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Transparency and over-the-counter derivatives: The role of transaction transparency

- Some policymakers advocate that OTC derivatives be made subject to transaction transparency levels that are similar to those found on securities and futures exchanges.
- Mandated “one size fits all” transparency standards may lead to decreased liquidity in some products and markets if the standards do not take account of the reasons for different levels of transparency.
- The recent regulatory approach to credit default swaps, in which policy makers encourage and facilitate industry-developed solutions rather than impose uniform solutions, provides a promising template for OTC derivatives transparency.

Privately-negotiated derivatives are frequently criticized for a perceived lack of transparency. Characterizations such as “murky,” “opaque,” and “anonymous” appear regularly in the financial press. The apparent implication is that financial markets would be more efficient, and society would be better off, if over-the-counter derivatives moved to a higher level of transparency.

The word “transparency” carries positive connotations. Few would disagree, for example, that governments should function in a transparent—that is, open—manner, or that regulations should be transparent—that is, clear and understandable—to the affected parties. The problem is, transparency means different things to different people (OECD 2001). Further, the positive connotations of the word can sometimes lead policy makers to view transparency as an end in itself instead of as a means to an end.

In financial markets, transparency usually means *transaction transparency*, that is, the degree to which information regarding prices and volumes of financial transactions is made publicly available (COSRA 1993). Transaction transparency in turn takes two forms. One is *pre-trade transparency*, which refers to the reporting of information on prospective trading interest or limit order books. The other is *post-trade transparency*, which refers to the reporting of prices and volumes of completed transactions. In the mar-

ket microstructure literature, transparent markets are those that offer pre- or post-trade transparency of some sort; *opaque* markets are those that do not (Harris 2003, p. 101).

Some critics of OTC derivatives appear to have a different form of transparency in mind, namely, transparency of risks taken by market participants. One television reporter, for example, lamented that the details of credit default swaps “...are hidden from the public, from stockholders and regulators. No one knows what they cover, who owns them, and whether or not they have the money to pay them off” (CBS 60 Minutes, October 5, 2008). Although the Depository Trust & Clearing Corporation publishes risk information for credit default swaps, it is doubtful that risk transparency at the level of detail described above is currently available for OTC derivatives or, for that matter, any other financial markets. Further, there have been few if any detailed proposals for increased risk transparency, and it is not clear what form risk transparency would take if implemented.

Regardless of the status of risk transparency, the issue of transaction transparency is very much alive. Policy makers in the European Union, for example, are considering applying increased transaction transparency to corporate bonds, structured finance transactions, and OTC derivatives, with particular attention to credit default swaps (EC 2006; CESR 2008). The

objective of this Note is to review the research on transaction transparency and to consider the arguments for increased transaction transparency for OTC derivatives.

This Note will argue that transaction transparency is not an end in itself, but a market characteristic that varies across financial markets in response to market demands and that should be evaluated on the basis of how it affects the functioning of a market. In the case of OTC derivatives, the primary function of the market is the transfer of risk and not the transfer of debt or equity. Just as transparency measures appropriate for actively-traded equities might not be appropriate for thinly-traded bonds, so transparency measures designed for exchange-traded instruments might not be beneficial for over-the-counter risk transfer instruments.

The first part of the Note will consider the economics of transparency in the context of the financial intermediation function. Various market structures have evolved, some highly transparent and some hardly transparent at all, for the purposes of capital raising and risk shifting. The second part will consider the costs and benefits of mandated transparency for OTC derivatives. Although the Note argues against a “one size fits all” transparency regime, it does not argue against transaction transparency in general. Indeed, the recent increase in the transparency of credit default swaps suggests that new forms of transparency develop as markets evolve, sometimes in response to regulatory pressure but often to meet the changing demands of market participants.

