

Current Issues Affecting the OTC Derivatives Market and its Importance to London

A paper produced by
Lynton Jones, Bourse Consult

April 2009



Current Issues Affecting the OTC Derivatives Market and its Importance to London is published by the City of London. The author of this report is Lynton Jones, of Bourse Consult.

www.bourse-consult.com

This paper is intended as a basis for discussion only. Whilst every effort has been made to ensure the accuracy and completeness of the material in this report, the author, Lynton Jones, and the City of London, give no warranty in that regard and accept no liability for any loss or damage incurred through the use of, or reliance upon, this report or the information contained herein. The views expressed herein are the views of the author and are not intended to express the views of the City of London Corporation.

April 2009

© **City of London**
PO Box 270, Guildhall
London
EC2P 2EJ

<http://www.cityoflondon.gov.uk/economicresearch>

Table of Contents

Executive Summary	1
1. Introduction	4
2. Size and Scope of the Market	5
3. Which Derivatives were the “Guilty Party” During the Financial Crisis?	7
4. Which OTC Derivatives were <u>not</u> Implicated in the Recent Financial Crisis?	11
5. The Future Method of Trading and Clearing OTC Derivatives	12
6. Regulatory Initiatives	15
7. What Next?	18
8. Conclusions	20

Executive Summary

The global OTC Derivatives market is very large, considerably larger than the listed equity market and the exchange-traded derivatives market. It is concentrated largely in the UK, which has 43% by value of the overall market, and the US which has 24%.

The market comprises a broad range of different instruments. The most heavily traded instruments are foreign exchange and interest rate derivatives. The instruments which were most implicated in the financial crisis were Collateralised Debt Obligations (CDOs) and structured products (SIVs). In addition much attention has been focussed on Credit Default Swaps (CDS) which would seem to have been less heavily implicated. Of these, CDS are actually traded in considerably greater volume on the OTC derivatives market than CDOs.

As a result of the problems allegedly caused by the use of these instruments, several regulatory bodies and legislators are pushing for the market in these instruments to be more transparent and tightly controlled. This has become a highly politicised issue. Although the market in CDS is primarily based in the UK, with a smaller proportion based in the US, the US Treasury Secretary has said he wants the market to be run, cleared and regulated in the US. Congress has introduced a bill which seeks to give effect to this desire. Within the US CCPs (Central Counterparties) willing to clear CDS include the CME and ICE (and ICE Trust has just started clearing CDS).

In Europe, the EU Commission has made it clear that it will be looking to impose greater transparency, transaction reporting obligations and closer supervision over the OTC markets and that it is expecting CDS (and, progressively, other OTC transactions) to be cleared through CCPs. Pressure has been put on the industry to cooperate in this endeavour.

The Federation of European Securities Exchanges has suggested that had these instruments been traded on a public exchange these problems might not have arisen. They state that these products would be better listed on an exchange and therefore cleared centrally. But many OTC products are not suitable for trading on a public exchange and they do not need to be listed in order to benefit from centralised clearing.

For its part, the Futures and Options Association (FOA) has disagreed with this approach, emphasising market differentiation and the importance of sustaining the capacity of financial markets in all their different forms to meet the different and often complex needs of customers and counterparties. This view is held strongly by the OTC industry itself.

In an attempt to avoid punitive legislation, the industry has committed to Commissioner McCreevy to ensure that by 31 July 2009 as far as possible these instruments will be centrally cleared (although this deadline would seem to be optimistic). The essential issue is where in Europe they should be cleared.

The ECB, the Banque de France and the French Finance Minister have proposed that a large CCP should be created (possibly from merging some of the existing houses) within the Eurozone. The industry view and the view of the British Government is that as the business is essentially global, so a clearing house for CDS should be global also. In that case the big American clearers who are also setting up in Europe, in particular ICE, stand a good chance of becoming one of the de facto global clearers of choice, despite the greater experience of LCH.Clearnet.

Conclusions

1. The evidence objectively available suggests that the major guilty parties during the current financial crisis were CDOs on ABS which were sold into highly leveraged SIVs held by banks as off-balance sheet assets. These were valued by the ratings agencies as AAA, a valuation accepted by the banks' own risk management teams and not questioned by the regulators. While CDOs are certainly derivatives, for the most part they were traded on the OTC derivatives market in considerably lower volumes than CDS.
2. The credit derivatives which were traded most heavily on the OTC derivatives market were CDS. There is very little evidence to suggest that these contributed in any significant way to the crisis. Indeed the efficient way in which they were closed out during the Lehman default suggests that they are capable of being transacted safely and securely.
3. Notwithstanding the evidence it seems inevitable that CDS and possibly even the whole OTC derivatives market are going to be much more heavily regulated as a result of political pressure that "something needs to be done" about the OTC market. This political pressure is acute in the Eurozone countries and in the US. In accepting the inevitable additional regulation that will come, it is important that the very successful OTC Derivatives market is not crushed in the process.
4. Those arguing that OTC products should be moved onto exchanges are mistaken. This would be an extremely foolish move which could even result in damage to exchanges. It is sufficient that OTC products should, as far as possible, be cleared centrally through a CCP. This can happen without the products being traded on an exchange. Given the nature of the market, some OTC products may never be susceptible to being centrally cleared.
5. The ratings agencies' cavalier modelling, the banks' own over-optimistic

