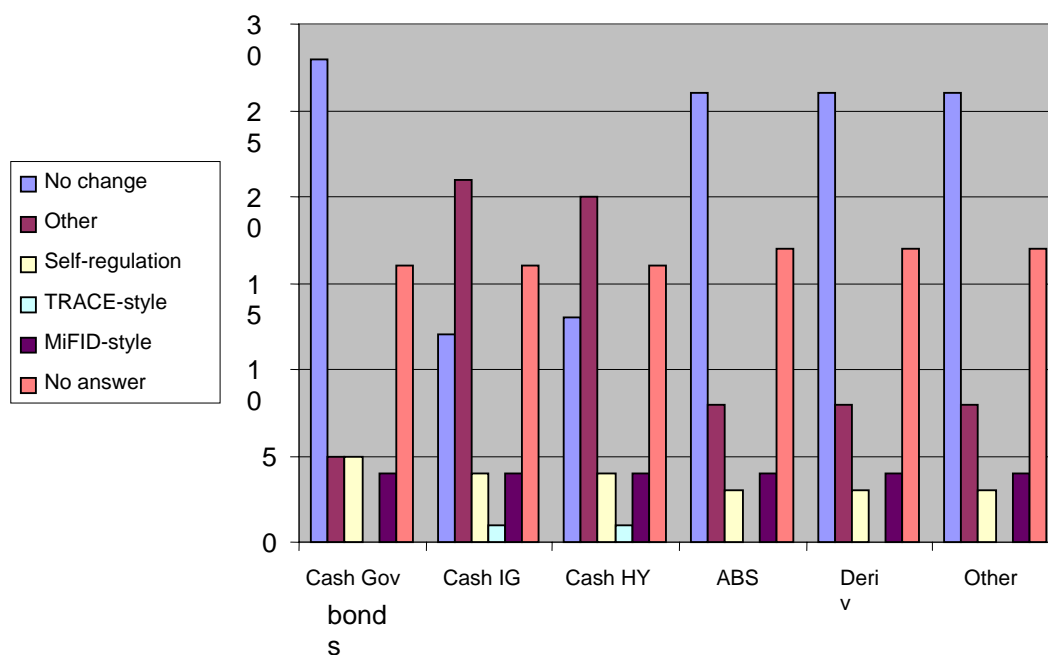
We have also been discussing the issues concerning bond market transparency for some time with our liquidity providers and have now extended that process to our buy-side members to establish whether, in their view, there is more that can and should be done at the self regulatory level to further enhance the levels of post-trade transparency in international debt securities. We will also hold discussions with other representative associations from the fund management community. ICMA is committed to pursuing this work with an open mind as to the eventual outcome. We seek to make a positive contribution to the debate and to do so, on the basis of securing as great a degree of consensus as possible among the diversity of interests reflected in ICMA’s membership.

We will return to the Commission early in 2007, with our conclusions which we believe will have the support of a critical mass of buy side and sell side participants in Europe’s bond markets. We will then be anxious to engage in substantive dialogue concerning the self-regulatory option. In particular, assuming we proceed with phased or experimental introduction of enhanced transparency, we would welcome close cooperation with and advice from the Commission and CESR, and indeed the academic community, on the details of our plans, their relevance to the appropriate regime for best execution in dealer markets and on how to assess whether there are any adverse effects on liquidity. For cash high-yield corporate bonds, this option referred to no change pending the outcome of the commissioned research on the high-yield marketplace referred to above.

It is notable that support for TRACE-style mandatory transparency was very limited.

Figure 5 shows the degree of support for the various options with respect to pre-trade transparency according to the instrument class.

Figure 5: Support for options by instrument²² class: post-trade transparency



4. CONCLUSIONS AND NEXT STEPS

Clearly, most market participants consider either that no change is necessary in relation to mandatory transparency levels, or that at the most, some kind of self-regulatory solution should be called for. This result was anticipated by Commission services when the Call for Evidence was released.

As well, market sentiment is quite strongly to the effect that there are no or no significant problems, and that there are no proven market failures that would justify regulatory intervention.