Financial intermediation and transparency

Financial markets and financial institutions, known collectively as financial intermediaries, exist to solve two fundamental problems. The first—capital raising—is to bring together those who have productive uses for funds but lack access to funds, and those who have access to funds but are willing to part temporarily with the funds instead of using them today. The second problem—risk shifting—is that some people face risks in the conduct of their daily business that they would rather avoid, while others are willing to take on those risks under certain circumstances. In a world of perfect and costless information, financial intermediaries would not be necessary because all the relevant parties could find each other on their own. But in the real world, a wide variety of transaction costs and informational asymmetries keep the

parties apart, which creates opportunities for financial intermediaries to overcome these obstacles.

Financial intermediation consists of a vast array of products, institutions, and markets, which have evolved in response to a diverse mix of market demands for capital raising and risk shifting services in various environments. Considered from the point of view of transparency, financial markets span a continuum from highly transparent to hardly transparent. Table 1 on the following page shows the continuum, while Table 2 on page 4 shows the specific forms of transaction transparency that are found in various markets.

At the right end of the continuum in Table 1 are the high transparency markets. For capital raising, these include the public securities underwriting process and the securities exchanges; for risk shifting, they include the futures exchanges. A securities exchange, for example, provides pre-trade transparency by collecting all orders in a public order book, which can be viewed by market participants. In addition, it provides post-trade transparency by providing information on executed transactions. In such markets, transaction transparency is, as discussed below, a desirable characteristic that users seek out and choose.

At the low transparency end lie two traditional forms of financial intermediation. For capital raising, there is bank lending; for risk shifting, there is specialized business insurance provided by insurance brokers. Compared with exchanges, the amount of information made public is minimal, and the regulatory regimes of low transparency institutions generally encourage an atmosphere of confidentiality.

Most other forms of intermediation lie on a continuum between the two poles. Over-the-counter securities markets, securitization, loan syndication, loan sales, and private placements occupy various points between high and low transparency in capital raising; similarly, swaps and other OTC derivatives hold various points on the middle ground in risk shifting. Such activities operate in a more open manner than traditional loans and insurance, but do not attempt to match the openness of the exchanges. Private placements, for example, involve substantial disclosure to the investor but not to the market generally. In risk shifting, OTC derivatives often involve the exchange of risks under standardized terms while still retaining their character as privately-negotiated bilateral agreements instead of publicly traded instruments.

Table 1
Continuum of financial instrument transparency

	Low transparency (Private information)			High transparency (Public information)	
Capital raising	Bank lending	Loan sales	ABS/CDO	Private placements	Securities underwriting
		Loan syndications	OTC securities markets	OTC trading platforms (e.g., Tradeweb)	Securities exchanges
		OTC equity derivatives	FX markets	Index CDS	
Risk shifting	Business insurance	Non-vanilla interest rate and currency derivatives	Plain vanilla OTC interest rate derivatives	Credit derivatives warehouse (DTCC)	Futures (listed derivatives)
			FX options	Centrally-cleared OTC derivatives	

The primary factor differentiating the high transparency from the low transparency markets and instruments is the nature of the information used by market participants. The high end of the continuum is characterized primarily by public information, that is, by borrowers and lenders or by traders relying for the most part on information equally available to all. Firms raising capital on such markets tend to be those that can make their case for funding to the public. In addition, the information available tends to be easily understood by market participants and somewhat homogeneous across traded instruments. And because of the public and homogeneous nature of the information, the markets tend by their nature to attract their own trading volume and liquidity. Finally, practices that increase transparency enhance the public nature of the information, that is, they attempt to minimize the differences between information available to various transactors.

At the low transparency end, by contrast, the primary form of information is private information. Further, the risks and products exchanged in the less transparent markets tend to be large, complex, or heterogeneous. Examples of participants at this end include lesser known borrowers, new ventures, and those with special financing and risk shifting needs; examples of products include non-vanilla OTC derivatives, asset-backed and mortgage-backed securities, and many

corporate bonds. All these products differ along many dimensions and tend to be traded in large size. Because of these characteristics, retail interest in such products is limited compared with the simple products and risks exchanged in transparent markets. Further, there is little “natural”—that is, instantly available—liquidity in such products; instead, market makers provide liquidity to such markets by putting their own capital at risk. As one industry document pointed out with regard to corporate bonds:

Because most bonds do not trade frequently, there is never a constant source of buyers and sellers looking to trade sufficient to sustain a central pool of investor provided liquidity. Investors instead rely on the ability of dealers to assume the risk inherent in intermediating the timing differences between buyers and sellers. (Joint Associations 2009)

Similar considerations hold for other inherently less transparent markets. The lenders, dealers, and insurance brokers in such markets attempt to profit from investing in information about their clients, and the transactions tend to be conducted confidentially. If market makers do not earn a return that covers the cost of the capital they bring to the market, they will exit. Mandating a higher level of transparency in such markets can reduce the return to operating there and

Table 2: Transaction transparency for selected financial instruments

Market/instrument	Current quotes (pre-trade)	Trade reports (post-trade)
U.S. equity and equity options exchanges	Best bid and offer immediately	All trades immediately and in no event later than 90 seconds
Nasdaq	All dealer quotes immediately	All trades immediately and in no event later than 90 seconds
U.S. futures markets	Real-time quotes available to users of E-quotes system	All price changes immediately
U.S. OTC corporate and municipal bond markets	Indicative quotes displayed on Bloomberg and other data services	Corporate bond trades reported through Trace system www.investinginbonds.org (SIFMA)
European corporate bonds	http://www.investinginbondseurope.org (SIFMA)	Xtrakter (ICMA)
Foreign exchange markets	Provided by various interdealer bond brokers	None
Toronto Stock Exchange	Aggregate quantities of all orders at the five best prices on both sides of the market	All trades immediately
Deutsche Börse	All displayed order size, aggregated by price for continuous markets, less information for single price auctions	All Xetra trades immediately; very large privately negotiated trades may never be reported
Euronext Paris Bourse	All orders	All trades immediately
London Stock Exchange	All dealer quotes in SEAQ (dealer market) stocks, the best bid and offer in SETS (electronic order book) stocks	All small trades immediately; larger trade reports are delayed
Tokyo Stock Exchange	For all investors, aggregate quantities of all orders at five best prices on both sides of the market. For participants, all price information and orders are available.	All prices and amounts disclosed immediately
OTC interest rate derivatives	Provided by various interdealer brokers	None
Credit default swaps (see page 6)	Markit intraday indicative prices	Markit daily consensus pricing ICE Trust settlement prices

Sources: Harris (2005) with permission of author; CESR (2008); Joint Associations (2009)

thereby exacerbate the inherent illiquidity of such markets.

Swaps and other over-the-counter derivatives do not belong with insurance at the low transparency pole of the risk shifting continuum; instead, they occupy various positions between the two poles ranging from highly customized products such as exotic OTC interest rate derivatives and structured equity derivatives to more standardized products like index credit default swaps. Because counterparty credit risk assessment and management are an integral part of the OTC derivatives markets, dealers expect to earn a return on the private counterparty information in which they invest. But in addition, some less transparent derivatives form a bridge to more liquid and to more transparent markets in that

the risks taken on in OTC derivative transactions are often, to the extent possible depending on the nature of the risks, decomposed and passed on to those markets on the high transparency end of the spectrum. In low transparency markets, measures to mandate higher transparency could reduce the return to credit intermediation by dealers. The result would be to increase the cost of risk shifting products to those clients for whom high transparency products (such as futures) are less feasible because, for example, standardized, listed products cannot be tailored to fit the risks to be managed.

As suggested above, heterogeneity is a salient feature of the low end of the transparency continuum. Among cash instruments, fixed income instruments such as asset-backed and mortgage-backed securities tend to

trade at the middle- to low end of the transparency continuum (Tabb 2007). And while OTC derivatives often trade as generic “vanilla” transactions, they remain essentially heterogeneous instruments because market participants are free to negotiate terms that differ from the vanilla. Further, while ISDA has developed standard templates, terms, and definitions for market participants, market participants can and do modify the standard terms and definitions or combine different elements or different contract types in a myriad of different ways to meet their individual needs. There are therefore a potentially unlimited number of different types of OTC derivative contracts and the terms of individual, apparently similar transactions can vary in ways that have a significant effect on price.