in-house risk management systems and the slack way in which the regulators accepted the views of these participants were the major causes of the crisis. The derivative instruments that were implicated were simply the products which were used. This was a crisis caused by people's misjudgment, not a product-led crisis.

6. The OTC derivatives industry is global. The market will eventually decide upon a few de facto global CCPs of choice (concentrating all the risk in one single CCP would be too risky). Regional pressures to choose regional CCPs (whether in the US or in the Eurozone) are misguided.

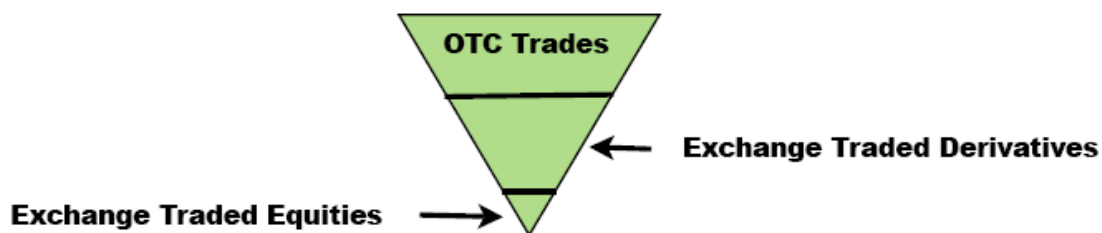
1. Introduction

1.1 This paper has been prepared as a contribution to the debate currently underway over the direction that the future regulation of the OTC markets should take. There are a number of contributors to this debate, including HM Treasury, the FSA and the Bank of England in the UK, and of course the European Commission, specifically the DG Markt Division headed by Commissioner Charlie McCreevy and the European Central Bank. In the United States the debate is taking place within the regulatory bodies, including the CFTC (Commodity Futures Trading Commission) and the Treasury, but also in Congress where a bill has been introduced (the Peterson Act introduced by the House of Representatives Committee of Agriculture). The main participants in this market are primarily the Inter Dealer Broker community (and their clients), based for the most part in the UK and the US.

1.2 Given the huge size and scope of this market (examined in the next section), it has not been possible to undertake a detailed study of the subject in the very short time that was available to examine the issue. The methodology followed in the preparation of this report has therefore been mainly based on desk research plus discussions with a few of the main participants in this debate who were easily available in London.

2. Size and Scope of the Market

2.1 The market in OTC Derivatives was explored in some detail in the Bourse Consult research report for the City of London, *"The Competitive Impact of London's Financial Market Infrastructure"*, published in April 2007. The relevant passages describing the OTC derivatives market are to be found in paragraphs 2.2 to 2.4 of this report. In brief, the OTC derivatives market can be divided into three main groups: Financial Derivatives (including Interest Rate and Fixed Income Derivatives and Credit Derivatives), Commodity Derivatives, and Foreign Exchange (FX) Derivatives. The size of the overall market is enormous. In its latest triennial report published in 2007¹ the BIS estimated that the market value of OTC derivatives contracts stood at US\$415 trillion, with average daily turnover by April 2007 standing at US\$2,544 billion. To appreciate the size of this market it is worth noting that at the start of 2007 the market value of all OTC Derivatives contracts were some eight times greater than the equivalent exchange traded derivatives. We at Bourse Consult estimate that the value of daily turnover in exchange traded derivatives in London is some 25 times greater than the value of daily turnover in exchange traded cash equities. This leads to the following "inverted pyramid" model of the scale of the business (by value).



2.2 Within this market, by far the most important products are Interest Rate Derivatives, followed by FX. The former accounted for some 70% of market value at the start of 2007, with FX at 10%. Both of these showed a slight decline from the previous study undertaken by the BIS in 2004 as a result of the rise in trading of Credit Default Swaps, which by early 2007 had become the third largest product traded OTC at 7% of market value. Since 2007 this latter sector has grown considerably and the market in CDS has become a focus of attention in the wake of the financial crisis (although there is anecdotal evidence that use of CDS declined in the later stages of the crisis). The total of all other OTC derivatives traded (including Equities, Commodities, etc) amounted to just over

¹ Reported by IFSL, in their Derivatives 2007, published November 2007

13%.

