SIFMA/EPDA/EHYA RESPONSE TO CESR CALL FOR EVIDENCE ON NON-EQUITY MARKETS TRANSPARENCY
6th March, 2007

Introduction

The Securities Industry and Financial Markets Association (SIFMA),[1] the European Primary Dealers Association (EPDA)[2] and the European High Yield Association (EHYA),[3] are pleased to respond to CESR's Call for Evidence on "Non-Equities Markets Transparency".

In our joint response[4] to an FSA Discussion Paper on "Trading Transparency in the UK Secondary Bond Market" in December 2005, we went to great lengths to consider levels of price transparency (pre- and post-trade) in all segments of the European bond market, including each of the markets under review by CESR. Importantly, we carried out this examination in the context of a dynamic and ever evolving bond market. We concluded that, although different levels of price transparency were available to different types of investors in different areas of the EU bond market, that market was showing, over time, every sign of efficient evolution in the provision of price transparency; we warned, therefore, against the risk of possible regulatory failure in mandating price transparency.

We use the opportunity of this consultation to update the significant data we provided as part of our response to FSA, and to reflect on market and other developments that have occurred, so as to assess whether our observations and conclusions, 15 months later, still hold or need revising.

Executive Summary

1. The European bond market growth story continues. Primary issuance and CDS volumes are at a record high level and the share of e-trading continues to increase, bringing additional transparency into an overwhelmingly institutional market.

2. In order to assess the impact of formalised additional price transparency, it is essential to fully understand how the bond market is structured and why it is structured in this way. In particular: bond markets are not centralised (e-trading platforms are not exchanges); because bonds do not trade on exchange, there is not a class of exchange-designated market makers; therefore there is

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[1] SIFMA (the result of a merger between the Bond Market Association and the Securities Industry Association) brings together the shared interests of more than 650 securities firms, banks and asset managers. Its mission is to promote policies and practices that work to expand and perfect markets, foster the development of new products and services and create efficiencies for member firms, while preserving and enhancing the public confidence in the markets. SIFMA represent its members locally and globally. It has offices in London, New York and Washington DC, and its sister association, the Asia Securities Industry and Financial Markets Association (ASIFMA), is based in Hong Kong.

[2] EPDA addresses primary and secondary market issues arising across € government bond markets. It represents EU government securities dealers officially recognised in numerous primary, and active in secondary, markets. Its members cumulatively trade over 85% of the EU government bond market volumes. EPDA is a division of SIFMA.

[3] EHYA addresses primary and secondary market issues arising across Europe's high yield market. It represents underwriters, investors, issuers, law and accounting firms and other participants in the EU high yield market. Its members cumulatively issue and trade over 95% of the EU high yield bond market. EHYA is an independent, self-funded forum of SIFMA.

[4] http://www.bondmarkets.com/assets/files/FSA%20Response%205%20Dec%2005pdf.pdf

no central or dominant pool of liquidity and dealers do not generally quote 2-way prices; dealers act as principal: they put their capital at risk to provide market liquidity.
3. Certain factors, arising out of this market structure, may contribute to the perception by regulators and certain smaller institutional and retail investors of a market failure in the provision of price transparency. Some of the factors relate to the efficiency of price formation, others to access to price information. It is important to address them.

4. Price formation is becoming increasingly efficient in all segments of the EU bond market:

- The continued development of the CDS market allows for constant improvements in the accurate pricing of credit risk in the bond market. Several industry initiatives regarding electronification and the creation of new indices in the CDS market have taken place in the last year, adding efficiency and transparency. More can be expected.
- Bid/offer spreads have continued to compress in all segments of the EU bond market. Independent academic research now exists that shows that spreads on EU corporate bonds are tighter than those on US corporate bonds, even post TRACE. But market efficiency is not just about the tightness of spreads. The fact that bid/offer spreads widen in times of volatility is a natural part of a dynamic market. Investors in the dealer to customer market benefit from tighter bid/offer spreads than dealers the inter-dealer market. Dealers do not see each other's prices: they are competitors.
- Recent academic research also shows that opaque voice trading is a necessary complement to transparent electronic trading and can be more price efficient in certain important circumstances.
- Competitive pressures on dealers act as an effective incentive to provide competitive quotes that are close to or the same as firm quotes.

5. The fragmentation of the numerous sources of price information and (often) the cost of accessing them mean that bond price information is not widely available to, and not user-friendly for, non active bond market participants (i.e. certain small institutional and retail investors). But in any markets there are participants with better access to information than others. This is not a market failure per se, but a result of how markets operate and the nature of the role that particular participants play.

6. We do not see, therefore, any convincing evidence of a market failure in the provision of price transparency in the EU bond market. Quite the opposite, we see a healthy continuation of market-driven price transparency. This, combined with competition, an efficient interaction between the cash and derivatives markets, and existing regulation, is sufficient to continue to deliver fair pricing and execution to market participants.

7. MiFID will provide important additional retail investor protections in the areas of best execution, suitability and investment advice. These tools are much more relevant to the protection of retail investors against another Parmalat or Argentina default type scenario than regulated or self-regulated price transparency.

8. Nevertheless, meaningful, user-friendly, free and educational price information could be of some assistance to smaller institutional and retail bond investors. But in the absence of any evidence of a market failure or inefficiencies that the market has not already shown that it is capable of addressing over time, any initiative to that effect should be driven by the industry. We are aware of the ICMA initiative, which we are discussing with them.

Q1) Does CESR consider there to be convincing evidence of market failure with respect to market transparency in any of the instrument markets under review?

1. The growth story continues

With the potential impact of mandatory price transparency on the liquidity and competitiveness of Europe's bond market, we believe it important, as a starting point, to remind ourselves that this market has a very positive story to tell, in a largely unregulated environment.

We attach as Annex 1 updated **primary market issuance** graphs showing continued significant growth (i) in each of the markets under review by CESR (EU Government, investment grade and high yield bonds), and (ii) in CDS volumes.

There has also been continued significant growth of **electronic trading**, as evidenced by SIFMA's February 2007 Second Annual EU Fixed Income e-Trading survey of 302 buy side, 12 dealers and 5 trading platforms[5], in particular:

- A significant number (55%) of buy-side now trade over 60% of their total volume electronically. By 2007, less than 1% of the buy-side surveyed will not trade electronically since e-trading is becoming the dominant trading method for a growing number of firms[6].
- The sell-side reports a 32% growth in volumes of e-trading from 2005 to 2006.
- Future growth is expected to come from less e-trading established, less transparent products.

The main dealer-to-customer platforms also report continued growth in volumes traded[7] and institutional client coverage[8].

The impact of growth in e-trading on the market is several, and most importantly, in the context of this consultation:

- Increased liquidity, in particular for new products
- Increased price transparency, in particular for new products
- Increased choice of counterparties for customers (increased competition)
- Reduced bid/offer spreads
- Increased efficiencies
- Enhanced ability to obtain and verify best execution

2. Investors in today's EU bond market

Because of regulators' desire to enhance investor protection via enhanced price transparency, it is also important to know which types of investors invest in Europe's bond market.

The first ever primary distribution survey[9] of the 20 leading bookrunners of EU bonds across all bond segments, carried out by SIFMA at the end of 2006, indicates that the EU primary bond market is almost entirely institutional. Retail investment in primary issuance is below 3% in all "plain vanilla" products and quasi-non existent in structured products (we replicate in Annex 2

[5] http://www.bondmarkets.com/assets/files/EuropeanFITradingSurvey.pdf,
[6] Id.
[7] $57 trillion traded on Tradeweb in 06 (+25% on 05, +72% in last 3 years), $340 billions traded on MarketAxess in 06 (+14% on 05, + 44% in last 3 years).
[8] Over 2,200 clients on Tradeweb (+200 on 05), 650 on MarketAxess (+75 on 05).
[9] http://www.bondmarkets.com/story.asp?id=2653

the findings that relate to the markets under CESR review). This percentage is likely to be even smaller in the secondary bond market given most retail investors buy to hold. Moreover, retail participation is likely to be concentrated in high-net-worth individuals, whose access to information is higher than normal (so-called "quasi-institutional"). Lastly, with the exception of Italy and Denmark, most average retail investors in Europe buy fixed income products through funds/brokers who benefit from the price transparency available to institutional investors.