On the other hand, a small but significant minority of exchanges and trading platforms, regulators, self-regulatory organisations and consumer representative organisations considers that there are potential investor protection and systemic concerns with regard to the present state of affairs.

The suggestion has been made by several respondents that a system could be devised of mandatory transparency specifically for retail customers. Some respondents have also proposed transparency regimes that go beyond trade transparency and relate to risk positions and to other issues such as effective margin specification and periodic reporting obligations in relation to securitised derivatives. Other respondents have noted the need for better information on overall market activity levels and the like.

Commission services note and welcome the work being undertaken by industry, both with respect to the high-yield market and with respect to possible self-regulatory

²² The six instrument classes used are: Cash government bonds; cash investment-grade; cash high-yield; Asset-Backed Securities; Derivatives; and Other instruments.

initiatives. They expect to engage in constructive dialogue with all stakeholders over coming months in order to determine whether self-regulatory measures can provide a viable, low-cost means of addressing the issues that have been raised.

Commission services will also be asking both the Committee of European Securities Regulators (CESR) and the European Securities Markets Expert Group (ESME) for specialist technical advice and assistance. CESR and ESME will be asked to react to the findings of this feedback statement, as well as to answer a targeted series of questions. Those questions will be designed to focus on the cash bond markets as priority areas, while exploring interrelationships between instrument markets, and will explore some of the suggestions mentioned above. The mandates to these bodies will be made public on the Commission's website shortly.²³

A revised set of key milestones is enclosed in **Annex IV**.

²³ http://ec.europa.eu/internal_market/securities/isd/mifid_reports_en.htm

Annex I.

List of non-confidential respondents

Acronym	Respondent
13 TAs	Joint response of 13 trade associations ²⁴
ABBL	The Luxembourg Bankers' Association (Association des Banques et Banquiers, Luxembourg/Luxemburger Bankenvereinigung)
ABI	The Association of British Insurers
ABI	Italian Banking Association (Associazione Bancaria Italiana)
ABN AMRO	ABN AMRO
ADMB	Association of Danish Mortgage Banks (Realkreditrådet)
AFEI	French Association of Investment Firms (Association Française des Entreprises D'Investissement)
AMF	French Financial Markets Authority (Autorité des Marchés Financiers)
AMTE	Euro Debt Market Association (Association des Marchés de Taux en Euro)
ASSOSIM	Italian Association of Securities Intermediaries (Associazione Italiana Intermediari Mobiliari)
BBA	British Bankers' Association
Bloomberg	Bloomberg L.P.
Borsa Italiana	Gruppo Borsa Italiana
BVI	Federal Association of Investment and Asset Management (Bundesverband Investment und Asset Management e.V.)
CMVM	Portuguese Securities Market Commission (Comissão do Mercado de Valores Mobiliários)
CNMV	Spanish Securities Markets Commission (Commission Nacional de Mercados de Valores) - Advisory Committee
CONSOB	Italian Company and Exchange Commission (Commissione Nazionale per le Società e la Borsa)
DAI	German Equity Institute (Deutsches Aktieninstitut e.V.)
Deutsche Bank	Deutsche Bank AG
Deutsche Börse	Deutsche Börse AG
EACB	European Association of Co-operative Banks
EAPB	European Association of Public Banks
EFAMA	The European Fund and Asset Management Association
EFFAS	European Federation of Financial Analyst Societies: European Bond Commission
EPDA	European Primary Dealers Association

²⁴ The 13 trade associations' response was submitted jointly by the Asociación de Mercados Financieros, Bankers and Securities Dealers' Association of Iceland, Danish Securities Dealers Association, Euribor ACI European Commission Working Group, European High Yield Association (EHYA), European Primary Dealers' Association (EPDA), European Securitisation Forum (ESF), Finnish Association of Securities Dealers, International Swaps and Derivatives' Association (ISDA), London Investment Banking Association (LIBA), Norwegian Securities Dealers' Association, Swedish Securities Dealers' Association, and The Bond Market Association (TBMA).

