



Canadian Securities Administrators
Consultation Paper 91-401 on Over-the-Counter
Derivatives Regulation in Canada

To:

Alberta Securities Commission
Autorité des marchés financiers
British Columbia Securities Commission
Manitoba Securities Commission
New Brunswick Securities Commission
Ontario Securities Commission
Saskatchewan Financial Services Commission

14 January 2011

Dear Sir / Madam,

The Global FX Division of AFME, SIFMA and ASIFMA (the "GFXD") welcomes the opportunity to comment on the Canadian Securities Administrators Consultation Paper 91-401 on Over-the-Counter Derivatives Regulation in Canada.

The FX market is the world's largest financial market. Effective and efficient exchange of currencies underpins the world's entire financial system. Many of the current legislative and regulatory reforms will have a significant impact upon the operation of the global FX market and we feel it is vital that the potential consequences are fully understood and that new regulation improves efficiency and reduces risk, not vice versa.

This paper sets out the views, comments and positions of the GFXD in response to the consultation paper. We have restricted our responses to those questions where we have a specific comment to make in regard to the FX market. We are aware of, and support the views set out in, the response being submitted by ISDA.

We thank you in advance for providing us the opportunity to comment and we would be happy and willing to discuss any of the issues contained herein in more detail with you.

Yours sincerely

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About the Global FX Division

The Global Foreign Exchange (FX) Division was formed in co-operation with the Association for Financial Markets in Europe (AFME), the Securities Industry and Financial Markets Association (SIFMA) and the Asia Securities Industry and Financial Markets Association (ASIFMA). Its members comprise 21 global FX market participants, collectively representing more than 85% of the FX market.¹

14 January 2011

¹ Bank of America Merrill Lynch, Bank of New York Mellon, Barclays Capital, BNP Paribas, Citi, Credit Agricole, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, JP Morgan, Lloyds, Morgan Stanley, Nomura, RBC, RBS, Société Générale, Standard Chartered Bank, State Street, UBS, and Westpac

Section 3 - Clearing

1. *Do you agree with the recommendations on the approach to implementing mandatory central clearing? What factors should be taken into consideration by regulators in identifying OTC derivatives appropriate for clearing and which are capable of being cleared?*

We agree with the recommendation only to clear derivatives trades that are appropriate for clearing, such as standardized derivatives which have sufficient liquidity, which would not threaten the risk model of a CCP and where it is the most appropriate solution to reduce risk. This is the approach that has been adopted both in the US and Europe and recognises that mandatory clearing is likely to be suitable only for certain types of contracts.

With regard to the treatment of foreign exchange transactions specifically, we have significant concerns about the impact of mandatory clearing. With a turnover of some US\$4 trillion / EUR2.9 trillion per day the FX market is the world's largest financial market. It is the means by which cross border payments are effected and currency risk is managed in the world's financial system. It differs from the OTC derivative markets in that it has many more participants and its transactions are much simpler and short term. We are therefore concerned with treating the vast majority of FX transactions, which are simple exchanges of currency, as if they are "derivatives".

The vast majority of foreign exchange transactions are not derivatives. They are simple, comprising spot, forward or swap transactions. Forwards are simply an agreement to exchange principle at a pre-determined rate, whilst swaps are simply a combination of i) a spot and a forward or ii) a forward and a forward. As an economic matter, FX swaps and FX forwards are too interrelated to be distinguishable. Most importantly, for these types of transactions, there are no contingent outcomes; cash flows are determined and known at the outset. BIS data shows that these products accounted for 95% of 2010 daily traded volumes.

As FX transactions typically involve exchanging cash flows, the key counterparty risk is settlement risk. This has long been acknowledged as the pertinent systemic risk for FX. CLS Bank was created to manage this risk and it performs a comparable role in FX to the role CCPs play in other markets. Mandating CCP clearing for the FX market therefore tackles counterparty risk in the wrong place.

Ultimately, we believe these transactions should be excluded from the requirements of mandatory clearing. For brevity, we have summarised the rationale below, but provide more detailed (including statistical) analysis in Appendix A.

- FX is an integral part of the global payments systems and is closely monitored by central banks.
- Settlement risk dwarfs credit risk for FX transactions, even in the case of longer dated trades, because there is a single exchange of payments at maturity. Oliver Wyman analysis illustrates that settlement risk comprises 94% of the estimated maximum loss exposure in a trade for foreign exchange instruments with maturity of 6 months and 89% for instruments with a maturity of two years.
- Settlement risk is adequately addressed through CLS; it covers almost 90% of all inter-dealer trades and is regulated by a college of central banks.
- CCPs address mark-to-market credit risk. This is relatively small for FX because of its short maturities, comprising 6% of the maximum risk of loss for foreign exchange instruments with a maturity of 6 months and 11% for instruments with a maturity of two years.
- This residual mark to market credit risk is addressed through the widespread use of CSAs. Initial analysis by the Global FX Division estimates that 85% of the mark-to-market credit exposure in 2010 (to start Q4) relates to counterparties (excluding corporates) for whom CSAs have been put in place. CSAs are particularly effective because MTM is easily calculated by reference to traded prices, which are readily available because of the large volumes and deep liquidity in the market.
- The remaining mark-to-market credit risk that would be addressed by a CCP is therefore minimal. Even for 2-year instruments, only 1.65% of the credit risk of loss in FX instruments is