3. Market structure

In order to assess the impact of additional formalized price transparency on bond markets, it is essential to understand how bonds trade and why they trade through certain media rather than others. In its November 2006 response to the Commission's request for initial assistance, CESR did an excellent job of highlighting the importance of this point and of describing the broad characteristics of bond trading. We think it helpful to summarise these in the following manner:

Fixed income instruments trade using one of **four trading media:**

- Inter-dealer (B2B) e-trading platform (e.g., BrokerTec, eSpeed, MTS);
- Dealer-to-customer (B2C) e-trading platforms, either multi-dealer (e.g., BondVision, Bloomberg, Reuters, TradeWeb, MarketAxess), or single dealer;
- OTC inter-dealer trading via voice brokers (e.g., ICAP, BGC); and
- OTC dealer-to-customer voice trading.

There are **three types of trading methods on e-trading platforms:**

- **Quote driven:** market makers commit to continuously fulfill price quoting obligations;
- **Order driven:** anonymous buy/sell orders are entered by users voluntarily and automatically executed when another party's buy/sell are entered at the same price; and
- **Request for quotes (RFQ):** investors request and compare prices of several dealers simultaneously before executing a transaction with their chosen dealer.

Typically, quote and order driven models are features of B2B platforms and the RFQ model is a feature of B2C platforms, although some platforms operate a hybrid model.

For more information on the number of trading platforms operating globally, trading systems and methods used, participants, price and other information available, timeliness of such information and product coverage by platform, see SIFMA's 10th Annual Report on e-Commerce in the Fixed-Income Markets for 2006[10].

The key here, as can be seen from the two tables immediately below, is that **trading media and methods vary across instruments.**

[10] http://www.bondmarkets.com/assets/files/2006eCommerceSurveyFinal120606.pdf

- **Percentage of e-traded vs OTC traded volumes in the B2B segment**

For the following B2B trading methods at your firm, what % of current volume would you estimate is handled electronically? (Volume and tickets created for European originated trades)

	Voice / Telephone		Multi-Dealer Electronic				Exchange	
			Mandatory Quote		Order Driven			
Product	Volume	Tickets	Volume	Tickets	Volume	Tickets	Volume	Tickets
Eu Govnt (inc Gilts)	48	32	33.4	53.75	6.6	4.25	12	10
US Treasuries	43	38.25	0.8	0	48.6	61.75	7.6	0
Sovereign / Agency / Supranational / Covered	71.6	51.25	16	33.75	12	15	0.4	0
Credit-High Yield	99.6	99.5	0.4	0.5	0	0	0	0
Credit - Investment Grade	89	86.25	1	0	10	13.75	0	0
Emerging Mkt Debt	94	90	0	0	6	10	0	0
Repo	57.5	51.25	0	0	30	31.25	12.5	17.5
IRS	97.5	97.5	0.25	0.25	2.25	2.25	0	0
CDS	69	63	0	0	31	37	0	0
ABS	99	99	1	1	0	0	0	0
ECP	85	n/a	0	0	n/a	0	15	n/a
Futures	5	5	0	0	0	0	95	95

Source: SIFMA 2007 e-trading survey

- **Percentage of e-traded vs OTC traded volumes in the B2C segment**

For the following **B2C** trading methods at your firm, **what % of current volume would you estimate is** handled electronically? (Volume and tickets created for European originated trades)

	Voice / Telephone		Single Dealer Streaming		Multi-Dealer Electronic				Exchange	
					Inventory		Request for Quote			
Product	Volume	Tickets	Volume	Tickets	Volume	Tickets	Volume	Tickets	Volume	Tickets
Eu Govnt (inc Gilts)	62.7	36.7	8.3	19.1	2.9	7.1	26.1	37.0	0.0	0.0
US Treasuries	75.3	57.5	8.8	15.0	0.5	5.0	15.5	22.5	0.0	0.0
Sovereign / Agency / Supranational / Covered	83.7	62.1	5.4	19.4	0.7	2.9	10.1	15.6	0.0	0.0
Credit-High Yield	91.7	76.0	1.0	6.0	2.1	5.4	5.1	12.6	0.0	0.0
Credit - Investment Grade	81.6	50.0	3.6	15.7	3.3	12.9	11.3	21.1	0.3	0.3
Emerging Mkt Debt	95.5	87.2	0.7	4.3	0.7	3.2	3.2	5.3	0.0	0.0
Repo	77.2	73.0	16.7	20.0	1.7	0.0	2.8	7.0	1.7	0.0
IRS	87.3	74.3	4.5	15.7	1.1	0.4	6.1	9.6	1.0	0.0
CDS	95.9	96.6	0.3	0.3	1.1	0.0	1.8	3.1	1.0	0.0
ABS	99.2	98.4	0.3	0.4	0.0	0.0	0.5	1.2	0.0	0.0
ECP	90.0	86.3	2.4	4.8	2.0	0.0	5.6	9.0	0.0	0.0
Futures	45.0	37.5	0.0	0.0	0.0	0.0	17.5	17.5	37.5	45.0

Source: SIFMA 2007 e-trading survey

4 Why is the bond market structured in this way?

In its response to the Commission's initial request for assistance, CESR makes some very important points which help explain why the bond market is structured in this way. These points are critical to a full understanding of the varying levels of transparency within the bond market. We echo several of CESR's points in setting out below what we believe are the key ones:

(i) Bond markets are not centralised

Equities generally trade almost exclusively on exchanges, and most of the liquidity in a particular share is found on one exchange.[11] In contrast, although most bonds issued into Europe are listed on an EU stock exchange, only an insignificant proportion of such bonds actually trade on an exchange. Most bonds trade over-the-counter in a decentralised dealer market.

There are a number of reasons for this. Whereas an equity investor must deal almost exclusively in the secondary market to buy and sell a share, a bond investor who is looking for yield can buy a bond and wait until redemption in order to realise its investment and thus never enter the secondary market. Also, while each share trades on the unique dynamics of a particular company's future prospects, bonds are generally traded within groups according to their credit rating, maturity and yield. Finally, there are many more bond issues than equity issues (e.g., a corporate issuer may have 2-3 classes of equity shares outstanding while it may also have tens of bond issues outstanding).

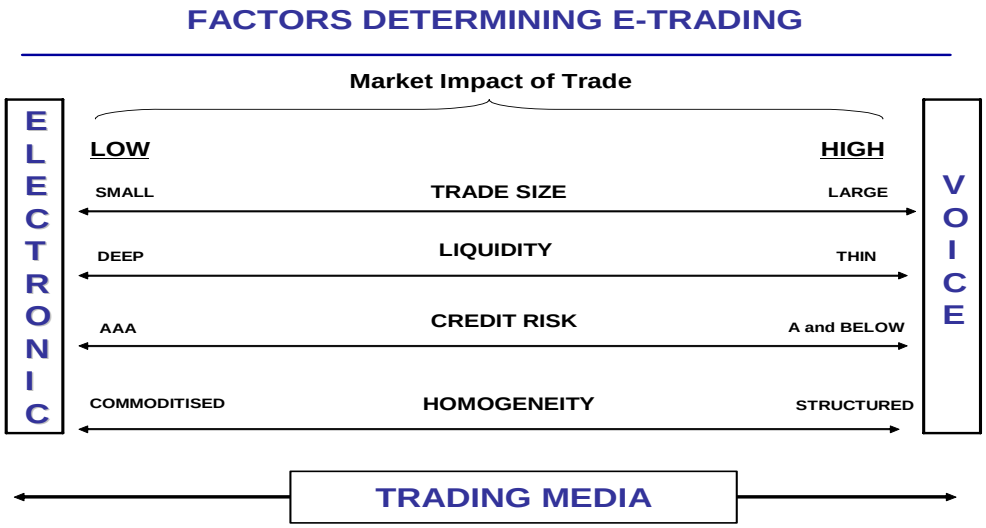
As a result, other than for a small percentage, most bonds do not trade continuously and in a centralised market as do equities. Because trading is sporadic there usually is not a natural investor when another investor wishes to buy or sell a bond. Thus, investors rely on dealers to provide liquidity where no natural contra-side exists to their trade.

(ii) E-trading growth has brought trading efficiencies but has not altered market structure

As can be seen from the tables above, a large portion of secondary market volumes is traded by voice in both the inter-dealer and the dealer-to-customer markets, though e-trading has grown substantially since the mid-90's and continues to grow, bringing more of the benefits and efficiencies already highlighted. Fundamentally, however, the various trading media and methods available mirror the existing bond market structure and are designed to facilitate existing trading relationships between market participants. Trading platforms do not create liquidity: with the exception of very few inter-dealer platforms that ask participants to provide continuous quoting obligations irrespective of investor interest, it is the dealers who voluntarily provide liquidity as per client demand. Trading platforms merely (though importantly) help facilitate this process.