The transparency continuum allows for the evolution of markets as they adapt to new conditions. Sometimes the evolution might be the result of regulatory policy, such as the mandating of post-trade transparency for corporate bonds in the United States. But the evolution can also take place without regulatory pressure, as the history of credit derivatives linked to credit indexes demonstrates. Index credit default swaps, which are near the high transparency pole in Table 1, began trading on a large scale in 2004. In order to encourage liquidity, the major dealers adopted a higher degree of standardization than is found in other OTC derivatives; all index CDS payments and maturities, for example, occur on standard settlement dates. At the same time, the provision of transaction information by such providers as Markit led to increased transparency in the market (see “Transparency of credit default swaps” on page 6).

A further stage in the evolution of credit derivatives occurred with the establishment by Depository Trust & Clearing Corporation (DTCC) of the Trade Information Warehouse, which maintains trade records for those OTC derivatives that are eligible for electronic processing; DTCC recently began publishing CDS notional amounts by reference entity, index, and maturity. And moving toward even more transparency, inter-dealer credit default swaps will be intermediated through a clearing house, that is, a central counterparty, which will be a regulated institution that will provide a higher degree of transparency than in the past. Although this last move toward higher transparency has been actively encouraged by regulators, it is far from a mandated solution that was imposed over dealer objections. In fact, it is the result of cooperative efforts by private firms to solve problems—most notably, counterparty credit risk management and operational efficiency—that were difficult for firms to solve acting alone.

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All the points on the continuum represent responses to market demands at some point. Even those highly regulated market forms, such as securities and futures exchanges, arose originally not as the result of regulatory fiat but evolved in response to demands by market participants for specific forms of financial intermediation. Regulatory intervention that ignores the essential differences between the markets and the nature of the services they provide could reduce the options available to users of financial services.

Benefits and costs of transparency

Policy makers tend to view transaction transparency as a desirable end in itself. The policy arguments in favor of increased transaction transparency fall into three general categories (EC 2006). The first is investor protection, mainly in the form of reduced information asymmetries and “best execution” of deals at favorable prices. The second is market efficiency, which refers to more informative prices as well as increased liquidity. And the third is technological development, which suggests that the cost of increased transparency need not be high because electronic trading is already leading to a centralization of information and a reduction of the costs of price dissemination.

In contrast to policy makers, the academic literature on market microstructure tends to view transparency as a means to an end, for example, improved market efficiency. The literature recognizes that there are trade-offs between transparency and other market attributes:

What makes a market perform better? ...this is not an easy question to answer. Markets provide a wide range of services and functions, and factors that facilitate the performance of some functions may impede the delivery of others. Equally difficult to ascertain is what is meant by better. (O’Hara 1995, chap. 9)

The result is that the findings on transparency are mixed. On the one hand, transparent markets might be more efficient from the standpoint of the information content of prices; but on the other hand, transparent markets might be less efficient when considering spreads and other transaction costs. Thus, if market transparency were to increase, active traders might benefit from their knowledge of the market while less active market participants “with immediate liquidity needs” could be put in a worse position than otherwise (Bloomfield and O’Hara 1999). Similarly, it is

Transparency of credit default swaps

Transaction transparency. The major source of pre-trade and post-trade information for CDS is Markit, which offers two main CDS data services. One is indicative intraday spreads, which are based on bid and offer prices provided by dealers. These spreads are not officially “live” prices that can be hit or lifted, but are considered to accurately reflect the current terms on which posting firms will transact. The other data service is end-of-day consensus prices, which are based on book of record prices at active market makers and used by subscribers to mark their books to market. The services provide data on the full yield curve and not just the most liquid 5-year point.

In addition to subscriber services, Markit maintains a CDS Market Summary webpage (www.markit.com/cds). The site, which the public can access free of charge, displays index levels as well as most active single name spreads. In addition, it includes links to files describing credit derivative documents and credit event auction results. And it also features a program for converting a conventional CDS spread to an up-front payment and vice-versa.