- not covered by CSAs (with 0.9% not covered by CSAs for instruments with maturities of 6 months).
- Introducing a CCP to address mark to market credit risk would be disproportionate. It may introduce concentration risk and increase both operational risk and potentially systemic risk. Implementing a CCP model has the potential to undermine the effectiveness of existing efforts further to address settlement risk.

In the US, the Dodd Frank legislation recognises the potentially different treatment that is warranted by foreign exchange forward and swap transactions. The legislation provides that US Treasury may make a determination to exclude those classes of FX transactions from mandatory clearing. The statute further exempts commodity swaps where physical delivery of the commodity is contemplated. FX is more closely related to this exempt class as it calls for the delivery of currencies. The Global FX Division has submitted a public response to US Treasury's recent invitation to comment on whether an exemption is warranted². The Global FX Division is also seeking to ensure that appropriate exemptions are secured under the equivalent European OTC derivatives legislation.

The application of any exemption, or indeed differential regulatory application, is particularly important in a market that is as global and liquid as foreign exchange. We note Patrick Pearson's (EU Commission) recognition of the need for regulatory convergence in his comments at the Risk Conference in New York (appendix B). The potential for regulatory arbitrage in FX could drive trading to Canada and we believe that standardisation with other regions would be of benefit to Canada.

In terms of identifying OTC derivatives that are capable of being cleared, we believe the overriding objectives for regulators should be to implement measures that are proportionate to the systemic risks being addressed. Consideration should therefore be given to whether mandatory clearing is a proportionate response when taking into account the pertinent systemic risks, which for FX comprise settlement risk that far outweighs counterparty credit risks that CCPs address, and the measures that are already in place to deal with those risks. The analysis should also take into account factors such as the cost of clearing and the ability of the CCP to deal with and manage the volume and risks (including risk of default) associated with clearing of relevant contracts.

2. *What is your view on possible solutions for accessing CCPs and allowing for the most efficient use of capital? Considerations should account for risk models, collateral netting, membership criteria, etc. Possible iterations are, but are not limited to:*
 - a. *Creation and Use of Canadian Multi-Asset CCP;*
 - b. *Accessing Global Single and/or Multi-Asset CCPs, with additional collateral requirements for non-cleared trades not available for clearing globally; or*
 - c. *Creation and Use of Canadian Single Asset or Multi-Asset CCPs used in combination with Global Single and Multi-Asset CCPs with collateral linkages between the CCPs.*

One major factor underpinning significant advances in the efficiency and effectiveness of the global FX market over recent years has been the ability to trade FX contracts seamlessly and fungibly, regardless of geography or time zone. This has helped bring about very high levels of market transparency and straight through processing efficiency. There is clearly a risk that new regulatory regimes might impair this global efficiency by imposing new restrictions on who can trade with whom and under what conditions.

In the FX market a significant proportion of business is transacted between counterparties in different jurisdictions, sometimes in currencies that are foreign to both counterparties. The potential negative impact of CCP clearing can be reduced if each mainstream FX CCP (if there is

² <http://www.regulations.gov/search/Regs/home.html#docketDetail?R=TREAS-DO-2010-0006>

more than one) that meets appropriate standards is mutually recognised by all jurisdictions, and the counterparties to the trade can agree between themselves where the contract is to be cleared:

- This avoids potential conflict where each counterparty would be required to clear the same trade in a different jurisdiction.
- It allows counterparties to select the CCP that is most efficient in terms of cost and collateral efficiency for that trade (e.g. where there are offsetting positions).
- It avoids needlessly proliferating CCPs, which is inefficient for the market as a whole.

The worst case would be for each jurisdiction to mandate use of local CCPs, which would lead to an unnecessary proliferation of CCPs in each asset class and significantly diminish the efficiency of the global FX market, the cost of which would be felt as much by end users as by market professionals.

What is unclear at present is how - and whether - inter-operability should occur i.e. do the global banks clear through key international clearing houses, and the regional banks are members of, and clear through, their local CCP with cross margining done between the global and local CCPs?