2.3 Not only is the overall market huge, but by far the largest proportion of the OTC business is done in the EU, of which the UK is the largest player. To quote the IFSL Derivatives 2007 paper: "The UK remains the leading derivatives centre worldwide with its share of turnover stable at 43% in 2007. The US is the only other major location with 24% of trading." The amount of OTC business undertaken in France, Germany and Japan combined amounted to less than 15% in 2007. Another point to note is that the proportion of the industry concentrated in the UK is primarily serving international customers. Some 74% of turnover generated by UK-based institutions is cross border. Thus the UK is responsible for some 47% of all cross border trading, even greater than its 43% of all derivatives turnover.²

2.4 Since the publication of the BIS triennial report in 2007 and in particular since the onset of the financial crisis many more sources of data have been made public as a result of a desire to increase confidence in the market and address credit issues. As a result it is almost certainly the case that the overall shape of the market has changed considerably. In particular we know from anecdotal information that swaps volumes have increased significantly. Additionally, prime brokerage activities have changed considerably and there is evidence that the buy side has become very exercised about counterparty risks with banks. It seems likely that the BIS triennial report due in 2010 will show significant changes in the overall composition of the OTC markets while at the same time underlining the preeminence of London as the centre for most of these major markets, specifically CDS.

2.5 Therefore there can be little doubt that not only is the future of this industry of significant importance to the UK, but the UK market is of significant importance to the global market as a whole.

² Ibid

3. Which Derivatives were the “Guilty Party” During the Financial Crisis?

3.1 There is a widespread perception that the instruments that caused the greatest problem during the unravelling of the financial crisis, particularly in the wake of the Bear Sterns and then the Lehman collapse, were credit derivatives. These products were invented by JP Morgan in the late 1990s and comprised derivatives such as Collateralised Debt Obligations (CDOs) and Credit Default Swaps (CDS). The fundamental derivative which was at the heart of this crisis was the CDO on asset backed securities (hence CDO on ABS). Much has been written about the securitisation of mortgages and the huge liability that this gave rise to when the sub-prime market collapsed. CDOs were the way in which banks securitised mortgages. However, rather than being heavily traded on the OTC derivative market, many of the CDO instruments were sold to banks' off-balance sheet entities such as structured investment vehicles (SIVs), which many commentators have regarded as the beginning of the real crisis of confidence in the banks³.

3.2 The way in which CDOs were sold into the structured investment vehicles (SIVs) caused major problems. Structured products are highly customised instruments comprising for the most part CDOs based on asset-backed securities. SIVs were used by banks as an off-balance sheet asset which was essentially opaque and not transparent to the marketplace as a whole. On the basis of the evidence available, it would seem that these instruments, especially the highly leveraged CDOs on ABS, really were at the core of the problem. As an example AIG (notionally an insurance company) generated \$500 billion worth of exposure on paper rated AAA by the ratings agencies. Positions which, when written, were intended to make three or four basis points ended costing something like 800 basis points. The underlying portfolios of assets were sub-prime in many cases, and the ratings agencies accepted in their entirety mathematical models which calculated the chances of loss in these instruments as being extremely small. Many investors were able to leverage positions in these tranches by obtaining funding in markets such as the Canadian 30 day CP market and when this and other markets failed they had to liquidate with catastrophic effects. To compound the problem, the banks exacerbated the rating abuse situation with insufficient controls to recognise that they were being deceived by their own marketing hype by optimistically valuing risk. The losses involved here are at the root of all bank revaluation of toxic asset issues. Thus, the problem with the use of

³ FT article “Lost through destructive creation” by Gillian Tett, 10 March 2009

these instruments was essentially the degree to which banks were exposed to them in the event of a default, the unrealistic ratings awarded them by the ratings agencies, the failure of the banks themselves correctly to assess their risk and the tendency of the regulators to accept all of these risk assessments at face value.

3.3 The problems in the CDO market totally outweighed the perceived problems of CDS. These latter instruments have been traded extensively in the OTC derivatives market for several years now. They can be divided into single name CDS and Index CDS. This distinction is important because single name CDS are very difficult to guarantee (and therefore difficult to clear centrally), while Index CDS represent sectoral groups of a greater or lesser size which are somewhat easier to clear centrally. CDS were traded at the time of the Lehman default. This default was handled so well and so seamlessly by the CDS support mechanisms that it is slightly puzzling to see why there should now be so many questions about the future of this product. What did characterise the CDS market was probably a lack of pricing transparency and market exposure transparency. It would now seem that most market participants in this market would favour greater transparency for the use of this product and the intercession of a CCP in most cases.

3.4 CDS are effectively derivatives of physical bonds. However, unlike physical bonds, which are relatively illiquid instruments, CDS are much more liquid. They are, in fact, much valued by users. In this context it is useful to hear the views of a major user of these products, John Patullo, director of fixed income at Henderson Global Investors, quoted on FT.com⁴. He said "We invested in processing them early and at quite considerable cost. We've used them throughout the last three to four years. I wouldn't have fancied not using CDS last year. The bulk of our trading has been in them because they are still many times more liquid than physical bonds. There have been many instances where we couldn't sell the physical bond and held the derivative instead. In hindsight, I wish we had used a lot more."