Position transparency. As reported in the Autumn 2008 ISDA Research Notes, the Depository Trust and Clearing Corporation announced in October 2008 that it would publish notional amounts of CDS transactions registered in its Trade Information Warehouse (DTCC 2008). The dataset, which is updated weekly and is available at www.dtcc.com/products/derivserv/data/index.php, consists of three parts.

The first provides notional amounts of live positions in the Warehouse as of the release date. The data distinguish between single name, index, and tranche trades as well as between dealer and non-dealer counterparties. The section also provides gross and net notional amounts of the 1,000 most active reference entity names and of all on-the-run and off-the-run indexes.

The second section provides information on the change (turnover) in notional amounts from the previous week. And the third section, which was added early in 2009, provides information on all transactions confirmed during the previous week—new trades, assignments, and terminations—that led to either an increase or decrease in overall positions.

Recently, Markit has combined price and position transparency in a page displaying last quotes for the most liquid CDS contracts; the table is linked to the CDS Market Summary page described above. The table displays net notional amount and number of contracts outstanding (obtained from DTCC), along with most recent price quotes from active dealers, for on-the-run indexes and for the most liquid single-name contracts.

possible that “the market structure that produces the best execution from the perspective of individual traders may not be the market structure that provides the best bid and ask spreads or the most liquidity for the market as a whole” (Macey and O’Hara 1997).

In order to evaluate the effect of mandating a higher level of transparency in OTC derivative markets, the following analysis will consider the effect of transparency on the following aspects of market quality (Harris 2003, p. 4):

- Liquidity
- Market efficiency and price discovery
- Volatility
- Transaction costs
- Market stability

All the above characteristics are relevant to both market participants and policy makers. The fifth, market stability, is a primary concern and responsibility of regulators and policy makers.

Liquidity can be defined as “the ability to quickly trade large size at low cost.” Alternatively, liquidity characterizes “a market where participants can rapidly execute large-volume transactions with a small impact on prices.” And to give yet a third, liquidity is “the ability [of transactions] to flow smoothly and without interruptions among the various players in the economy” (Harris 2003, p. 399; BIS 1999, p. 5; Rebonato 2007, p. 9). Most would agree that liquidity is a positive attribute of markets and that public policy should encourage conditions that will contribute to high liquidity. For risk-shifting markets, liquidity is by far the most important aspect of market quality because it determines the ease, degree, and speed of risk transfer that can occur.

Some have argued that higher transaction transparency could lead to higher liquidity. The European Commission, for example, has suggested that mandatory transparency “can promote more liquid markets by ensuring that all players have comparable access to information about real market conditions as well as by lowering transaction costs (such as spreads).” Also, a research paper has suggested that pre-trade transparency might in some circumstances improve liquidity. And some empirical analyses have concluded that mandated transparency has led to higher liquidity in some bond markets (EC 2006, Lagana et al. 2006, Goldstein et al. 2007).

The analysis of liquidity is complicated by the fact that it is measured along four dimensions (Harris 2007, pp. 398-399; Bessembinder and Maxwell 2008):

- **Width:** The cost of completing a transaction within a short period, generally measured as bid-offer spread.
- **Depth:** The size of transaction required to move market price by a given amount.
- **Resiliency:** The speed with which price recovers from changes caused by a transaction that moves market price.
- **Immediacy:** The speed with which a trade of a given size can be agreed at a given cost.

There are trade-offs between the above dimensions. For example, either a larger trade or an immediate trade might mean a less favorable price; similarly, lower bid-offer spreads might mean less depth.

Other things equal, one would expect that mandating high transparency at the low transparency end of the spectrum would lead to reduced liquidity. The reason is that higher transparency can reduce bid-offer spreads, which reduces the return to market makers and leads ultimately to the exit of some market makers. The result is a lower level of liquidity provision. Given this possibility, it is difficult to evaluate the significance of analyses that find that enhanced transparency in corporate bond markets leads to lower bid-offer spreads (e.g., Goldstein et al. 2007). The analyses tend to place undue attention on one dimension, width, without giving sufficient consideration to the others. That is, mandated transparency might well lead to lower bid-offer spreads, but it is not clear from the results that the markets did not lose depth, resilience, or immediacy. One might argue further that the lower bid-offer spreads could lead to decreased market depth because some market makers might reduce the capital committed to such markets or else exit entirely (Bessembinder and Maxwell 2008). Finally, the evidence might be biased in favor of higher transparency because data on markets where transparency would be harmful—that is, markets for heterogeneous, infrequently traded instruments—are simply not available.¹