It is worth pointing out that FX CCPs may introduce systemically important concentration risks into the global financial system that do not currently exist. The importance of FX to the financial system, and the impact on global trade and payments of any disruption to the functioning of the FX market, means any mainstream CCP in the FX market could be universally assumed to be too-big-to-fail and to benefit from a de facto guarantee. In a crisis, the FX market would quickly gravitate to the CCPs that appear to be backstopped by the largest pools of taxpayer funds.

In this context, possibly the greatest risk of failure for an FX CCP would arise from failure in other asset classes also cleared by the same CCP, which in turn could overwhelm the resources of the entire CCP. The extent to which a significant CCP could sustain a major collapse in one of its asset classes without experiencing concerns over its ongoing ability to clear other asset classes is untested. In this respect the configuration of default funds and the commitments of the clearing members are obviously important, but these resources will always be finite and limited. This may be particularly important in the Canadian context where the market may be such as to require a CCP to clear different classes of assets to be economically viable.

3. *Is there sufficient liquidity in each of the individual Canadian derivatives markets (eg. equities, interest rate, commodities, foreign exchange, etc.) to support the creation of a Canadian CCP? Which derivatives markets may pose challenges to the operation of a Canadian CCP?*

There is a real possibility that the domestic market may be too small to sustain a profitable CCP for its clearing members. In order to maximise trading volumes and netting efficiencies, if a Canadian CCP were to be mandated then it would suggest at the very least that it be capable of clearing multiple asset classes. However, this brings with it attendant risks such as a contagion between asset classes and the impact on the CCPs ability to deal with potential defaults.

It is not clear what the intentions of the CSA would be in terms of clearing requirements. For example, would it expect domestic banks to clear locally or also global banks when the local currency is involved? It may be the case that clearing (and repository) solutions for CAD products are put in place before a Canadian clearing regime is implemented. Would the expectation then be for a subsequent transfer of business away from these CCPs to a smaller Canadian CCP? Or would the CSA be content with recognition of and clearing on internationally recognised CCPs?

5. *How should non-financial intermediary users of derivatives be able to clear their derivative trades? Should this occur through direct access and membership in a CCP or should this be done through an indirect clearing model with financial intermediary CCP members acting as agents for the non-member CCP derivative participants?*

The consultation paper envisages options whereby clearing may be effected either through direct access to the CCP as a member or indirectly by third party clients, who are not clearing members themselves but clear via a clearing member.

It is important to consider that there may be a small but important minority of participants, each of whom:

- Performs a valuable function e.g. in a local market
- Falls under a mandatory clearing requirement
- Does not qualify to become a direct clearing member
- Struggles to find anyone willing to take them on as a third party client (e.g. because of counterparty risk concerns), or is willing to do so only at prohibitive cost.

It is worth noting that third party clearing arrangements almost always expose the clearing member to counterparty risk with respect to a client, at least from an operational risk perspective.

Such participants would, on the face of it, be excluded from the foreign exchange market. This may have advantages; it may also cause significant disutility within local economies as local companies may not be impeded from accessing the FX markets through their national banks who may not be clearing members. This may be particularly an issue in the FX market due to the ubiquity of foreign exchange and the very large numbers of highly diverse participants who need access to the market. This issue should be studied carefully before clearing is mandated.

Section 4 - Trade repositories

1. *Do you agree with a mandatory reporting requirement for all OTC derivatives trades? If not, should there be a threshold below which reporting would not be required?*

The members of the Global FX Division are committed to assisting regulators with access to trade repository information and have launched a process for selecting a provider of trade repository services. We believe the most sensible approach would be to have a single, global trade repository that allows regional regulators appropriate access to information. This will provide the most meaningful source of reporting information.

There are a number of challenges for the FX industry regarding a trade repository which need careful consideration. Trade repository information must be consistent and complete (and non-duplicative as far as possible) in order for it to be meaningful. This is particularly the case if assessing systemic risk based on position reports, where omission of a single, systemically relevant trade may render position information inaccurate. This means that the trade repository must either cover all asset classes or that regulators be able to access all relevant information and aggregate data in a consistent manner. Any collateral or capital held would also need to be taken into account.

There are significant barriers to achieving sufficient coverage of data at present, in particular jurisdictional differences concerning confidentiality of counterparty data and consistent counterparty identification. We also note that the international agreement, cooperation and equivalency processes for trade repositories may well be complex.

The key issues for FX are as follows:

- The universe of participants in the FX market is significantly wider than for other asset classes given that FX forms the basis of the global payments system. There is simply a practical issue ensuring that all relevant reporting participants are able to report. It also means that consistent counterparty identifiers become even more important.
- There are a vast number of "FX trades". Consideration needs to be given to what trades are therefore material from a regulatory perspective. For example, there are a large number of technical transactions that occur across internal bank books and records which are presumably not relevant from a systemic or transaction reporting perspective. We believe the appropriate trades to capture are those that externally settle and there should be consideration of whether a minimum cut-off would be appropriate.
- The biggest architectural issue relates to position versus trade data. Recognising that there is a desire for trade repositories to provide both trade event and position data, we believe that the legislation should leave flexibility for repositories to infer the position data from the trade data, gather it separately or do a mixture as appropriate.