Acronym	Respondent
ESBG	European Savings Banks Group
ESF	European Securitisation Forum
Euronext	Euronext
FBE	European Banking Federation (Fédération Bancaire Européenne)
FBF	French Banking Federation (Fédération Bancaire Française)
FESE	Federation of European Securities Exchanges
FIN USE	Expert Forum of Financial Services Users
FOA	Futures and Options Association
FSA	Financial Services Authority
Goldman Sachs	Goldman Sachs International
ICAP	ICAP plc
ICMA	International Capital Market Association
IMA	Investment Management Association
ISDA	International Swaps and Derivatives Association
LME	London Metals Exchange
LUX Bourse	Société de la Bourse de Luxembourg
M&G	M and G Investment Management Limited
MTS	MTS Group
TLX	TLX S.p.A.
TBMA	The Bond Market Association
UniCredit	UniCredit S.p.a
VAB	Association of Foreign Banks in Germany (Verband der Auslandsbanken in Deutschland e.V)
ZKA	Central Credit Committee (Zentraler Kreditausschuss) ²⁵

²⁵ The ZKA is the joint committee operated by the central associations of the German banking industry. These associations are the Bundesverband der Deutschen Volksbanken und Raiffeisenbanken (BVR), for the cooperative banks, the Bundesverband deutscher Banken (BdB), for the private commercial banks, the Bundesverband Öffentlicher Banken Deutschlands (VÖB), for the public-sector banks, the Deutscher Sparkassen- und Giroverband (DSGV), for the savings banks financial group, and the Verband deutscher Pfandbriefbanken (vdp), for the Pfandbrief banks. Collectively, they represent more than 2,300 banks.

Annex II.

Revised classification scheme

- Cash bonds and money market instruments
 - supranational
 - government
 - corporate investment-grade
 - corporate high-yield
 - covered bonds
 - treasury bills and commercial paper
 - other (e.g. convertible)
- Securitised instruments and derivative securities
 - Asset-backed securities
 - certificates
 - warrants
 - other (structured products, etc.)
- Units in collective investment undertakings
 - UCITS
 - Units in Other collective investment undertakings
 - Exchange-traded funds (ETFs)
 - other
- Derivatives
 - bond options and futures
 - credit default swaps
 - interest rate swaps
 - equity and index derivatives
 - commodity derivatives
 - foreign exchange derivatives
 - other

Annex III.

Revised bibliography²⁶

Aitken MJ, Cook RM, Harris FH.deB, McInish, TH (2006) 'Market Design and Execution Cost for Matched Securities Across Seven Tier-One Markets', Working Paper

Allen H, Hawkins J, Sato S (2001) 'Electronic Trading and its Implications for Financial Systems', BIS Papers No 7, <http://tinyurl.com/y48e8d>

Alonso Alonso E, Sastre C, Galo J (2003) 'Transparencia y principio de mejor ejecución', Comisión Nacional del Mercado de Valores, Monografías No. 2. June 2003, <http://tinyurl.com/v2636>

AMTE paper 'Empirical Evidence on the Daily Returns Distributions in the European Bond Markets', Annex 3 to their submission in response to the Call for Evidence, <http://tinyurl.com/v3sspr>

Angeles de Frutos MA, Manzano C(2005) 'Trade Disclosure and Price Dispersion', Journal of Financial Markets, 8(2), pp. 183-216, <http://tinyurl.com/uy2al>

Ayanian, JV (2002) 'Corporate Bond Market Transparency and Debt Mark-Up Regulation', Speech at the Regional Bond Dealers Management Conference, <http://tinyurl.com/y87o7y>

BearingPoint (2005) 'The Electronic Bond Market 2005: an Analysis of the Electronic Bond Market in the Euro-zone'.

Bessembinder H, Maxwell WF, Venkataraman K (2005) 'Market Transparency, Liquidity Externalities and Institutional Trading Costs in Corporate Bonds', Journal of Financial Economics, <http://tinyurl.com/t8x56>

Bessembinder H, Maxwell WF, Venkataraman K (2006) 'Optimal Market Transparency: Evidence from the Initiation of Trade Reporting in Corporate Bonds,' Journal of Financial Economics, <http://tinyurl.com/wtcy6> [TRACE Ref.]