Market efficiency refers to the information content of prices in a financial intermediation structure. Efficient markets are those that produce highly informative prices; price discovery is the process that arrives at such prices. In contrast to liquidity, market efficiency and the price discovery mechanism are less relevant characteristics of risk shifting

¹For a discussion of the experience with the TRACE system, see Joint Associations (2009), Annex 6.

markets in general, and OTC derivatives in particular, than for other forms of intermediation. The reason is that much of the price information in OTC derivatives activity is derived from complementary markets such as underlying cash markets or in transparent securities and futures exchanges (PWG 1999). Interest rate derivatives, for example, depend on interest rate futures markets as well as money markets for price and yield curve information, while OTC commodity derivatives depend almost entirely on futures prices and OTC equity derivatives prices are derived from both cash and futures markets.

Price discovery is arguably a relevant criterion for one product, credit default swaps, which have generated new and useful pricing information for corporate bonds and bank loans (Lagana et al. 2006). Corporate bond prices are not highly transparent, and loan prices are hardly transparent at all. Prior to the availability of credit default swaps, it was difficult to determine the credit component of corporate bond prices and to disentangle credit pricing from liquidity pricing; asset swap spreads were the primary source of information. Further, there could be a wide variety of different bonds with different coupons, maturities, and other intricacies. Finally, pricing of loans was even more limited, due largely to the private information considerations discussed above. With CDS, however, market participants have access to a relatively standardized par contract that can be used as a benchmark against which to evaluate the pricing of credit risk. Basis trading between CDS and bonds could, in theory, lead to convergence between CDS and cash prices. And if CDS are important to bond price discovery, one might mandate higher CDS transparency in order to improve bond price discovery (CESR 2008). But market practitioners have questioned the price discovery argument, pointing out that significant differences remain between CDS and bonds and that CDS data is one of many inputs into bond pricing (Joint Associations 2009). Indeed, given the likely adverse liquidity effects described above, mandated transparency might serve to lessen the usefulness of CDS to bond price discovery.

Volatility is the degree of fluctuation in a price or index over time; a volatile market is subject to short-term fluctuations that are unpredictable, frequent, and significant. Volatility is normally considered a negative characteristic of a financial instrument or market because it means that market participants face greater uncertainty.

Market transparency could affect volatility through two channels. First, through providing more information to the market and facilitating rapid adaptation to information, mandated transparency could give rise to higher

volatility. Second, by leading to decreased liquidity, mandated transparency might lead to higher volatility because individual transactions will themselves lead to increased price fluctuation; that is, trading itself leads to volatility. Empirical as well as anecdotal evidence suggests that the latter effect is dominant (Hull 2006, p 289; Bookstaber 2007, pp. 212-213), but both arguments suggest that higher transparency would move volatility in an adverse direction.

Transaction costs fall into two categories, explicit and implicit (Harris 2003, p. 421). Explicit transaction costs are essentially accounting costs, that is, identifiable outlays such as fees as well as operational and administrative costs. Implicit costs, in contrast, do not involve explicit outlays but instead arise either from foregone opportunities or from prices departing from “benchmark” levels; bid-offer spreads and market impact effects on prices are examples of implicit costs.

One would expect mandated transparency to lead to increased explicit costs because of the necessity to maintain both systems and staff to comply with the requirements; in addition, central reporting structures, if used, might charge fees to reporting firms. One would also expect higher implicit costs because of the exit of market maker capital. Even if implicit costs in the form of bid-offer spreads were to tighten, liquidity might be lower because of decreased depth, that is, greater market impact of trades.

Finally, *stability* refers to the vulnerability of a market to disruptions, and is a primary concern because a functioning banking and payment system is a necessary condition for economic growth. As argued already, one effect of mandated transparency would be to reduce liquidity, which would make risk transfer more costly and less efficient; this in turn would lead to less stable markets.