This will allow trade repositories to provide complete and useful position data before backfilling of historic trade data and allows the provision of useful position data if some trades are not reported to the trade repository.

"Calculating" meaningful positions from the trade population may be unrealistic:

- It requires sufficiently complete trade population
- Non-linear risks (e.g. FX options) cannot be simply aggregated across repositories
- Position information needs to show net bilateral positions across asset classes (requires consistent counterparty mapping, combined trade population, consistent parameters)

Given all of these issues, we believe the key is for regulators to be clear as to the types of information that they require, which will enable participants and trade repositories to determine how best to deliver it e.g. for position reporting, in ways that may be similar to current central

bank reporting mechanisms. In addition, our preference would be that regulators take a flexible and phased approach to the implementation and delivery of trade repository data.

2. *With mandatory reporting of derivatives trades, should dealers have to report non-cleared trades to a global trade repository or to a Canadian trade repository?*

See above.

3. *What impediments currently stand in the way of implementing real-time reporting of data to trade repositories?*

We believe that mandatory real-time reporting of trades to a trade repository is likely to increase costs for market participants, particularly those captured by the reporting requirements but who do not have in place the systems to deal with such reporting. We believe it would be preferable to utilise daily end of day reporting.

4. *What information, if any, should be made publicly available? Should this information be available on a real-time, same day or historical basis?*

We believe that only aggregate, historic information that does not allow the positions or identities of market participants to be determined should be made publicly available.

5. *Should a trade repository be able to publish its non-confidential data for fees?*

We believe that trade repositories should only be allowed to publish data relating to reporting participants with their consent.

Section 5 - Electronic trading

1. *Should regulators choose to implement mandatory electronic trading, which of the frameworks discussed above should regulators use in respect of such implementation (ie. mandatory trading of products subject to mandatory clearing; mandatory trading contingent on the availability of a trading platform; allowing participants to determine whether or not to trade on a platform)?*

We believe that market participants should be allowed to choose whether or not to trade on a platform.

Experience to date suggests that classic exchange trading is simply not appropriate for the FX market. The cashflows that need to be managed each day around the world are completely variable in terms of currencies involved, amounts, dates and times required and destinations.

This is true of both the FX cash and the derivatives market. For example, if a European aircraft manufacturer has offered a US customer a firm price in US dollars for delivery on a given date, but the contract has yet to be signed, the manufacturer may well buy an FX option to hedge the FX risk. Clearly the manufacturer needs the FX option to be for the precise amount and date (and currencies) contractually agreed with the customer, and not some approximation that may or may not be available on an exchange. For these reasons, although classic exchange trading has long existed in the FX market, it is predominantly used by participants who simply want general financial exposure to currency movements e.g. for speculation, and has thus never achieved more than c. 3-4% share of the overall market.

The FX market has been a leader in terms of electronic trading, particularly in the spot market. We acknowledge, however, that FX forwards, swaps and especially FX options have proven to be harder to migrate to electronic platforms. The greater number of parameters involved in making a price and the infinite number of possible grid points along the maturity curves and volatility surfaces means it is impractical to publish continuously updating real-time streaming prices for more than a limited number of the most popular tenors and grid points. Alternatively, the RFQ model enables clients quickly to obtain competing quotes from a number of market makers, so transparency is nevertheless easily achievable. Competition amongst the banks and the platforms is continually driving expansion of electronic trading.

The paper references price transparency as a benefit of exchange trading. Price competition amongst the market-making banks coupled with market competition between the various ECNs and aggregators is at a level where the FX market is clearly one of the most efficient markets in the world. Notably, in today's market a client can often obtain better prices than the banks themselves can achieve in the interbank market. This is achieved without the widespread use of exchange trading.

With respect to transparency for regulators, in the FX market, this would almost certainly be better achieved via a trade repository. FX market participants will typically manage their positions by trading globally across a variety of execution venues according to whichever venue has the best liquidity at any given time; for example, the highly fungible nature of FX means that positions established in Tokyo are routinely closed in London. Even for a participant dealing exclusively in standard products, any specific exchange or execution venue is therefore likely to have a highly distorted view of a participant's overall position. A central transaction repository that records all the relevant activity however it is executed is much more likely to achieve the desired benefit. This will be true for many OTC products, but it is particularly true for FX.