Biais B, Glosten L, Spatt C (2002, revised 2004) 'The Microstructure of Stock Markets', Centre for Economic Policy Research, <http://tinyurl.com/su22z>

Biais, B, Green, R (2005) 'The Microstructure of the Bond Market in the 20th century', Working Paper, New York Stock Exchange, <http://tinyurl.com/v89zew>

Bloomfield R, O'Hara M (2000) 'Can Transparent Markets Survive?', Journal of Financial Economics, Vol 55, pp. 425-459 <http://tinyurl.com/vzjnl>

Bloomfield R, O'Hara M (1999) 'Market Transparency: Who Wins and Who Loses?', The Review of Financial Studies, Vol.12, No. 1, pp. 5-35

Board J, Sutcliffe C (1995) 'The Effects of Trade Transparency on the London Stock Exchange: a Summary', Working Paper, Financial Markets Group, London School of Economics

²⁶ New items are marked in bold, while revised items in bold italics. Internet links may be to earlier MS versions of published papers.

Board J, Sutcliffe C (1996) 'The Proof of the Pudding: the Effects of Increased Trade Transparency on the London Stock Exchange', Working Paper, Financial Markets Group, London School of Economics.

Board J, Sutcliffe C, Wells S (1999) 'Orderly Markets: Regulation in a Changing Environment'

Boehmer E, Saar, G, Yu L(2005) 'Lifting the Veil: an Analysis of Pre-Trade Transparency at the NYSE', The Journal of Finance, Vol. 60, No. 2 , pp. 783-815 <http://tinyurl.com/w7fsu>

Boudoukh,J, Whitelaw RF (1993) 'Liquidity as a Choice Variable: A Lesson from the Japanese Government Bond Market' Review of Financial Studies, Oxford University Press for Society for Financial Studies, Vol. 6(2), pp. 265-92

Centre for European Policy Studies (2005) 'Europe's Hidden Capital Markets: Evolution, Architecture and Regulation of The European Bond Market'

Centre for European Policy Research: Biais B, Declerck F, Dow J, Portes R, von Thadden E-L(2006) 'European Corporate Bond Markets:Transparency, Liquidity, Efficiency' <http://tinyurl.com/vx3lov>

Centre for European Policy Research: Portes R, Dunne P, Moore M (2006) 'European Government Bond Markets: Transparency, Liquidity, Efficiency' <http://tinyurl.com/v36prz>

Chakravarty S, Sarkar A, (2003) 'Trading Costs in Three U.S. Bond Markets', Journal of Fixed Income Vol 13, pp 39-48 <http://tinyurl.com/y8gs3o>

Chen L, Lesmond D, Wei J (2002) 'Bond Liquidity Estimation and the Liquidity Effect in Yield Spreads', Working Paper, Michigan State University

Committee of European Securities Regulators, Committee of European Banking Supervisors, and Committee of European Insurance and Occupational Pensions Supervisors (March 2006) 'Cross-Sector Aspects Regarding the Functioning of Bond Markets in the European Union', Document No. 06-106

Edwards AK (2006) 'Corporate Bond Market Microstructure and Transparency: The US Experience', BIS Papers No 26, 31-38 <http://tinyurl.com/y2ajvh>

Edwards AK, Harris LE, Piwowar MS (2005) 'Corporate Bond Market: Transparency and Transaction', Journal of Finance, <http://tinyurl.com/yxkwfc>

European Securitisation Forum, Securitisation Data Report, quarterly, <http://tinyurl.com/v39h3f>

European Central Bank(2004) 'The Euro Bond Market Study', Frankfurt am Main <http://tinyurl.com/y6cl62>

European Central Bank: Lagana M, Perina M, von Koppen-Mertes I, Persaud A (August 2006) 'Implications for Liquidity from Innovation and Transparency in the European Corporate Bond Market', Occasional paper, <http://tinyurl.com/tlmgo>

European High Yield Association, London Investment Banking Association et al. (forthcoming in November 2006) independent research paper into the high-yield market

Financial Services Authority (2005), 'Trading Transparency in the UK Secondary Bond Markets' DP 05/5 (together with papers submitted in response thereto by various respondents) <http://tinyurl.com/yyvopu>