3.5 In a study undertaken by JP Morgan Chase⁵, they have reached the conclusion that in the top five recent bankruptcies, payments from sellers of CDS protection were considerably smaller than bondholder losses. In the case of Lehman for example, senior bondholder loss was \$101 billion, while payments from sellers of CDS protection only amounted to \$5 billion on a gross notional figure of \$72 billion. In the case of AIG the figures were equally compelling. On

⁴ Article by Nick Rice, FT.com, 26 February 2009

⁵ JP Morgan Chase presentation on Derivatives, 26 February 2009

AIG's corporate referenced CDS with a notional value of £180 billion (representing 48% of total notional value) the actual losses were barely £2 billion (representing only 6% of the total loss). This compared with their multi sector CDO on ABS with a notional value of \$196 billion (representing 52% of total notional value) resulting in actual losses of \$31 billion (representing 94% of the total loss). In other words while CDOs represented just half of the notional value they represented virtually all of the total loss. Having said this it is worth mentioning that one of the reasons the AIG losses on CDS were not that great was because AIG was effectively bailed out.

3.6 The various regulatory bodies involved in this debate have clearly reached a conclusion that there need to be improvements in the give-up process. For example, the ECB and the European Commission seem to believe that the absence of any industry-wide give-up process served to exacerbate the effects of participants scrambling to get out of Bear Sterns and other CDS. There is a clear perception that the existing process is far from clear and led to an overall increase in the fear and confusion that was generated at the time. The regulators have also probably concluded that the market has been skewed too far towards control by the dealer community. In the moves under discussion it seems clear that the regulators will wish to limit the dealers' control of the market by extending transparency and possibly even governance to the buy-side participants.

3.7 Thus it is by no means clear that the simple existence of these instruments was the problem, but rather the extent of a particular firm's exposure to those instruments, particularly the CDO market, the extent to which that exposure was transparent to the marketplace and the fact that the use of these instruments was not supervised by the regulators and the central banks. The exposure of a firm to the risk involved was compounded by the somewhat cavalier approach taken by the ratings agencies. By effectively giving a seal of approval to the use of these highly-leveraged CDOs they encouraged their use. This must raise fundamental questions about the competence and responsibility of the ratings agencies in the evolution of the financial crisis. The acceptance of these so-called AAA structured products as good balance sheet investments for banks (and the acceptance of this view by the regulators) was the final nail in the coffin for the banks themselves.

3.8 The conclusion that one is inescapably drawn to in the wake of the Lehman default is that with the instruments that the market was using, (highly leveraged CDOs) which were at the centre of much of the associated problems in the closing out of their positions, the problem was essentially the high leveraging of these securitised products rather than activity in the OTC derivatives market. Because they were essentially private transactions between consenting banks they were not subject to the sort of disclosure that centrally cleared products enjoy, and this in turn led to a dramatic loss of confidence in the ability of Lehmans and, subsequently, other banks to honour their liabilities. In order to

ensure that this sort of thing does not happen again it would seem that what needs to be far more heavily regulated is this “over-leveraging” of these securitised products and the role played in their validation by the ratings agencies. In the face of this evidence the current pressure for the increased regulation of the OTC Derivatives market as a whole (see section 6) seems to be simply wrong. This is not where the problems originated. Nevertheless increased regulation of this market now seems inevitable.

3.9 Given the exact circumstances it might be more constructive to argue that it was not the relatively light regulatory regime that these instruments were subject to (and remember that the participants in the OTC market are as tightly regulated by the FSA as any other authorised firm), but rather the way in which they were used that was the main problem.

4. Which OTC Derivatives were not Implicated in the Recent Financial Crisis?

4.1 It is important not to throw the baby out with the bath water. A very large proportion of OTC derivatives had no involvement whatsoever in the financial crisis. Interest Rate Derivatives and FX derivatives, which together account for some 80% of all trades in OTC derivatives, had virtually no impact on the financial crisis. Of the remaining 20%, equity derivatives played virtually no part and commodity derivatives only a small part in the crisis.

4.2 Does this mean that these instruments should be left entirely untouched in the debate now underway about the future regulation of these markets? Probably not. It is not so much the issue of regulation that is the point but rather of full disclosure of open positions, that is, the question of market exposure transparency. Given the extremely limited role that non-credit derivatives played in the evolution of the financial crisis they should really be absolved of blame. But in the discussion about the future regulation of OTC derivatives it is unlikely that these products can be excluded from the debate. In that debate their very limited role should be borne in mind.