3. *Do you agree with the criteria on assessing the degree of standardization necessary for mandating trading of OTC derivatives on an organized trading platform (namely, legal, process and product standardization)? Is there any other element that the CSA should take into account?*

We broadly agree with the criteria set out in the paper. However, we note that the foreign exchange market clearly demonstrates that products need neither be standardised nor exchange-traded to be liquid. We welcome the recognition that customizable products have an

important role to play in meeting market participants' needs and would emphasise that this is particularly so in the foreign exchange market, where only c. 4.2% of global FX market derivatives turnover comprises exchange-traded derivatives (BIS 2010).

As a general comment, we believe that standardisation and exchange trading should not be viewed as objectives in their own right. We believe that the emphasis should be placed on achieving beneficial outcomes for the market, participants and regulators, irrespective of whether standardisation and exchange trading are the means.

On the criteria, we support greater legal and process uniformity. The foreign exchange market is a truly global market, and its global nature and the very high numbers of participants and transactions involved have long required a very high degree of legal and process uniformity, as well as automation for the global financial system to function efficiently. The vast majority of FX contracts are already heavily standardised from a legal and process point of view. ISDA master agreements and credit support documentation are widely used, and there is a very large degree of standardisation and conventions to support automated electronic matching and straight-through trade processing. There are nevertheless some specific areas, for example some exotics and non-deliverable products, where full legal and process standardisation has not yet been achieved, but these represent a very small proportion of the market and they are actively being worked on.

However, we are very cautious, given the nature of the FX market, about product uniformity, which we would characterise as standardisation of the economic terms of products. The level of economic uniformity commonly required for classic exchange trading is simply inappropriate for foreign exchange, as the precise needs of each participant are as economically diverse as the multitude of cash flows that need to be managed daily. An ability to address hedging requirements solely through standardised i.e. economically standard products would inevitably create mismatch risk and have negative profit and competitiveness impacts on those firms. This applies to both financial and non-financial market participants.

4. *Is the availability of CCP clearing an essential pre-determining factor for a derivative contract to be traded on an organized trading platform?*

We note that platform trading and CCP clearing are not intrinsically linked. CCP clearing is not an essential pre-condition for the use of organised trading platforms. There are execution models where dealers bilaterally clear transactions entered into through an organised trading platform. Likewise, just because a product may be capable of being cleared, it does not necessarily make it suitable for platform trading.

Section 6 - Capital and collateral

2. *What are the consequences of mandatory collateral requirements for non-financial entities for non-cleared trades?*

We do not believe that imposing mandatory collateral requirements for non-financial entities for non-cleared trades is appropriate.

For FX in particular, the characteristics of the market (high number of participants and high volume of transactions) mean that the impact of mandatory collateral requirements will be widely felt across market participants.

Increasing the costs associated with using FX instruments to hedge risk will hamper the ability of end-users to manage cross currency flows. Non-financial entities, which make use of customised derivatives, are not geared up to routinely post margin. The costs and demands of managing margin requirements on a daily basis are extremely prohibitive and may in fact deter some users from hedging those risks.

Although not “non-financial”, it is also worth pointing out that for pension funds, the requirements to post collateral will increase costs, potentially discouraging international diversification, impacting asset allocation and therefore ultimately affecting risk allocation and return to investors. Collateral calls will also cause inefficient switching into and out of assets to post cash.

Section 7 - End-Users and Significant Market Participants

1. *What are your views on the general approach of providing commercial hedging end-users of OTC derivatives with exemptions from the mandatory clearing, electronic trading, margin and/or collateral requirements? If such trades are exempt, what would the effect be on financial institutions on the other side of these trades?*

We agree with the ISDA response that affordable access to appropriate methods of hedging is vital to end-users to mitigate risks. We also agree with the general approach that certain firms should be exempt from clearing and margin requirements, as the increased collateral and operational requirements would be too burdensome and the reduction in systemic risk is insufficient to justify the imposition of these costs on the economy as a whole. OTC positions which are hedges of business risk should be exempt from any central clearing or margin obligations. These requirements would affect end-users' ability to use derivatives for risk management purposes as many of these firms, especially non-financial end-users, need their most liquid assets for working capital and investment purposes.

Such firms should also be permitted to choose the venue for execution that best suits their hedging needs – whether on exchange, electronic or bilateral.

Dealers facing end-users that do not pose a threat to financial stability should be permitted to evaluate and underwrite the credit risk of such end-users and negotiate bilateral collateral or credit support arrangements as they deem necessary.

Again, we would point out that these issues are particularly pertinent for the FX market, which differs from the OTC derivative markets in that it has many more participants and transactions that will be affected.

2. *Should there be any other exemption from the mandatory clearing or from capital margin and/or collateral requirements for any category of end-users?*

It is our view that regulators should focus on the systemic risk arising from a participant's use of instruments. Where it is deemed that an end-user does not pose such a threat, then we would consider it proportionate to exempt those end-users from mandatory clearing or from capital margin and / or collateral requirements.