The extent to which trading of different asset classes occurs on e-trading platforms rather than over the telephone depends on the degree to which the asset class is commoditised, its rating, liquidity, the size of the trade as well as overall market conditions (e.g., volatility), as summarised in the chart below. Hence, more platforms trade government bonds, money market instruments and investment grade corporate bonds, than trade high yield, ABS and emerging market bonds.

[11] According to CESR's own statistics "in 95 % of all the cases, the most liquid [equity] market had at least five times the size of the second biggest [equity] market (using the criterion "volume" as well as the criterion "turnover"). In 90 % it had even more than eleven times the size of the next biggest [equity] market" (Advice on Possible Implementing Measures of the Directive 2004/39/EC on Markets in Financial Instruments, 27 June 2004, page 107)



Because bond trading involves search for price and negotiation rather than firm orders, investors' preferred method of trading, and therefore the method mostly made available by B2C platforms, is by far the RFQ model[12]. For this reason, investor participants on multi-dealer B2C platforms have more trading information than dealers about trades executed electronically. Whilst most institutional users have access to several dealer prices via multi-dealer B2C platforms, the dealers that are put in competition on RFQ systems do not see each other's quotes.

(iii) Because bonds do not generally trade on exchanges, there is not a class of exchange-designated market makers in bonds

In the equity market, the determination of which firms are market makers is made on a security-by-security basis. Because there are so many more bond issues than equity issues, dealers in bonds generally stand ready to buy and sell bonds in an entire sector, rather than merely those of a single issue or issuer. Even with respect to some of the more complex and structured bonds, where it is possible that only one dealer originally underwrote the bonds, it is common for multiple dealers to be willing to provide secondary market liquidity to institutional investors who have a relationship with such dealers.

This highlights an important characteristic of bond markets which is not found in equity markets, namely that bonds with similar terms are often good substitutes for each other. The shares of a chemical company, for example, are not equivalent to the shares of another chemical company, since investors buy shares to benefit from future price changes which will depend on the profitability of the specific company. Bonds issued by different companies with the same maturity, coupon, credit rating and other terms will, however, provide similar investment returns in terms of income and likelihood of repayment at maturity - the objectives of bond investors. Unless a client insists on purchasing a specific bond, which may have a high illiquidity premium, a dealer may be able to offer a bond with almost identical investment characteristics from its inventory at a better price.

[12] See SIFMA 2007 e-trading survey, #3.7

(iv) As a result, there is no central or dominant pool of liquidity in bond markets

As a result, and in further contrast with the equity market, there is no central or dominant pool of liquidity in bond markets, except in the most highly liquid bonds, such as certain government bonds, supra-national organisations and large investment grade corporates. Because most bonds do not trade frequently, there is never a constant source of buyers for all bonds and investors rely on the ability of dealers, individually or collectively via telephone or e-trading systems, to provide liquidity. Liquidity is thus dynamic and much more so in fixed-income than in equity markets. Since most bonds do not trade frequently, it is also difficult and costly to "short" bonds (another difference with equities). Importantly, in times of market stress, dealers are often the only parties willing to provide a quote and to hold positions until a market imbalance is righted.

(v) As a further result, dealers do not generally quote executable 2-way prices

Because of the very large number of bonds outstanding and the infrequent interest in trading the vast majority of bonds[13], dealers do not continuously quote 2-way prices for bonds other than the most liquid ones. When they do quote, they may quote indicative or 1-way prices on their proprietary trading systems or on multi-dealer e-trading platforms in which they participate. They will quote a bid price to buy those bonds at the request of a client, but are unlikely to quote an offer price unless they hold the security in portfolio, since it may be difficult and costly to cover a "short", depending on the characteristics (in particular the liquidity) of the bonds in question. Occasionally, dealers will quote 2-way executable prices, but generally not for large trades. However, even when a firm does not publicly quote 2-way prices, it will respond to a client request to quote a price at which it is willing to buy or sell bonds including up to very large sizes.

As in equity market block trades, large sized bond trades can be at a significant discount/premium to the prices displayed for more "normal" sized trades for that issue.

(vi) Bond markets are mostly principal markets

Dealers sell securities from, and buy securities into, their trading portfolios. Many such dealers provide liquidity to their clients by buying bonds from them even though they do not have and may not find an ultimate buyer to which to on-sell the bonds. Thus, most trades are done on an at-risk basis, i.e. dealers do not have both a buy and sell order at the time they enter into a trade.

Hence, institutional customers rarely place orders. They ask for the quotes of several dealers and then may decide to transact at the best price. Where trades are for a large size, the investor may wish to transact with a single dealer at a price which may be poorer than that offered by other dealers for smaller sizes. Trading immediacy for a poorer price is often accepted by an investor because the alternative would be for the market to move away from him as the first dealer tried to unwind his trade while the investor was attempting to complete the rest of his transaction.

As a result, in bond markets price is not always the most important factor. And for some bonds, the most important factor is whether it is possible to deal in the bond at all. In the corporate bond market, certainty of execution and settlement is often more important than price.

[13] See Annex 3 for charts on bonds vs equities outstandings and secondary trading volumes

5 What factors may contribute to the perception of a market failure in the provision of price transparency?

Several consequences follow from the unique structure of the bond market which may contribute to the perception by regulators and certain small institutional and retail investors of potential market failures or inefficiencies. It is important to address them. We take this opportunity to also review any relevant private sector initiatives and other developments arising in the last 15 months.

This perception seems to be fuelled partly by factors that go to the efficiency of price formation in the bond markets, and partly by factors relating to availability of/access to price information.

Factors relating to efficiency of price formation

(i) Bond pricing

Bond pricing can be simple or complex, depending upon the type of bond, its maturity, yield, credit rating and liquidity. At its simplest, for a bond of impeccable credit quality, it should be worth the discounted cash flow of its future principal and interest payments. However, a variety of macroeconomic factors can affect even the price of bonds of impeccable credit quality, including (i) current debt market yields, (ii) the current outlook for growth and inflation, (iii) potential changes in monetary policy, (iv) benchmark yield curves (for bonds priced as a spread to a benchmark curve), (v) prevailing rates in the OTC interest rate swap markets, the exchange-traded interest rate futures market and the repo market, and (vi) credit default swap curves. Different views on these economic factors may affect the decision of an institutional investor as to the current market value of a bond.

Lower rated bonds, and even some on-the-run corporate and government bonds, are also subject to an "illiquidity premium" that compensates the holder for the illiquidity of the issue, i.e. the fact that it may take more time and effort to find a buyer than for a highly rated, highly liquid issue.

The pricing of bonds in all sectors of the bond market has become increasingly efficient since the creation of the Euro in 1999. This is the case in the government and investment grade corporate bond markets, where the multitude of competing dealers making markets ensures the efficiency of price formation. It is also increasingly the case in the high yield market where the number of dealers has grown on average from only 5 a few years ago to 3 times that number today as the market has shown the strongest growth rate of all sectors under CESR review in 2006[14].

Further, as noted earlier, an important characteristic of bond markets is that bonds with similar terms are often good substitutes for each other. We note and welcome recent privative sector initiatives that help investors better achieve comparability, such as Fitch's "Peer Analysis Tool", a web-based analytical service which enables investors to perform detailed peer analysis of more than 100 sovereigns and over 800 corporate entities from one centralised database.

[14] See Fitch press release: "High-Yield Record Issuance Driven By M&A As Default Risk Rises", 19 October 2006

Another important factor has been the development of multi-contributor indices (comprising daily prices of liquid bonds) that provide the market with references to several industry sectors' prices. For example, the universe of thousands of bonds comprised in International Index Company (IIC)'s Iboxx index family has continued to increase over the last 15 months. In addition, in January 2007, IIC launched its iBoxx Euro High Yield Index Family[15] comprising 193 high yield bonds. Price and other information are available for free on IIC's website.

(ii) Role of the credit default swap (CDS) market

The most important factor that has increased efficiency in bond pricing is the development of liquidity and pricing accuracy in the CDS market, which allows for more accurate and consistent comparative pricing of credit risk in the bond market. Pre-CDS, bond markets were fragmented by currency, settlement mechanism, name familiarity in that market, structure, issuance type, etc. The asset swap market went some way in improving this but the CDS market has removed much of the barriers by providing a mechanism to remove price anomalies across a fragmented space, thereby making for more efficient pricing. Hence, many trading platforms are now offering this product, and hence, the resounding success of data providers such as Markit and iTraxx.