5. The Future Method of Trading and Clearing OTC Derivatives

5.1 There is a general consensus that the existing method of trading needs to be improved and the clearing of OTC derivatives needs to be extended. Although several methods exist for a hybrid system of combining electronic trading with telephone trading there is a general view that telephone trading alone (i.e. without electronic trade processing and confirmations) is an outmoded and inefficient means of trading these complex products. The industry itself recognises this and has suggested that there needs to be a wider adoption of electronic trading. Already spot FX and the major government bond markets trade electronically. The industry has suggested that the “electronic trading of CDS in North America and of interest rate swaps globally would be a major step forward for the industry”⁶

5.2 The advantages of electronic trading are significant. It improves price transparency, trade capture, trade affirmation and confirmation and, of course, it makes it much easier for the regulators to track and for the participants to ensure that they are fulfilling the regulations. There is therefore little argument that this needs to be encouraged as rapidly as possible.

5.3 There is, however, very little agreement about whether or not OTC trading should be encouraged to move onto an exchange platform. The Federation of European Securities Exchanges (FESE) has published a paper⁷ which argues specifically that were the OTC market in CDS etc moved onto exchanges this would increase the liquidity and reduce significantly the opacity of the market. They argue that exchanges provide transparent and reliable price formation mechanisms, neutrality and independence, robust and appropriate technology, better regulation and, above all, central counter-party (CCP) clearing and settlement⁸. The Futures and Options Association (FOA) on the other hand, while supporting the need for greater oversight of OTC markets and increased transparency (subject to paying full regard to the need for commercial trading confidentiality) supported continuance of OTC markets on the basis that they are complementary to exchange-traded dealings, provide the opportunity of tailored products to meet customer needs which are not necessarily available from exchange-listed contracts and that the risk is often laid off on the relevant exchange⁹.

⁶ The Future of OTC Markets, by Mark Yallop, COO ICAP, 10 November 2008

⁷ Submission to the High Level Group on Cross Border Financial Supervision, 30 January 2009

⁸ Ibid

⁹ Letter from FOA to de Larosière, dated 20 February

5.4 Firstly, exchanges are complementary to the OTC markets. The two need each other. Exchanges specialise in highly standardised products, many of which started life as an OTC product and, as they became more standardised and therefore highly liquid, were capable of being traded on a public market. Many of the products currently traded OTC are either highly customised (e.g. single name CDS) or else only semi-standardised (such as index CDS). It is highly unlikely that single name CDS could ever be safely traded on a public exchange.

5.5 Secondly the OTC industry believes strongly that shifting OTC products onto exchanges would have a very serious impact on their ability to trade these products. For example, in testimony given to the US House of Representatives on 3 February¹⁰ it was stated that "As a policy matter, the purchase of uncovered CDS protection is no different than buying or selling futures, options, stocks or bonds because the relevant product is perceived to be undervalued or overvalued by the market. All of these activities are critical to liquidity, reduced execution costs and efficient price discovery in these markets and all involve legitimate and, indeed, desirable investment activities under current law. Absent the participation of intermediaries and non hedgers, CDS will cease to trade in a market and they will become extremely illiquid and costly, both to enter into and to terminate.... As a direct result, lenders and investors will be left with far more limited and more expensive alternatives for managing the credit risks arising from their lending and investment activities. In turn.... companies will have significantly reduced access to financing and the financing that is available will be more costly. Bank revenues from lending activity will also be reduced, placing further pressure on the financial strength of the banking sector."

5.6 Thirdly, exchanges are designed to be accessible to retail as well as wholesale customers. That is why the level of regulation is so tight for exchanges - it is essentially there to protect retail customers. The OTC derivatives markets are totally wholesale and it has been assumed, up until the recent crisis at least, that the wholesale customers are largely capable of taking care of themselves, hence the lighter level of regulation the markets have enjoyed. The sort of products being traded OTC would be highly undesirable for retail investors.

5.7 Fourthly, the fact that the majority of European exchanges own their own clearing houses leads them to make the argument that in order to gain access to centralised clearing and settlement, products need to be listed on a public exchange. This is not the case. It has been possible for a long time for OTC

¹⁰ Testimony by Ed Rosen to House of Representatives on 3 February

products to be centrally cleared without being listed on a public exchange. An early leader in this field was the LCH (not owned by a single exchange), which began the clearing of OTC energy products in the US and Europe on behalf of the ICE platform in the early years of this century. Subsequently in Europe LCH.Clearnet has been a pathfinder in the clearing of other OTC products (e.g. SwapClear etc). Industry participants are keen to increase significantly the use of CCP clearing for the OTC market. ICAP state in their paper that they would like to see the wider adoption of central counterparty give up and/or central clearing for OTC derivative markets¹¹. However, they also make the point that access to these clearing houses should be open to all execution venues, a reference to the fact that vertically integrated clearing houses (e.g. the ownership of Eurex Clearing and Clearstream by the Deutsche Börse) effectively diminish competition and increase costs. In addition, CCP solutions which are closely integrated with an execution platform excite nervousness on the basis that the delivery of the CCP solution =could be a vehicle for capturing execution. There are large numbers of wholesale customers who prefer the quality of service (even though it comes at a higher cost) offered by OTC execution voice brokers.