We would also note that for FX in particular, the characteristics of the market (high number of participants and high volume of transactions) mean that the impact of clearing and margin / collateral requirements will be felt widely.

We refer to our comments under section 6, question 2 above but would make the additional point that in cash flow terms, an exemption from mandatory clearing will only be beneficial where end-users are also exempt from mandatory collateralisation.

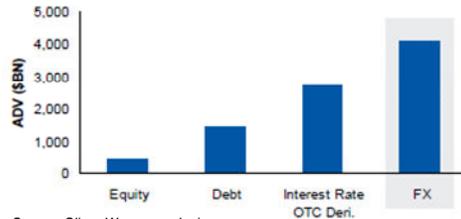
Appendix A

Introduction

The FX market is the world's largest and most liquid financial market. It forms the basis for international trade and supports the functioning of the global payments system. Its importance in effecting monetary policy has been long established and as such has historically been subject to central bank oversight.

FX has many more participants and transactions than other asset classes. Notwithstanding this, the vast majority of transactions are simple, comprising spot, forward or swap transactions. Forwards are simply an agreement to exchange principle at a pre-determined rate, whilst swaps are simply a combination of i) a spot and a forward or ii) a forward and a forward. Crucially, there are no contingent outcomes for these types of transactions; cash flows are known at the outset. BIS data shows that these products accounted for 95% of 2010 daily traded volumes.

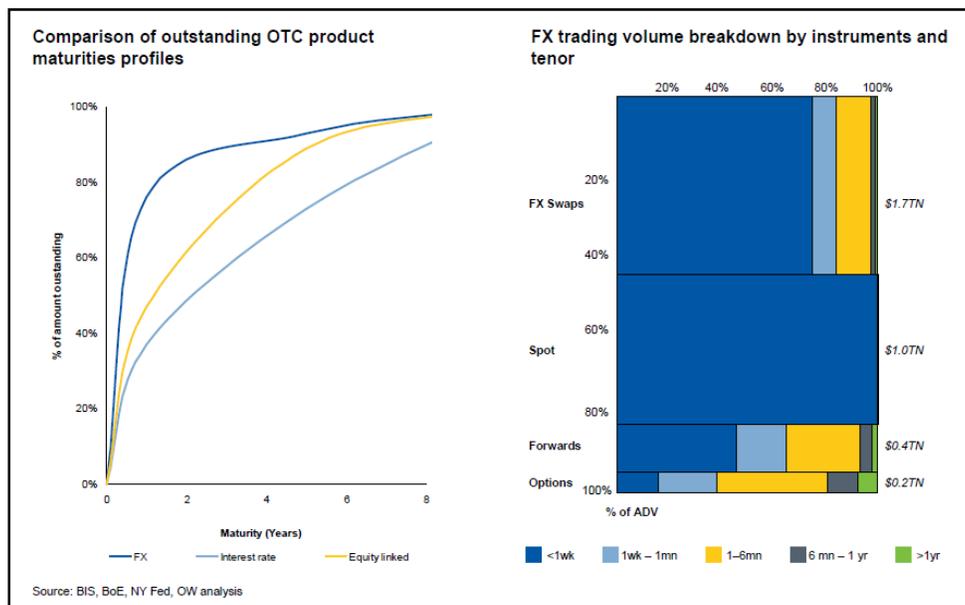
Daily trading volumes of global financial markets 2008



Source: Oliver Wyman analysis

| Instrument | 1998 | % | 2001 | % | 2004 | % | 2007 | % | 2010 | % |
|-------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| Spot | 568 | 37% | 386 | 31% | 631 | 33% | 1,005 | 31% | 1,490 | 38% |
| Outright forwards | 128 | 8% | 130 | 11% | 209 | 11% | 362 | 11% | 475 | 12% |
| Swaps | 734 | 48% | 656 | 53% | 954 | 50% | 1,714 | 52% | 1,765 | 45% |
| Options and other | 87 | 6% | 60 | 5% | 119 | 6% | 212 | 6% | 207 | 5% |
| Total | 1,517 | 100% | 1,232 | 100% | 1,913 | 100% | 3,293 | 100% | 3,938 | 100% |