- Financial Services Authority (2006) 'Trading Transparency in the UK Secondary Bond Market., Feedback on DP05/5', Feedback Statement 06/4, <http://tinyurl.com/pm7sn>**
- Flood M, Huisman R, Koedijk K, Mahieu R (1999) 'Quote Disclosure and Price Discovery in Multiple-Dealer Financial Markets', *The Review of Financial Studies*, Vol12, No. 1, pp. 5-35
- Flood M, Koedijk K, van Dijk M, van Leeuwen IW (2002) 'Dividing the Pie: Asymmetrically Informed Dealers and Market Transparency', Working Paper.
- Fritsch M, Wein T, Ewers HJ, (2005), 'Marktversagen und Wirtschaftspolitik', Verlag Vahlen, Munich <http://tinyurl.com/y7yhbb>**
- Gemmill G (1996), 'Transparency and Liquidity: a Study of Block Trades on the London Stock Exchange under Different Publication Rules', *Journal of Finance*, Vol 51 No. 5, pp. 1765-90
- Goldstein MA, Hodgkiss ES, Sirri ER (forthcoming 2006) 'Transparency and Liquidity: A Controlled Experiment on Corporate Bonds', Review of Financial Studies, forthcoming. <http://tinyurl.com/ux2ks> [TRACE Ref.]*
- Goldstein, M.A., Hodgkiss, E.S., 2005, 'High-Yield Active and Inactive Bonds and Transparency' [TRACE Ref.]*
- Goldstein, M.A., Hodgkiss, E.S., 2005, 'Additional Report on Active and Inactive High-Yield Bonds' [TRACE Ref.]*
- Gravelle T (2002) 'The Microstructure of Multiple-Dealer Equity and Government Securities Markets: How They Differ', Bank of Canada, Working Paper 2002-9, <http://tinyurl.com/tsw7g>
- Green RC, Hollifield B, Schüroff N (2004) 'Financial Intermediation and the Costs of Trading in an Opaque Market', Working Paper, Tepper School of Business, Carnegie Mellon University, <http://tinyurl.com/vlawz>**
- Hansch O, Saporta V (1999) 'Gross Trading Revenues in Gilt-Edged Market Making', Bank of England mimeo.
- Harris L (1997) 'Order Exposure and Parasitic Traders', Working Paper, University of Southern California, <http://tinyurl.com/vw926>**
- Harris L(2003) 'Trading and Exchanges: Market Microstructure for Practitioners', Oxford University Press**
- Harris L, Piwowar M (2005) 'Municipal Bond Liquidity', American Finance Association, <http://tinyurl.com/y3d5fb>**
- Hendershott T, Jones CM (2005) 'Island Goes Dark: Transparency, Fragmentation, and Regulation', Review of Financial Studies 18, 3, pp 743-793**
- Holland A (2000) 'Dealership Markets and Transparency: A Brief Review of the Academic Literature', Conference Paper, 10th OECD Workshop on Government Securities Markets and Public Debt Management in Emerging Markets <http://tinyurl.com/tb6fj>
- Hong G, Warga A (2000) 'An Empirical Study of Bond Market Transactions', Financial Analysts Journal Vol 56, pp 32-46**
- Hotchkiss E, Warga A, Jostova G (2005) 'Determinants of Corporate Bond Trading: A Comprehensive Analysis', Working Paper, Boston College, <http://tinyurl.com/y2vjxr>**

International Organization of Securities Commissioners (IOSCO) (2004) 'Transparency of Corporate Bond Markets', Report of the Technical Committee of the IOSCO. <http://tinyurl.com/y52aux>

International Organization of Securities Commissioners (IOSCO) (2003) 'Objectives and Principles of Securities Regulation', <http://tinyurl.com/y94r6y>

Kalimpalli M, Warga A (2002) 'Bid-ask Spread, Volatility and Volume in the Corporate Bond Market', Journal of Fixed Income Vol 12, pp 31-42

Lee R, (2002), 'Capital Markets that Benefit Investors: A Survey of Evidence on Fragmentation, Internalisation and Market Transparency', Oxford Finance Group, <http://tinyurl.com/w6zpv>

London International Financial Futures and Options Exchange (LIFFE) (2004) 'Block Trades in Futures and Options Markets', <http://tinyurl.com/y3kf63>