Since the Commission has asked CESR to review "other markets" to the extent it is necessary to do so, it would seem appropriate to deal further with the inter-relationship between cash and derivatives markets at this stage.

First, it is important to distinguish rates from credit. CDS is used to hedge credit risk in portfolios; interest rate swap (IRS) is used to hedge interest rate risk. In government bond markets it is often more efficient to trade IRS or the Eurex future against Eurozone debt as a rate (and price) hedge.

Second, that inter-relationship varies by bond market segment. Liquidity in IRS is broadly equivalent to liquidity in government bonds and liquidity in IRS and CDS is superior to liquidity in investment grade bonds. High yield still remains relatively unexposed to CDS. The low average issue size of the debt obligations for the majority of high yield issuers does not lend itself to CDS. The situation is evolving, however, as the number of issuers with actively traded CDS continues to grow. The prevalence of larger jumbo LBOs is also increasing the potential universe of high yield CDS, but this remains a relatively limited universe, at least as measured by percentage of total issuers.

Third, trade size influences the market that determines liquidity. As a broad characterization, the liquidity in bonds with a trade size below €5 million will tend to be in the bond market; for trade sizes above that, the liquidity is more likely to be found in the CDS market where the risk is likely to have been hedged.

The CDS market, therefore, plays a crucial role in the stability and efficient pricing in the bond market, and in particular the corporate bond market, as highlighted by the General Motors and Ford downgrades in May 2005. Without the CDS market, it is unlikely that the bond market alone would have been able to sustain an event of that magnitude.

An important development in the last year has been the growth of electronification in the CDS market. In December 2006, the first pilot test was conducted of a platform, Q-Wixx, that allows market participants to conduct near instant auctions to obtain prices for every trade in a portfolio

[15] http://www.indexco.com/download/news/178/20070108EHYLaunchPressRelease.pdf

of around 30 CDS names. Investors can submit lists of trades and dealers can all simultaneously submit quotes. The software allows the investor to select quotes individually or to select all the best quotes automatically and then cut the deal in bulk. This will likely cause greater commoditisation of CDS products and smaller margins for dealers, which should be offset by rising volumes and, above all, by the benefit of having a more efficient trading infrastructure.

Another important development has been the continued development of IIC's iTraxx series, in particular for high yield with the creation of the iTraxx Crossover Index, a basket that tracks CDS prices on risky European corporates. The index tightened from 290 basis points at inception to 220 bps at the end of last year. The baskets are updated twice a year and, again, the information is available for free on IIC's website.

(iii) Bid/offer spreads

Two types of comments are often heard about bid/offer spreads in the context of price transparency: one relates to the lack of transparency in which such spreads are determined, the other to the fact that greater price transparency will benefit investors since it will further reduce the volatility of spreads. Taking each in turn:

Determination of spreads

In an order-driven market, "natural" buyers and sellers have an investment view that they wish to buy/sell a particular instrument. In quote driven markets, a dealer has no such fundamental view. It is merely a facilitator/liquidity provider. For whatever it buys/sells, the dealer looks to reverse that transaction as quickly as possible. The dealer charges the investor as compensation for the risk of taking a position which, but for the dealer, the investor would have had to retain itself.

This charge is reflected in the dealer bid/offer spread, which reflects the dealer's view as to the risk of reversing the position taken on from the client, including the cost of capital it needs to commit to make its balance sheet available to carry the position, and other benefits it provides to investors, including research, providing market intelligence and help with portfolio valuations.

When markets become volatile or liquidity decreases, the spread increases. This is because of the additional risk that the dealer may incur a loss in reversing the transaction. Hence, a dealer spread is qualitatively different from charging a commission to execute a client order on an order book. In the former case, there is an additional facility provided by the firm in assuming the risk which would continue to be held by the buyer/seller in the absence of the dealer. In the latter case, the firm takes on no position risk in executing an order between two investors.

Volatility of spreads

The argument is sometimes made that since bond bid/offer spreads are wider than in equities, bonds are pricing less efficiently than equities. In the most liquid parts of the market however, spreads are much tighter than even the largest equity issues.[16]

Where dealers compete to make markets, the bids and offers quoted need to be sufficiently competitive to attract client business. Over the past five years, dealer spreads have compressed in all bond markets.[17] This is a sign of an efficient and competitive marketplace. CEPR's study on

[16] E.g. German Government Bonds often trade as tight as 1/10th of a basis point at the short end (Schatz) and US Treasuries often trade at ¼ of a 32nd at the short end.
[17] See TBMA response to FSA DP 05/5, Annex 5 (Price formation process and efficiency)

European corporate bond markets concludes that bid/offer spreads in this market are tighter than those in the US corporate bond market, even post TRACE.[18] The FSA's own analysis of the dataset provided by ICMA reaches the same conclusions.[19]

In the government bond market, bid/offer spreads have compressed to such a level that secondary flow trading does not offer an attractive return on capital for many banks. If spreads compress much further, banks may well reduce the amount of balance sheet available for secondary flow trading and reallocate it elsewhere.

As observed by the FSA,[20] "market efficiency is not just about the tightness of spreads. The sizes quoted are also of importance. Where competition exists between dealers, pricing improves. But prices and quote sizes may react differently to increases in transparency, with quoted spreads tightening while the size quoted falls." In a speech on promoting liquidity in domestic bonds markets in May 2006, Malcolm Knight, General Manager of the BIS, stated: "Even though bid/offer spreads in some parts of East Asia appear at first sight to be quite narrow, this may partly reflect government or exchanges rules that constrain market makers' spreads. These rules can undermine the willingness of market makers to deal in size, so the cost of this apparent liquidity may in fact be a reduction in market depth."

Therefore, it is important not to consider bid/offer spreads in isolation but to look at them in the context of a dynamic bond market. The fact that bid/offer spreads widen in times of volatility, as has been seen in recent weeks, is a natural part of a dynamic market and is consistent with other markets. It may even be the optimal behaviour for dealers to be allowed to maintain wide spreads for illiquid bonds, or in times of stress, so they can still offer liquidity to the market without taking on excessive levels of risk.

Finally, it is important to note that multi-dealer B2C platforms provide tighter bid/offer spreads and larger sizes to investors than are available between dealers in the B2B space[21]. This is because of a cardinal rule in bond markets: dealers provide liquidity to their customers, not their competitors. The same comment can be made in respect of voice trading, to which we now turn.

(iv) Voice trading

Despite the continued growth of e-trading across all fixed income asset classes, voice trading remains the predominant form of trading bonds, and increases as one goes down the credit curve (although this picture is dynamic). One can understand how this form of trading may be perceived as "anti-transparent" in the sense that it reduces price information available to the market at large.

[18] CEPR Study: *European corporate bond markets: transparency, liquidity, efficiency* (May 2006) ("CEPR Study on EU Corporate Bond Markets")

[19] "In new, large European bond issues, we find spreads that are narrow (averaging just 0.023% during our sample period) and that are sometimes negative… Our findings suggest that corporate bond spreads in Europe are noticeably tighter than those in the US. This is also supported by the evidence presented in the CEPR report on Europe's corporate bond markets, and with the comments we have received from market participants. Tighter European spreads are observed across all trade sizes, including for smaller, 'retail-sized' trades." (Feedback Statement 06/4, #4.6)

[20] Feedback Statement 06/04

[21] See slides and explanatory comments in Annex 4. They compare and contrast the prices and liquidity available for the same security (10 year German Bund) at the same time on a B2C and on a B2B platform.

Considered from the point of view of price efficiency, however, voice trading plays an important role in allowing dealers to continue to make markets and provide liquidity to investors (e.g. in circumstances where the investor wishes to sell a large position). This is particularly important in the large number of bonds that are not actively traded and in times of volatility, where liquidity tends to draw away from trading platforms.