5.8 Thus it can be concluded that it is possible to increase significantly the efficiency and transparency of the OTC markets without the products being listed on an exchange. Indeed to list some of these products on a public exchange could have an extremely damaging effect on the OTC market and possibly even be damaging for the exchanges themselves.

¹¹ The Future of OTC Markets, by Mark Yallop, COO ICAP, 10 November 2008

6. Regulatory Initiatives

The US

6.1 CDS have been traded primarily in the UK and in the US. In the US, in the immediate wake of the Lehman collapse Tim Geithner (who was at the time president of the Federal Reserve Bank of New York) made a strong statement indicating his desire to ensure that the future OTC CDS market would have to be regulated, and regulated out of the US. In the wake of this statement the issue has become a major discussion point in the US Congress. Here the initiative has been taken by the US House of Representatives Committee on Agriculture (which is the committee that supervises the CFTC regulator). This committee has introduced a bill entitled "Derivatives Markets Transparency and Accountability Act of 2009", also known as the Peterson Bill, after the chairman of that committee. The bill, in brief, proposes initiatives for greater transparency, appropriate central counter-party clearing and effective regulatory oversight. If enacted in its present form, the bill could have a serious impact on the future of the OTC markets. Furthermore, it seems probable that there will be a turf war in the US between the various regulators including the CFTC, the Federal Reserve Bank and the Treasury.

6.2 The view taken by the Treasury, now under Geithner, is that the entire CDS market operates only in the US and that there should therefore be a single vertical clearing and execution venue designated there for the entire global market. But according to Michael Gooch, (Chairman and CEO of GFI Group) some 60% of the inter-bank volume in credit derivatives is in fact transacted outside the US¹²; of this 60% a very large proportion is in fact traded from London (see 2.3).

6.3 US legislators are taking a close interest in what is going on in the UK and the rest of Europe. A group of US senators visited London earlier this year and had extensive discussions with LCH.Clearnet over the issues involved. It seems clear, therefore, that the US will do its utmost to ensure that its regulators and the Treasury have the closest control over the global CDS market.

Europe

6.4 This determination in the US is matched in Europe by the desire of the EU Commission and the ECB to ensure that they too have a handle on the way that the global credit derivatives market is regulated, at least for that portion which takes place in Europe. Here the picture becomes muddled by definitions of

¹² Writing in the FT, 23 February 2009, "We must act now to avoid a CDS regulatory time-bomb"

what constitutes Europe. As noted in paragraph 2.3, the vast majority of the trading in OTC derivatives takes place in the UK (43%) and the US (24%), with France and Germany together accounting for only about 11%.

6.5 France and Germany are, however, of course within the Eurozone while the UK sits outside. There are clearly moves afoot to locate a clearing house for the CDS market inside the Eurozone. The first such reference was in a statement made by the ECB in December 2008 when they said "On 18 December 2008 the Governing Council considered the need to strengthen the infrastructure for over-the-counter (OTC) derivatives in view of their systemic importance and welcomed initiatives by the European Commission aimed at introducing European central counterparty clearing facilities for OTC credit derivatives. In line with its earlier statement of September 2001 on the consolidation of central counterparty clearing and in view of the outcome of the meeting held at the ECB on 3 November 2008 (both available on the ECB's website), the Governing Council confirmed that there was a need for at least one European CCP for credit derivatives and that, given the potential systemic importance of securities clearing and settlement systems, this infrastructure should be located within the euro area"¹³. The reasons given by the ECB as to why there should be a European solution are that if a CCP defaulted and there was a major liquidity problem, the European Central Bank would not be prepared to replace that liquidity if the CCP was located outside the Eurozone. It is also claimed that member state supervisors are reluctant to rely on information-sharing and the overseas licensing and regulation of foreign clearing houses to the extent that they will be clearing EU CDS. There are however problems with this argument, firstly, because closer regulatory cooperation and information-sharing forms a major part of US and EU proposals for post-crisis regulatory repair; and secondly, the ECB argument is remote in the extreme because not only did the clearing houses manage the Lehman's default extremely well, but there is very little precedent for clearing houses going into default.