But it is also possible that mandated transparency could lead to a potentially destabilizing change in trader behavior. The reason lies in the incentives facing liquidity suppliers, that is, market makers acting as buyers. If trade information were widely known, market makers could face problems unwinding positions they take on in the course of normal business; this is why market makers often use inter-dealer brokers to provide cover for market making activities. But the eventual consequence of higher transparency could be the following:

The more transparency we extract to divine the behavior of traders and the resulting impli-

cations for the markets, the more the traders will alter their behavior. The paradox is that to understand and anticipate market crises, we must know positions, but knowing and acting on positions will itself generate feedback into our market. This feedback often will reduce liquidity, making our observations less valuable and possibly contributing to a market crisis. (Bookstaber 2007, pp. 225-226)

Beyond the effect on market makers, one might also expect further negative effects on financial stability because mandated transparency would lead to higher transaction costs and less liquidity for hedgers. And because hedgers would face higher costs of managing risks, market participants and the economy as a whole would be more vulnerable to financial disruptions.

Conclusion

The above discussion suggests that transaction transparency is not an end in itself, but a characteristic of financial markets that varies across market sectors because of the diverse demands of market participants. Public policy toward transparency should recognize the reasons for the coexistence of different levels of transparency, and should push for higher transparency only in those cases where it can demonstrably make markets more efficient and more beneficial to users.

To the extent that market participants demand more transparency as markets mature, financial markets are likely to evolve ways to address market participants’ desire for more information relevant to their trading and risk transfer decisions. Recent evolution of OTC derivatives, for example, has involved greater automation of the search or negotiation process through messaging systems or proprietary or multi-lateral dealing systems or bulletin boards; the provision by information vendors of price sources for key components of the contract such as Libor, Euribor, or currency exchange rates; and the development of indexes or benchmarks using panels of dealers to supply quotes on comparable terms. In addition, credit derivatives markets have grown rapidly following the development of indexes that provide an important source of information and encourage liquidity. And most recently, credit default swaps moved to a higher level of transparency following the DTCC’s decision to publish data on notional amounts of CDS trades in its Trade Information Warehouse.

Mandated transparency, in contrast, specifies a particular solution across the board. Of particular concern are suggestions that pre-trade and post-trade transparency requirements now found on equity exchanges would be appropriate for OTC derivatives and other customized and illiquid financial instruments. Such a one-size-fits-all policy runs the danger of disregarding the inherent nature of specific markets and could short-circuit the evolution of market-based transparency provision that would otherwise arise in response to real market demands.

The recent regulatory approach to credit default swaps, in which policy makers have chosen to encourage and facilitate industry-developed solutions rather than impose uniform solutions, provides a promising template for OTC derivatives transaction transparency. The approach involves specifying broad policy objectives, such as liquidity or market stability, and working with market participants to determine how best to accomplish such objectives. In the process, regulators can play a key role in identifying and overcoming obstacles to collective action to solve common industry problems. The result might involve heightened transaction transparency for some OTC derivatives products, but would also involve the acceptance of lower transparency in more customized and inherently illiquid risk transfer products.

David Mingle, Head of Research
dmingle@isda.org

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INTERNATIONAL SWAPS AND DERIVATIVES ASSOCIATION

The International Swaps and Derivatives Association, Inc. (ISDA) is the leading global trade association representing professional market participants in privately negotiated derivative transactions. Privately negotiated derivative transactions include interest rate, currency, equity, commodity and credit swaps, options, and forward transactions, as well as related products comprising forward rate agreements, caps, floors, collars, and swaptions.

ISDA, chartered in 1985, numbers over 800 members in 57 countries. Its members include most of the world's major commercial, universal and investment banks as well as other companies and institutions active in swaps and other privately negotiated derivatives transactions.

Website: www.isda.org

ISDA Research

David Mengle, Head of Research, dmengle@isda.org

Anatoli Kuprianov, Director of Technical Analysis, akuprianov@isda.org

Julia Pachos, Research Associate, jpachos@isda.org

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