Voice broking is complementary to electronic markets and is key to efficient price formation. Indeed, as mentioned in the CEPR study: "Electronic platforms are usually described as transparent and voice communication as opaque, but which of these trading mechanisms will provide the most efficient pricing will depend on circumstances … A voice-brokered market can be more price efficient than an electronic market because it allows a more sophisticated response to trades that are in fact uninformative… Transparency of a less efficient price from an electronic setting may not be as desirable as a somewhat less transparent but more efficient price from a voice-brokered market … This is particularly relevant for the B2C segment of the market. A customer with a large position to trade may be better off communicating this to a single liquidity provider, sparing him both the likelihood of experiencing a winner's curse[22] and the fear that there is an impending adverse information event."[23]

(v) Indicative quotes

A criticism sometimes made of bonds' often indicative prices is that there is no guarantee that a trade will be executed at the indicated price, in particular for the lower-rated, less liquid bonds.

This is a fair comment. However, as we have seen, the fact that so many bonds do not trade frequently explains why dealers generally do not quote 2-way executable prices for most bonds.

In addition, apart from flow and large issues, the lack of a liquid repo market in many less liquid segments makes it impossible to quote firm 2-way prices in most issues without creating large numbers of fails in the repo market.

Finally, indicative quotes are generally very close to, or the same as, executable quotes. This is because they lead to trades[24].

<u>Factors relating to availability and access to price information</u>

(i) Comparatively less price transparency in less liquid securities/less developed bond markets

The further down the credit curve, the lower the price transparency level, and the less efficiently information circulates. For example, in the less mature EU high yield market, the most common way of communicating prices and indications remains electronic messages, most commonly exchanged through Bloomberg terminals.

[22] "Winner's curse" is a term used to describe a situation in which the highest bidder, in a request for quote situation, in the B2C market wins. Subsequently, the winner needs to hedge his risk in the B2B market. However, due to the transparency of the B2C market, facilitated by electronic trading platforms, the other dealers have been made aware that someone will need to hedge or unwind a position later. Therefore, they move against the winner in the B2B market by taking "contrarian positions". Dunne, P., Moore, M., Portes, R., *"European Government Bond Market: transparency, liquidity, efficiency"*, May 2006 (the "CEPR Study on EU Government Market") at p. 10.

[23] CEPR Study on EU Government Bond Market at p. 12-13.

[24] E.g. on TradeWeb over 75% of trades are executed within the indicative bid/offer spreads. Most trades executed outside are the larger ones. About 20,000 of the 50,000 bond prices available on Bloomberg trade at the original indicative price.

However, the comparatively lower level of pre-trade transparency in less liquid bonds does not mean that dealers do not compete fiercely to provide the best possible price to their clients.

In addition, institutional buy-side accounts often have in fact better pre-trade price transparency in less liquid markets than the dealers themselves or the broker community. **Dealers do not see each other's prices; they are competitors.** Large high yield institutional investors receive quotes, indications and/or buy/sell "axes sheets" from more than 20 different dealers, whereas brokers typically see prices from up to only 5 dealers. Other institutional investors, such as emerging market bond fund managers, may expend more resources on analysing the underlying credit than the dealers who quote prices, and therefore have a better understanding of where prices should be. It is not therefore unusual for dealers and brokers to call large sell-side institutions to ask them about the wider range of prices available in less liquid bonds.

(ii) Uneven dissemination of trade price data and information

Currently, arrangements around the breadth and speed of dissemination of price information in bond markets are organised around those who most actively participate in the market. Thus, participants on a trading platform will receive broader and quicker pre-trade and post-trade quote information than subscribers to data vendors who are not platform participants. Similarly, institutional investors who are active in these markets will likely build relationships with several dealers and thus obtain broader and faster information than less active investors with fewer relationships.

In any market there are participants with better access to information than others. This is a result of how markets function, and the nature of the role that particular participants play.

(iii) Fragmentation and cost of access to price information

We echo CESR's frustration that "there is no fully comprehensive and harmonised data throughout the EU [bond market]"[25]. This is not surprising given the decentralised nature of bond markets and the level of competition in Europe. There are, however, a number of systems developed by the private sector which pool together, process and release a significant amount of bond price and other data[26]. We also note the recent creation of LiquidityHub, a consortium of leading banks in the fixed-income markets for the aggregation of liquidity and data in support of electronic trading, which is expected to launch in mid-2007.

The fragmentation of sources of price information and (often) the cost of accessing it mean that it is not widely available to, and not user-friendly for, non-active market participants (i.e. certain smaller institutional investors and retail).

In this respect, we hope that the industry initiatives currently underway (see Q6 below) will go some way to address this problem. In the meantime, it is important to remember that:

- Fragmentation is at issue, not the lack of information, at least for wholesale participants.

[25] CESR November 2006 response to the Commission's request for initial assistance on non-equity markets transparency

[26] See The Bond Market Association study: "European Bond pricing Sources and Services: Implications for Price Transparency in the European Bond Market" (April 2005, Annex C), available at http://www.bondmarkets.com/assets/files/PriceTransparencyStudy_april05.pdf

- The issue of information availability is primarily with small institutions and retail investors. There is no obstacle, however, for private client banks and brokers to subscribe to market data sources from the institutional sources to provide their retail customers with real-time information. In fact, private stockbrokers have developed their own bond trading platform (Bondscape) with 3 price contributors contributing prices on several hundreds of the most actively traded government and investment grade corporate bonds in the EU. Further, as already mentioned, the IIC makes end-of-day price information on thousands of bonds available for free on its website.
- Direct retail participation in the primary bond market is minimal, except in a limited number of EU member states (although even in these countries retail participation will be through intermediaries, typically a bank's local branch). Direct retail participation in secondary bond market is even less due to the "buy-and-hold" effect.
- Finally, the assumption that information asymmetry makes retail less likely to trade bonds in secondary markets does not ring true. There are many reasons why retail investors do not tend to be active in secondary markets, including their investment objectives and preferences (e.g., many EU countries' long standing equities culture), the media, government (through privatisations) and investment firms have long encouraged retail investment in equities. Most retail investors buy an issue and hold until maturity. Relatively little coverage is given to bonds, let alone via direct investment.

6 Broader concerns

Beyond the technical concerns that policy makers may have about price transparency, following on from the structure of bond markets, we understand and fully support their duty to ensure, with the shift of the pension industry towards more bond investment, that EU bond markets provide a safe environment that can be relied on to deliver on the broader issue of funding the "ageing crisis".

We note the London market is already at work. Several banks are working on creating a new securities market that will give pension schemes a way to offset the risk that their members will live longer than expected, while giving life insurers the ability to hedge the opposite risk of unexpectedly high mortality.

We are also conscious of the financial stability concerns of policy makers regarding leveraging of risks, eg via structured products. As has, we hope, been understood, this has little to do with price transparency and everything to do with proper valuations. Again, there are an increasing number of industry bodies and initiatives that are focusing on these issues.

Conclusion (including our response to Q2)

We do not see any convincing evidence of a market failure related to price transparency in the markets under review by CESR. A combination of competition, continued market-driven transparency, the efficient interaction between cash and credit derivatives markets, and existing regulation is sufficient, in general, to deliver fair pricing and execution to participants who are active in these markets.

Government Bond Market

We do not see how greater transparency imposed via regulation (or even self-regulation) in the already most transparent sector of the bond market would offer any additional benefit to institutional market participants.

We draw CESR's attention to the CEPR Study conclusions regarding the inverse relationship between precipitously decreasing spreads and the availability of liquidity in the market. In particular, we note, "We find that the introduction of full transparency…can drain liquidity from the government bond market abruptly and completely."[27]

We fully support the conclusions in this study that strongly advise against introducing mandatory pre-trade transparency and advise extreme caution in the case of post-trade transparency.

Some price information may be of benefit to small institutional and retail investors, but the calibration and delivery of such information should be left to the industry to design. We note that the Financial Times publishes daily price and yield information on over 40 Euro-zone benchmark government bonds. This is twice as many bonds as 18 months ago.

Investment Grade Corporate Bond Market

We acknowledge that this sector of the EU bond market is less transparent than the Government bond market, but this is not evidence of a market failure per se. We note, for example, that this sector is an area of e-trading growth. Very tellingly, we also note that a comparison of EU vs US investment grade coprorate bond spreads shows tighter spreads in the EU, even post the introduction of price transparency regulation in the US with TRACE. Finally, we believe that the continued growth of CDS on investment grade corporates is an efficient mechanism for price formation and risk transfer in most of the EU corporate bond market.

We agree with the CEPR Study on EU Corporate Bond Markets' conclusion that pre-trade transparency regulation would be unnecessary and potentially damaging. We also note the conclusion that some limited post trade transparency might be beneficial but that it should be left to the industry.