6.6 On 19th February, the FT published a report about a paper prepared by the Banque de France which proposed that a clearing house designed for the Eurozone be created. This followed earlier suggestions by the French finance minister that any solution should be confined to the Eurozone. The Banque de France paper stated that "LCH.Clearnet's decision making structure is based in London and this could lead to an increase in the weight of the London financial market or the relocation of governance to the US if the Paris financial markets do not recommend a solution"¹⁴. The paper went on to propose the creation of a

¹³ Decisions taken by the ECB (in addition to decisions setting interest rates) December 2008

¹⁴ "Banque de France in CDS Clearing Plan" Jeremy Grant, FT, 19 February 2009

consortium of Eurozone banks looking to develop a common strategy for the integration of several of the Eurozone's principal clearing houses. (It is worth recalling in this context that the UK itself has not been immune from its own protectionist tendencies when it prevented capital flows to Iceland.)

6.7 Meanwhile the EU Commission in the person of Commissioner Charlie McCreevy is pushing hard for a European-wide solution. Some legislators, specifically Pervenche Berès (a socialist deputy from France), are strongly promoting the addition of amendments to current legislation going through the European Parliament on the capital requirements directive (CRD) which would impose stringent new controls on the OTC derivatives market. Ms Berès believes it is only the existence of this threat that led the main banks to write to Commissioner McCreevy on 17 February giving him a commitment to do the following:

(a) to use one or more CCPs in the EU to clear CCP-eligible CDS on European reference entities and indices based on these entities, as well as back-loading outstanding eligible contracts;

(b) to resolve within the first quarter of 2009 all outstanding technical, regulatory, legal and practical issues in relation to this goal¹⁵.

In theory these targets are due to be met by the middle of 2009. In practice it seems dubious whether this very ambitious timeline can in fact be met.

6.8 The main problem with all of these regionally-based solutions is that many practitioners claim that a regional solution severely undermines the global nature of the business. David Clark, chairman of the Wholesale Market Brokers Association (the IDB trade association), while supporting initiatives to increase the clearing of all OTC products, pointed out the international nature of the business when he said "An American or Australian bank might trade in a CDS out of its London office with an underlying risk that is with a European borrower"¹⁶. The formal position of the UK is clearly set out in the Chancellor's letter of 3 March to the Czech Presidency¹⁷, giving his response to the de Larosière report. In it he states: "It has always been clear that the financial services industry is global..... EU arrangements need to fit with global practice. We must always consider how our EU architecture matches that of our international counterparts..." He goes on: "The development of rules for clearing and settlement systems in particular should be a priority....Just as a bank from any Member State can offer accounts

¹⁵ Letter to Commissioner McCreevy re: Industry Commitment to the European Commission regarding Central Counterparty Clearing of Credit Default Swaps in Europe.

¹⁶ "Battle shapes up for credit derivatives clearing", Jeremy Grant, FT, 17 March 2009

¹⁷ Letter "European Financial Regulation and Supervision", 3 March, Alastair Darling to Czech Minister of Finance

in any currency, so a clearing and settlement system in any Member State should also be able to provide services in any currency...". In other words, a CCP situated anywhere in Europe should be equally capable of transacting clearing business for OTC derivatives denominated in any currency.

7. What Next?

7.1 There are a number of clearing houses which have already indicated that they intend clearing CDS or already offer some kind of service. These include in the US, CME (regulated by the CFTC) and ICE Trust (regulated by the New York Fed), and in Europe NYSE LIFFE in conjunction with LCH.Clearnet, CME, ICE and Eurex Clearing. Note that the DTCC in the US acts as a warehouse inside which trades sit and it is a utility that all CCPs will use. If it purchases LCH.Clearnet, as it has indicated it wishes to do - although this is now looking less likely given the intervention of other parties - it would also be able to act as a CCP. But even then the other CCPs would be able to access it as NYSE LIFFE, ICE and CME have already agreed. It seems certain that whatever comes out of the EU Commission, there will be a requirement for these products to be cleared and regulated on a CCP based within Europe. France and Germany will almost certainly wish to use the UK's absence from the Eurozone to argue that a single large CCP should be set up within the Eurozone and - just possibly - try to introduce legislation requiring that all trades pass through that CCP.

7.2 It is necessary at this juncture to add a note of caution. At a time when there is a rush to ensure that everything must be centrally cleared, it is important to recognise that not everything can be cleared nor will all counterparties be able to collateralise in cash (versus the flexibility of OTC collateral programmes and banking relationships). OTC markets are an incubator and suffer (and will always suffer) from poor pricing transparency and wide spreads when they first start trading. Clearing by comparison relies on confidence in its pricing and valuation accuracy. Therefore a rush to clearing that ends up with a CCP failure would be worse than the situation that exists right now. Users' confidence in CCPs must be very high if they are to enjoy reduced capital charges and low expectations of default. Survivor loss mutualisation, as opposed to a user prefunding their own potential default via initial margin payments to a CCP, undermines the credit value of a CCP by forcing users to reserve capital against the prospect of a CCP failure.