Madhavan ., Porter D, Weaver D (2005) 'Should Securities Markets be Transparent?', Journal of Financial Markets, Vol 8, pp 265-287, <http://tinyurl.com/y5cq5>

Markit Group Ltd (May 2005) 'A discussion on Corporate Bond Market Transparency and Transaction Costs' by Amy K. Edwards, Laurence E. Harris, and Michael S. Piwovar', presented by Lance Uggla,

Martínez-Resano J (2005) 'Size and Heterogeneity Matter: A Microstructure-based Analysis of Regulation of Secondary Markets for Government Bonds', Banco de España, Documentos Ocasionales No. 0501, <http://tinyurl.com/y35soj>

Naik NY, Neuberger A, Viswanathan S (1999) 'Trade Disclosure Regulation in Markets with Negotiated Trades', The Review of Financial Studies, Vol 12, No4, pp 873-900

NASD (September 2004) 'Report of the Corporate Debt Market Panel', <http://tinyurl.com/twkjc>

O'Hara M (1997) 'Market Microstructure Theory', Blackwell

Pagano M, Röell A (1996) 'Transparency and Liquidity: A comparison of Auction and Dealer Markets with Informed Trading', Journal of Finance, Vol 51, No 2., pp 579-611

Piga G, Paesani P (forthcoming 2007) 'Transparency in the European Bond Market', forthcoming publication in Transition Studies Review, Vol 46

Porter DC, Weaver D (1996) 'Pre-Trade Transparency and Market Quality', Working Paper, Marquette University, <http://tinyurl.com/y5wsug>

Reiss PC, Werner IM (1998) 'Does Risk-Sharing Motivate Interdealer Trading?', Journal of Finance, Vol 53 No 5, pp 1657-1703, <http://tinyurl.com/yyzwhb>

Scalia A, Vacca V (1999) 'Does Market Transparency Matter? A Case Study', Bank for International Settlements, <http://tinyurl.com/wcyap>

Schultz P (2001) 'Corporate Bond Trading Costs: A Peek Behind the Curtain', Journal of Finance Vol 56, No 2, pp 677-698, <http://tinyurl.com/y7al8y>

Securities Exchange Commission (1999) 'Testimony of Arthur Levitt, Chairman, before the House Subcommittee on Finance and Hazardous Materials', March 18, 1999

Securities Exchange Commission (2005) 'Remarks before the Bond Market Association 2005 Legal & Compliance Conference', Speech by SEC Commissioner Paul S. Atkins, February 1, 2005, <http://tinyurl.com/y2mf44>

Securities Exchange Commission (2006) 'Remarks Before the TBMA Legal and Compliance Conference', Speech by SEC Commissioner Annette L. Nazareth, February 7, 2006, <http://tinyurl.com/y3zlx5>

Swan PL, Westerholm PJ (21 December 2004) 'The Impact of Architectural Features on Global Equity Market Performance: How Harmful is Opacity for Trading Success?' EFA 2004 Maastricht Meetings Paper No. 2249

The Bond Market Association (TBMA) (2005) , 'European Bond Pricing Sources and Services: Implication for Price Transparency in the European Bond Market', <http://tinyurl.com/yvq983>

The Bond Market Association (TBMA) (March 2006) Electronic Trading Survey, European Fixed Income E-Trading Conference, <http://tinyurl.com/tuqde>

Vitale P(1998) 'Two months in the life of several gilt-edged market makers on the London Stock Exchange', Journal of International Financial Markets, Institutions and Money. Vol 8 pp 299–324, <http://tinyurl.com/y5pj6o>

Warga A (1992) 'Bond Returns, Liquidity and Missing Data', Journal of Financial and Quantitative Analysis Vol 27, No 4, pp 605-616

Warga A, Elkins JA(2004) 'An Overview of the Regulation of the Bond Markets', Report for the Senate Banking Committee, <http://tinyurl.com/y2zqp8>

Annex IV.

Key milestones (revised)

Key milestone	Due/ release date
CESR advice	30 June 2007
ESME response	30 June 2007
Draft report	August 2007
Public hearing in Brussels	11 September 2007
Consultation period on draft report ends	October 07
Final report	End 2007