High yield

The EU high yield market is the least transparent of the 3 markets under review by CESR. Here again, this is not evidence of a market failure. As can be seen from the issuance graph in Annex 1, this market is still a fraction of its US equivalent and has gone through fits and starts since 1999. It has, however, matured through this process, and 2006 saw the strongest growth compared to any other market under CESR review. The increase in investor participation is particularly telling in this market, which has moved from a bank driven to a mostly institutional investor driven market in the last 5 years. The diversification of this market from mainly telecom asset class base to a multi-asset class product has increased investor participation.

The EU high yield market is therefore the most likely to react negatively to the introduction of price transparency regulation. We have seen it happen in the much more established and liquid

[27] CEPR Study on EU Government Bond Markets, p. 5

US high yield market post-TRACE (anecdotal evidence cannot be simply ignored) and believe the EU high yield market would be even more vulnerable to a similar intervention.

We would also have concerns over the sustainable attraction for investors of high yield investment as an important public refinancing alternative to private short term unregulated lending (e.g., via mezzanine loans).

Finally, we refer CESR to a recent study on the EU high yield market (co-sponsored by the EHYA) which, for the first time, provides empirical investigation into this market[28]. The study shows that although the EU high yield market is more concentrated than its investment grade counterpart and spreads are wider, the number of issuers (and therefore liquidity providers) is increasing, and spreads are "reasonably tight". The study also emphasises that the growth of CDS in this sector is contributing to its efficient development. This has been particularly noticeable in the last year.

The study reaches similar conclusions as those contained in the investment grade study. We agree with the conclusions on pre-trade transparency. Regarding the conclusion on post-trade transparency, the EHYA, as representative of market participants from all sides of the high yield market, is continuing to discuss and monitor the situation.

Q2) What evidence is there that mandatory pre- and post-trade transparency would mitigate such a market failure?

None that we can genuinely point to. See our concluding remarks on Q1.

Q3) To what extent can the implementation of MiFID be expected to change this picture?

The area where we believe MiFID will most likely impact the current debate is in relation to the investor (in particular retail) protection policy rationale advanced by regulators in support of price transparency regulation. The argument is that more price transparency would enable retail investors to quickly exit investments that are deteriorating and thereby avoid financial losses.

The situations that caused this argumentation are well known and are briefly discussed in our response to Q4. We believe that the most efficient ways of protecting retail investors is to tackle the two areas where they are the most vulnerable.

The first is best execution. Retail vulnerability can arise in situations where a retail broker sells a fixed-income product to a retail client at a price which the client cannot easily measure whether it is the market price; or where a firm's retail execution desk sources retail client requests exclusively from its in-house trading desk and passes-on any mark-up to the client. We believe, however, that EU regulators have the necessary information to assess these practices already.

In that context, post-trade price transparency could provide assistance to retail investors in establishing best execution, so long as it does not exempt regulators from ensuring that firms' retail execution desks and private brokers' best execution obligations are properly carried out.

MiFID, if properly implemented by both Member States and regulated entities, should go a long way towards addressing this issue. All firms, including their private banking divisions and independent retail brokers, are required to have clear policies regarding the provision of best execution, which will be accessible to customers.

[28]Biais&Declerck: *"European High-Yield Bond Market: transparency, liquidity efficiency"*, (March,2007)

Suitability is another area where retail investors are potentially exposed. Again, MiFID should go a long way in protecting retail investors against the sale of unsuitable instruments. There could be a debate on whether that principle may, in certain circumstances, need to extend beyond the initial sale; however, price transparency is mostly irrelevant to the suitability issue.

Another potential impact of MiFID on bond price transparency is the impact of the current price transparency provisions for equity markets on market structure and liquidity gathering. We are following with interest the start of Project Boat and note that they might consider including bond market data in the future.

Q4) Can CESR indicate and describe a significant case or category of cases where investor protection has been significantly compromised as a result of a lack of mandatory transparency?

We believe that the Commission is hinting at situations such as Parmalat and Argentina earlier this century. We have significant doubts that additional price transparency will be able to protect retail investors against future corporate frauds or sovereign issuer defaults. Regulatory attention should focus on the distributor of, not the market-maker in, financial products, and in particular, on the areas of disclosure, best execution and suitability.

For example, the Argentina default highlights suitability issues and certain unique factors that should not be re-packaged as price transparency issues. We are unable to ascertain how obtaining price information on Argentina or Parmalat bonds prior to default would have affected a retail investor's ability to determine whether and when a default would occur. In fact, while some fund managers did sell off their positions in the months preceding the default, other professionals remained convinced that a default would be averted. Therefore, information about the impending default was not necessarily something that could have been discerned by improved price transparency. These issues were exacerbated by a lack of clear practice standards amongst the local banks and, in the case of the Argentina default, by the close cultural and historical ties between Argentina and Italy. Indeed, retail holders were not present in such large numbers in other sovereign issuer defaults by, for example, Ecuador or Russia.

Q5) Could it be feasible and/or desirable to consider extending mandatory transparency only to certain segments of the market or certain types of investors?

In light of all the above, there does not seem to be any good reason to mandate price transparency, whether fully or selectively. Regulation of certain segments of the market could drive investments to unregulated segments. Moreover, it would require regulators to provide a legal definition of what might constitute different market segments. This would be wholly inappropriate given the vast amount of fixed income products, some of which either do not fit in or cross over the traditional Government/investment grade/high yield distinction. Further, it would create unnecessary rigidity at a time where we see increasing convergence between products (eg cash and derivatives), markets (eg exchange traded and OTC markets in certain areas), and participants (eg, banking, insurance and asset management). This issue, together with any concerns regarding particular types of investors, would be best addressed by industry initiatives (see our answer to Q6 below).

Q6) What criteria does CESR recommend should be applied by the Commission in determining whether self-regulatory solutions are adequate to address any of the issues above?

In the absence of any evidence of a market failure or inefficiencies that the market has not already shown that it is capable of addressing over time, we do not believe it appropriate to approach this subject in terms of finding "solutions". We believe that the more precise approach is to think in terms of initiatives to enhance the current transparency environment, and we hope that CESR will strongly recommend that this should be left to the industry to address.

The question becomes: what kind of industry initiative is necessary or desirable? Here are some important considerations to take into account:

- Will the industry initiative respond to regulators' most important concerns? It is still unclear to many market participants what these are precisely, other than, perhaps, enhancing small and retail investor access to price information, and, possibly, their participation. Will the industry initiative capture retail trades?
- Will the industry initiative be calibrated in such a way that it preserves market efficiency, dealer liquidity and the competitiveness of EU bond markets?
- Will it cover a substantial enough part of the markets under review?
- Will it have the support of a significant proportion of participants in those markets, sell- and buy-side?
- Will it have the type of independent governance behind it that ensures that all relevant parties are involved in its design and monitoring?

We are aware of the proposal by ICMA, which we are discussing with them. Regulators should give ICMA consultation time to gather important feedback that will provide answers to the above questions and others, and hopefully allow the industry and its regulators to reach consensus.

Conclusion

SIFMA is committed to transparent markets, but not at the expense of efficient and liquid markets. SIFMA is also committed to transparency to retail investors, whose information needs are of a different nature than those of actively trading investors. Through its award winning investor website in the US, www.investinginbonds.com, SIFMA provides US bonds price information to retail investors that is meaningful, user-friendly, free and accompanied by appropriate education and information on the risks of investing in bonds.

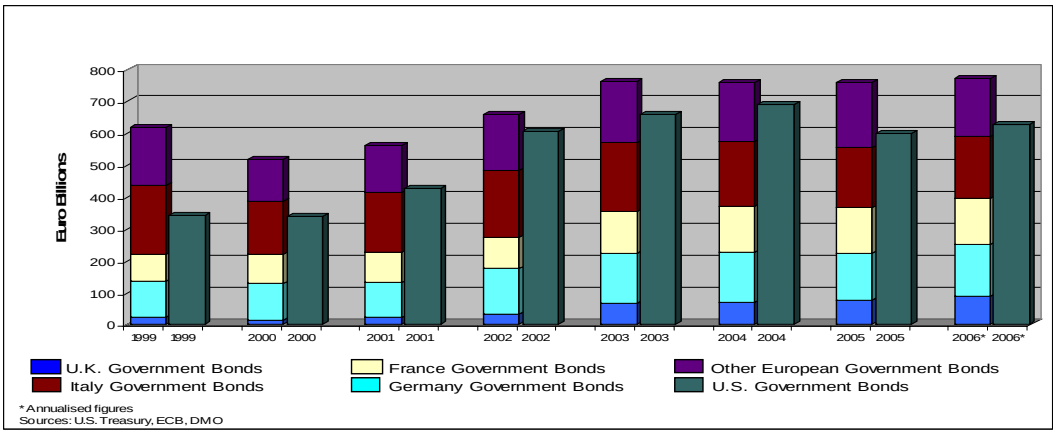
Our appeal to regulators is "when regulating to give due weight to the need to strike the right balance between prudential and investor protection considerations and the need for competitiveness and innovation in financial services. Don't try to protect everyone from every possible accident. Concentrate on the big things that really matter. And leave the industry with the space to breathe and investors with the freedom to learn from their mistakes".[29]

We look forward to working with regulators, market participants and other fellow associations in being part of the best possible outcome for Europe's bond markets.