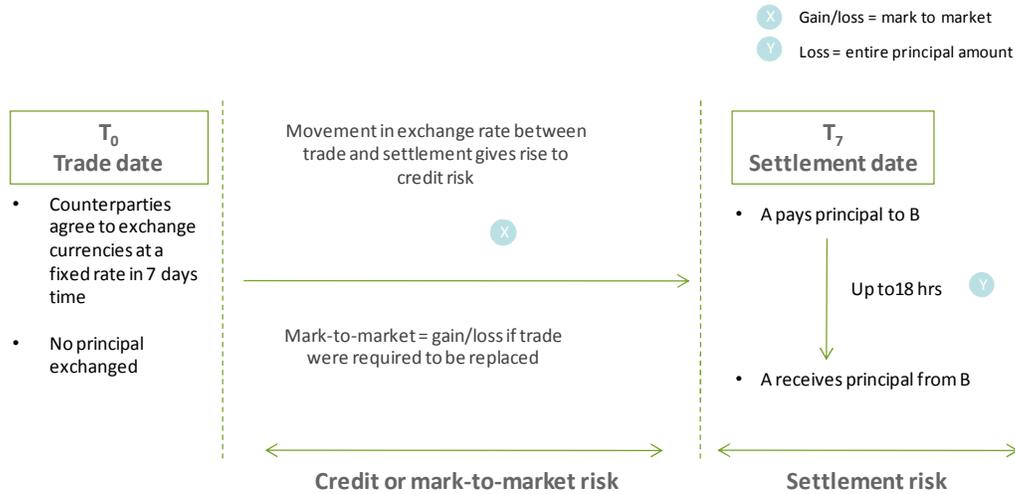
Additionally, the vast majority of FX transactions are short term. The chart that follows on the left contrasts the short maturity profile of outstanding FX instruments with those of interest rate and equity derivatives. The 16% of outstanding FX contracts with maturities longer than 2 years contrasts with more than 55% of interest rate derivatives and 40% of equity derivatives with maturities longer than two years. Of daily traded volume in 2007, more than 98% of FX forwards and 99% of FX swaps were of maturities of less than a year, as illustrated in the chart that follows on the right.



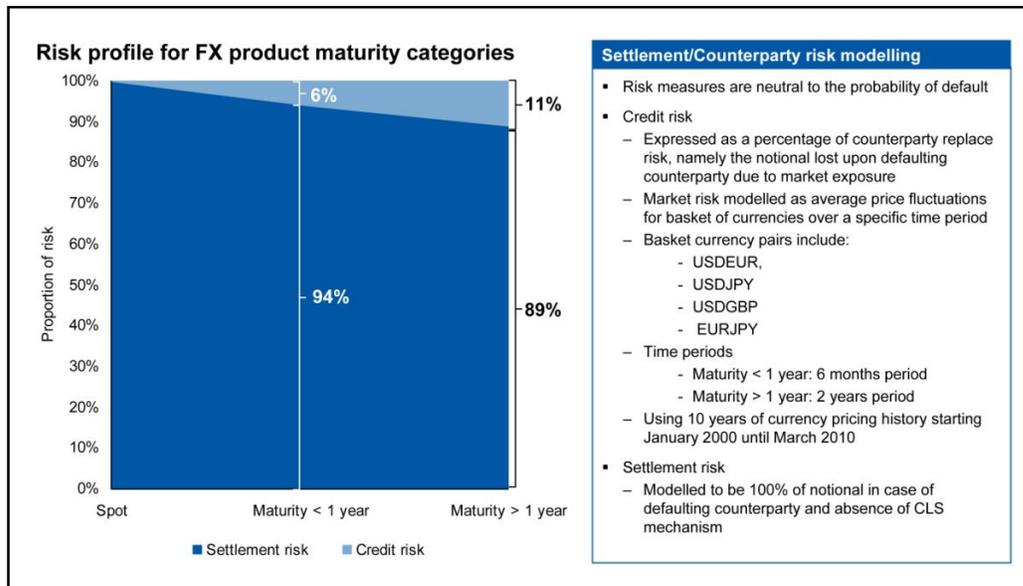
Settlement risk is the key risk in foreign exchange transactions

FX transactions typically involve exchange of principal. These settlement exposures represent the key risk in a transaction. Because of their size, settlement risk loss may be sufficient to trigger insolvency, with knock on effects to other counterparties (commonly referred to as Herstatt Risk).

7 day foreign exchange forward transaction



The graph below, based on an Oliver Wyman study, illustrates that settlement risk comprises 94% of the estimated maximum loss exposure in a trade for foreign exchange instruments with maturity of 6 months. This reduces to 89% for instruments with a maturity of 2 years.



Settlement risk is adequately addressed through CLS

CLS Bank was created in 1997 as a global settlement bank to address the concerns surrounding the systemic impact of potential settlement risk failures. By operating a payment versus payment model, whereby payments are processed simultaneously, it eliminates virtually all settlement risk to its participants. CLS Bank settles almost 90% of all inter-dealer FX trades and has had no settlement failures since it was created. CLS is regulated directly by the Federal Reserve with the active support

of all major central banks. Efforts to extend the reach of CLS Bank are under way, with broad support from both FX dealers and central banks around the globe.

CCPs address mark-to-market credit risk. This is relatively small for FX transactions because of their short maturities.