7.3 It is worth examining briefly the claims of these various CCPs. Firstly a global market needs a global clearer. In the context of the OTC markets that means a CCP that has experience of clearing in the UK and in the US, and to a lesser extent in the Eurozone. Secondly the industry is concerned to ensure that whichever CCP becomes one of the de facto CCPs of choice operates as a utility rather than a for profit entity. Thirdly it is self evident that the CCP needs to be experienced and capable of handling crises. How do each of the candidates fit into these categories?

7.4 LCH.Clearnet has perhaps the greatest experience in the clearing of OTC products. This experience has been gained by already clearing various OTC products in the UK and the rest of Europe, and in the US. In conjunction with

NYSE Liffe it has launched B-Clear which is already capable of clearing CDS (but which has at the time of writing not yet cleared a single CDS). It has a large and experienced risk management staff and has successfully handled major defaults such as Barings, LTCM and Lehmans. It is also (for the time being at least) mutually owned. In the US, ICE Trust would seem to be the leading candidate (and in its first month of operation - March 2009 - ICE Trust cleared 613 CDS transactions representing \$70 billion of notional value). However, it has been involved in clearing for just over a year. Note, when it purchased the New York Board of Trade in January 2007 it acquired NYBOT's clearing unit and it has used this as the basis for clearing its exchange traded products in the US, Canada and the UK. In the UK it had to hire former LCH staff to set up its European operation. ICE Trust has the backing of ten major US banks. It is a for profit entity and not a utility. The CME group is also seeking to enter this space. It has considerable experience of clearing exchange traded products but none at all of clearing OTC products. It too is a for profit entity and according to latest reports is having difficulty in finding backers (and, as a result, has delayed starting its CDS clearing service despite having received regulatory approval). Within the Eurozone, only Eurex Clearing has the backing to set up an OTC clearing operation. It intends starting the clearing of CDS within the next month or so.

7.5 Given the multiplicity of clearers emerging, ultimately it will be the market that decides which ones become the de facto clearers of choice (absent distortions caused by legislative fiat). That being so, given the support of the big US banks it seems at least a strong possibility that ICE Trust will stand a better chance of succeeding as a supplier of a global solution than European clearers without a strong US presence. But through its link with NYSE LIFFE, LCH.Clearnet can claim to have a US presence. And through its ownership of the former French CCP Clearnet it can also claim to be in the Eurozone. Eurex Clearing starts from the disadvantage of not having a significant US presence.

8. Conclusions

8.1 It should, hopefully, be evident from what has been said in this paper that the OTC derivatives business is of very significant importance to the City of London. No-one would wish to suggest that in the wake of the financial crisis this sector of the financial services industry should be protected from the wave of increased regulation that is now inevitable. But in the implementation of that more onerous regulation, and specifically in the face of the fact that the UK faces considerable challenges because it is outside the Eurozone, it is to be hoped that the importance of ensuring the long term health of this very important industry is borne in mind. In writing this paper I have reached a number of conclusions. They are, of course, entirely personal.

1. The evidence objectively available suggests that the major guilty parties during the current financial crisis were CDOs on ABS which were sold into highly leveraged SIVs held by banks as off-balance sheet assets. These were valued by the ratings agencies as AAA, a valuation accepted by the banks' own risk management teams and not questioned by the regulators. While CDOs are certainly derivatives, for the most part they were traded on the OTC derivatives market in considerably lower volumes than CDS.

2. The credit derivatives which were traded most heavily on the OTC derivatives market were CDS. There is very little evidence to suggest that these contributed in any significant way to the crisis. Indeed the efficient way in which they were closed out during the Lehman default suggests that they are capable of being transacted safely and securely.

3. Notwithstanding the evidence, it seems inevitable that CDS and possibly even the whole OTC derivatives market are going to be much more heavily regulated as a result of political pressure that "something needs to be done" about the OTC market. This political pressure is acute in the Eurozone countries and in the US. In accepting the inevitable additional regulation that will come, it is important that the very successful OTC Derivatives market is not crushed in the process.

4. Those arguing that OTC products should be moved onto exchanges are mistaken. This would be an extremely foolish move which could even result in damage to exchanges. It is sufficient that OTC products should, as far as possible, be cleared centrally through a CCP. This can happen without the products being traded on an exchange. Given the nature of the market, some OTC products may never be susceptible to being centrally cleared.

5. The ratings agencies' cavalier modelling, the banks' own over-optimistic in-house risk management systems and the slack way in which the regulators accepted the views of these participants were the major causes of the crisis. The

derivative instruments that were implicated were simply the products which were used. This was a crisis caused by people's misjudgment, not a product-led crisis.

6. The OTC derivatives industry is global. The market will eventually decide upon a few de facto global CCPs of choice (concentrating all the risk in one single CCP would be too risky). Regional pressures to choose regional CCPs (whether in the US or in the Eurozone) are misguided.