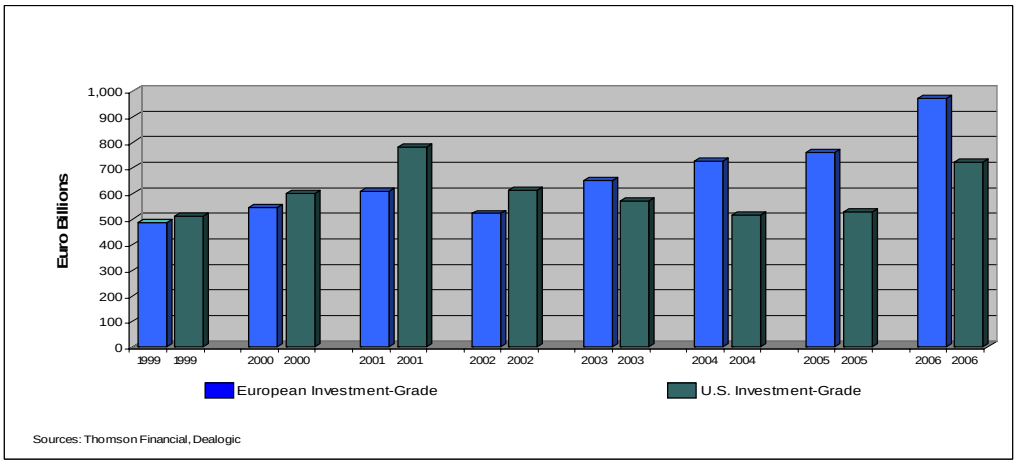
[29] Final lines of a speech from European Commissioner Charlie McCreevey delivered on 17 October, 2005 to the Central Bank of Ireland

ANNEX 1: CONTINUED GROWTH OF THE EU BOND MARKET

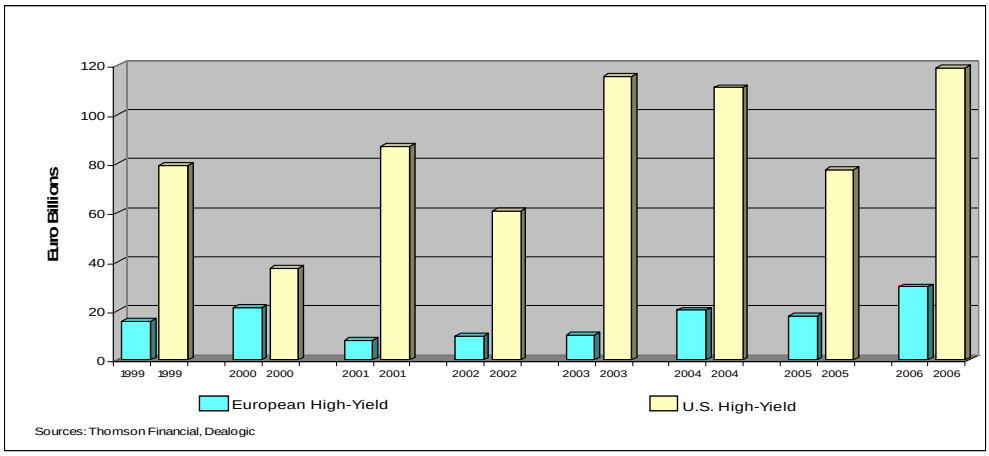
EU Government Bonds vs US Treasuries

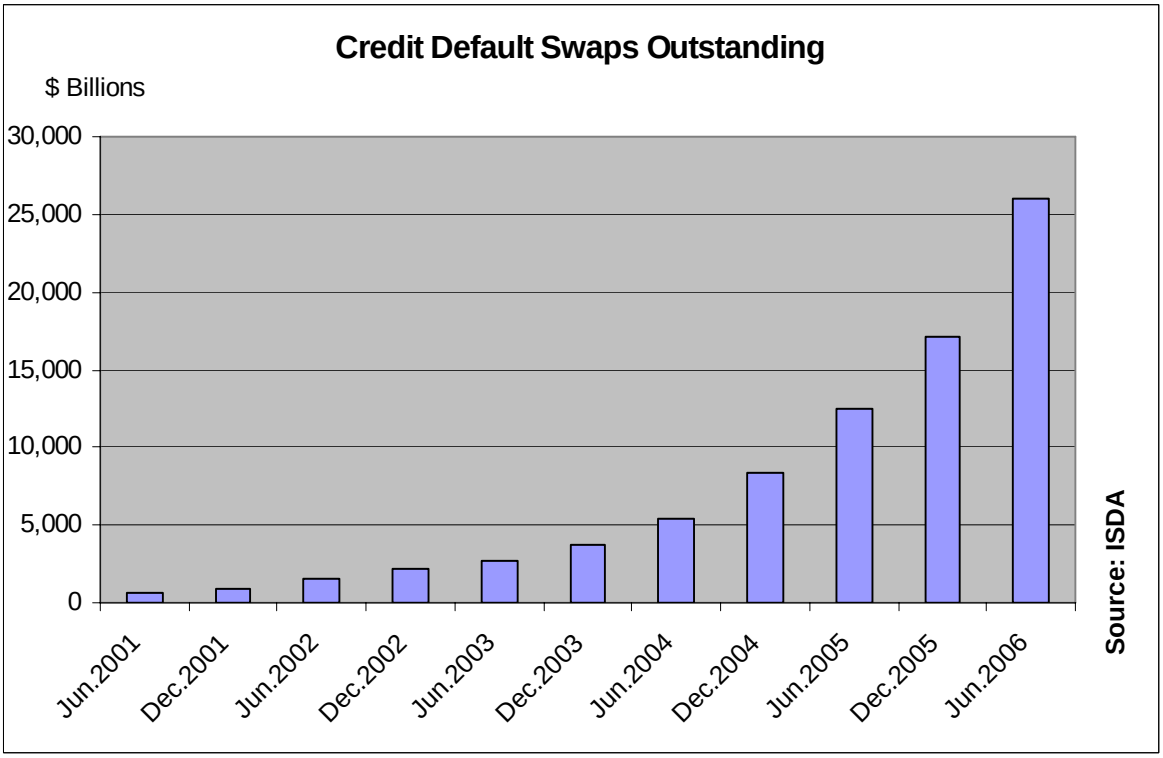


European and U.S. Corporate Investment-Grade



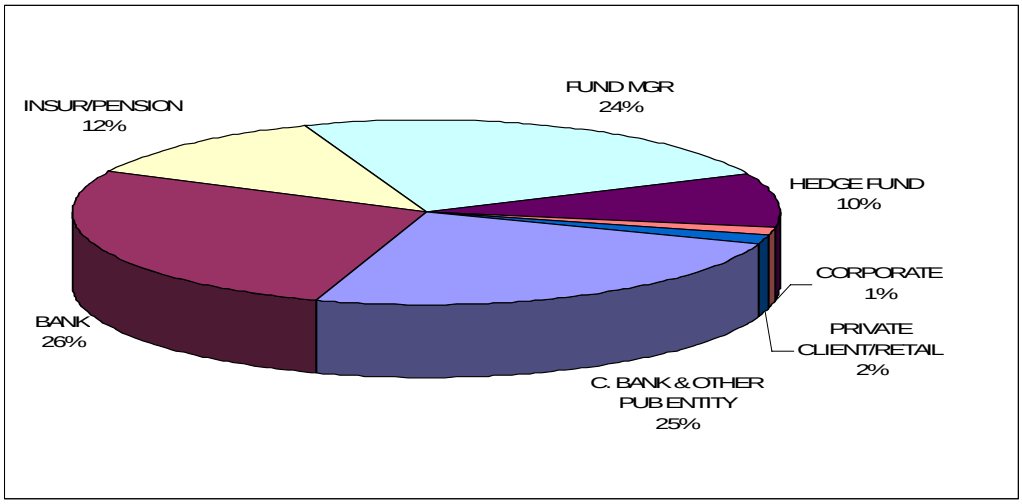
European and U.S. High-Yield Corporate Market



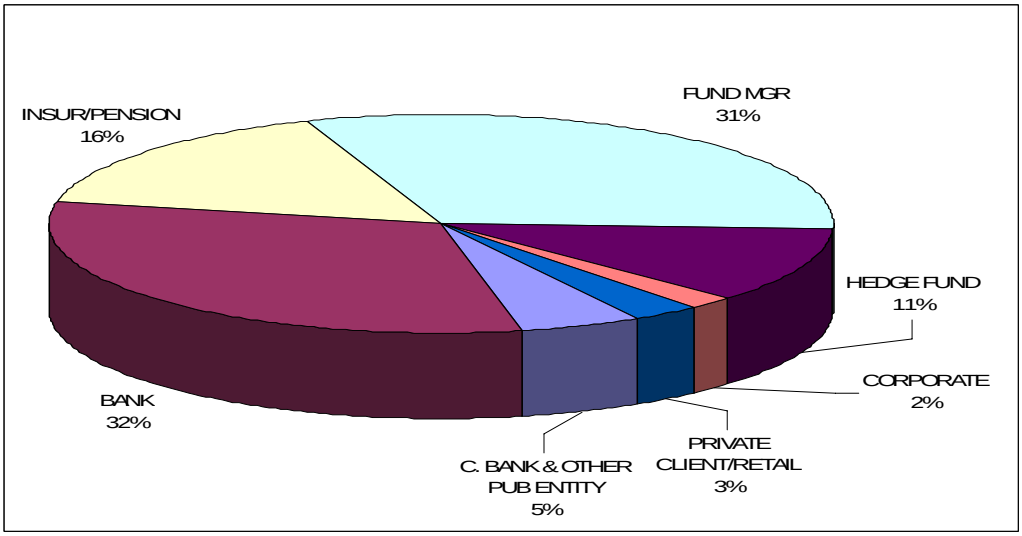


ANNEX 2: INVESTORS IN EU BOND MARKETS UNDER CESR REVIEW

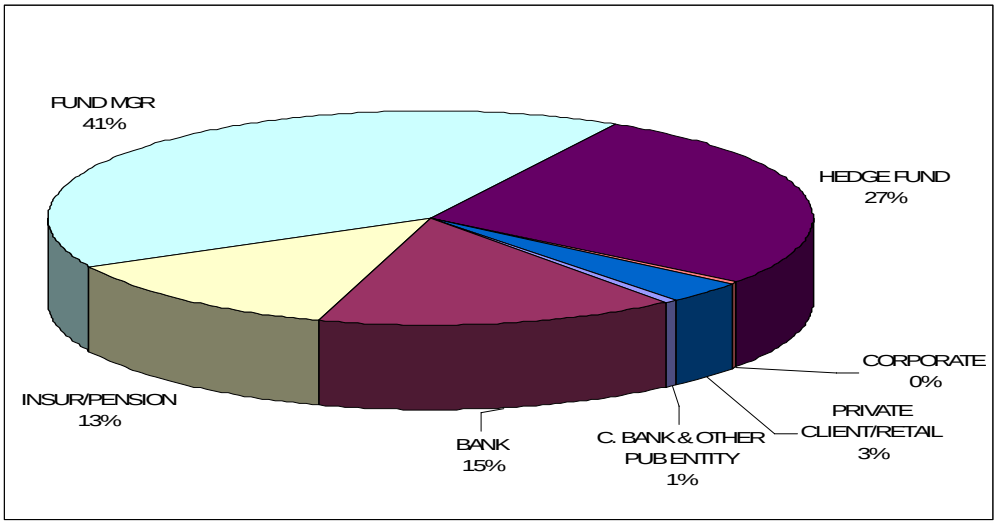
GOVERNMENT BONDS:



INVESTMENT GRADE CORPORATE BONDS:

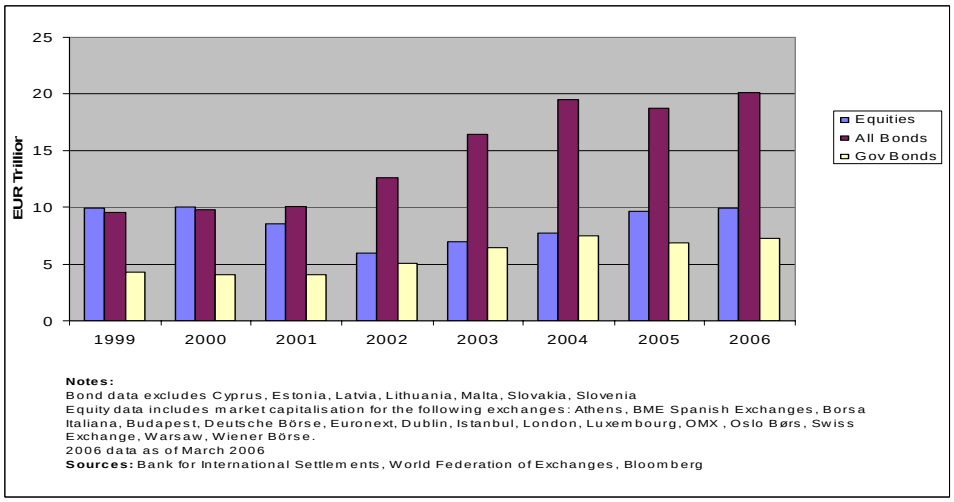


HIGH-YIELD CORPORATE BONDS:



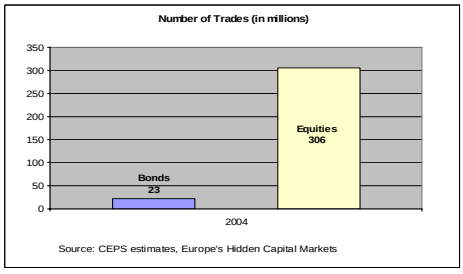
ANNEX 3: BONDS VS EQUITIES OUTSTANDINGS AND SECONDARY TRADING VOLUMES

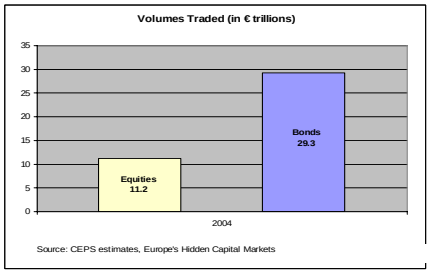
Bonds vs Equities Outstandings



Notes:
Bond data excludes Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, Slovenia
Equity data includes market capitalisation for the following exchanges: Athens, BME Spanish Exchanges, Borsa Italiana, Budapest, Deutsche Börse, Euronext, Dublin, Istanbul, London, Luxembourg, OMX, Oslo Børs, Swiss Exchange, Warsaw, Wiener Börse.
2006 data as of March 2006
Sources: Bank for International Settlements, World Federation of Exchanges, Bloomberg

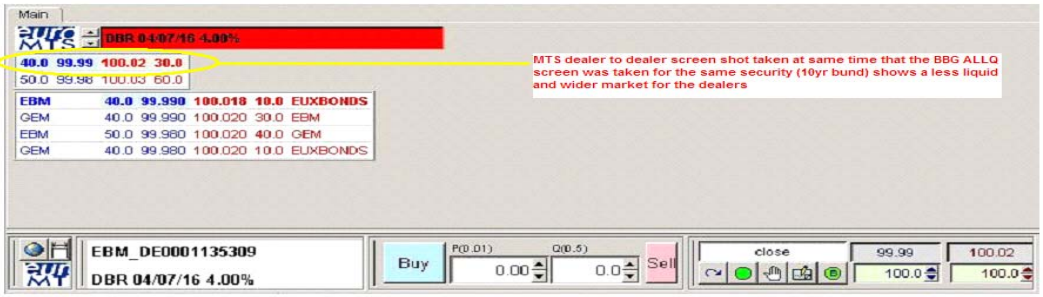
Bonds vs Equities Secondary Trading





ANNEX 4: B2B VS B2C SPREADS

Liquidity available in inter-dealer market via MTS



Liquidity available to clients via BBG trading platform