Mark to market risk is the main residual counterparty credit risk not addressed by CLS. Since most foreign exchange contracts have short maturities, the foreign exchange rate is unlikely to change significantly between the inception and maturity of most foreign exchange contracts. As a result, the in-the-money portion of the trade tends to be small relative to the principal value. Accordingly, the potential loss on foreign exchange transactions consists overwhelmingly of settlement risk.

To put this into context, for FX trades with a maturity of less than one year, Oliver Wyman analysis approximates that only 6% of the maximum risk of loss is mark-to-market credit risk. This rises to only 11% for instruments with a maturity of 2 years.

Because of their short duration, these transactions stand in sharp contrast to most other swaps, for which counterparty risk is comprised almost exclusively of credit risk on the mark-to-market value of the swap, which is the risk that CCPs are primarily designed to address.

Mark to market credit risk is addressed through the widespread use of CSAs. These are particularly effective because of high price transparency and deep liquidity.

Credit support annexes (“CSAs”) are heavily used in the FX market and are a particularly effective risk mitigation tool for addressing mark-to-market credit risk.

The deep liquidity and high price transparency of the market allows for a high level of confidence that initial margin levels will cover losses in these markets. Because the FX market is a highly liquid market in which prices are widely available 24 hours a day, market participants can also reliably determine the net amount of their exposure and therefore the appropriate amount of mark-to-market collateral.

Upon a default, the liquidity in the FX market means that the non-defaulting party can generally replace a transaction quickly and easily. Due to these characteristics of the FX market, existing bilateral agreements have been successful in mitigating counterparty credit risk exposures following the default of large FX counterparties, such as Lehman Brothers in 2008.³

The only portion of the foreign exchange market where trades are generally unsecured is where transactions are effected with corporates. Corporates use FX transactions to hedge business risks and do not generally have excess capital to use for CCP margining purposes. Regardless of whether ESMA determines to exempt classes of FX from the mandatory clearing obligation, we assume that many of those contracts would likely fall within the non-financial counterparty exemption. Mandatory clearing would therefore not result in mandatory clearing for the portion of the market that is most often unsecured.

The remaining mark-to-market credit risk that would be addressed by a CCP is therefore minimal

A CCP for FX would deliver almost no incremental credit risk mitigation because most of that risk has been covered by CSAs. The Global FX Division has undertaken indicative analysis of dealers accounting for approximately 66% of the market (by reference to Euromoney league tables). This analysis indicates that approximately 85% or more of mark-to-market exposure in 2010 relates to counterparties (excluding corporates) for which CSAs have been put in place.

³ Bank of England Foreign Exchange Joint Standing Committee. [FXJSC Paper on the Foreign Exchange Market](#). September 2009. p. 2. (“FXJSC”)

Applying the Oliver Wyman analysis that 6 month instruments have potential mark to market risk of 6%, we estimate the total remaining uncovered risk to be only 0.9%. On the same basis for FX transactions with maturities greater than a year, where 11% of the potential loss is mark-to-market credit risk⁴, we estimate the total remaining uncovered risk to be less than 1.7%.

FX Market volume profile and Uncovered Credit Exposure (forwards & swaps)

| | < 1yr Tenor | > 1 yr Tenor |
|----------------------------------|-------------|--------------|
| Risk Profile: | | |
| Credit / Counterparty Risk | 6.00% | 11.00% |
| Settlement Exposure % | 94.00% | 89.00% |
| | | |
| CSA Usage @ 85% | 5.10% | 9.35% |
| | | |
| Uncovered Credit Exposure | 0.90% | 1.65% |

Introducing a CCP to address mark to market credit risk would be disproportionate, increase operational risk and potentially systemic risk, and undermine the effectiveness of existing efforts further to address settlement risk.

Settlement of FX transactions involves extensive interconnectedness across payment and foreign exchange systems. This is illustrated by the relationships that CLS has with central banks to facilitate the funding process that supports payment-vs-payment settlement.⁵

A central clearing regime would be either global or accomplished through a network of local CCPs. A global CCP for a market the size of the FX market would pose significant systemic risk. Local CCPs would fragment the market and reduce liquidity through the dispersal of trades, positions and collateral across many jurisdictions.

The charts below illustrate the increased operational complexity and interdependencies that one or more CCPs would likely introduce into the FX market. Given the importance of foreign exchange to the global payments system, any CCP would require the same operational infrastructure, robustness and oversight currently afforded to CLS Bank.

A CCP would also introduce concentration risk, creating a potential single point of failure where none exists today, simply to address limited residual credit risk exposure. CCPs can and have failed – largely as a result of financial distress arising as a result of unmet margin calls. Because the FX market is an integral part of the global payments system, the failure of an FX CCP would likely be significant, with destabilizing effects on foreign exchange and the global economy as a whole.

Introducing CCP clearing also risks undermining the significant gains that have been made in addressing settlement risk. Efforts to introduce a CCP model could either distract from current

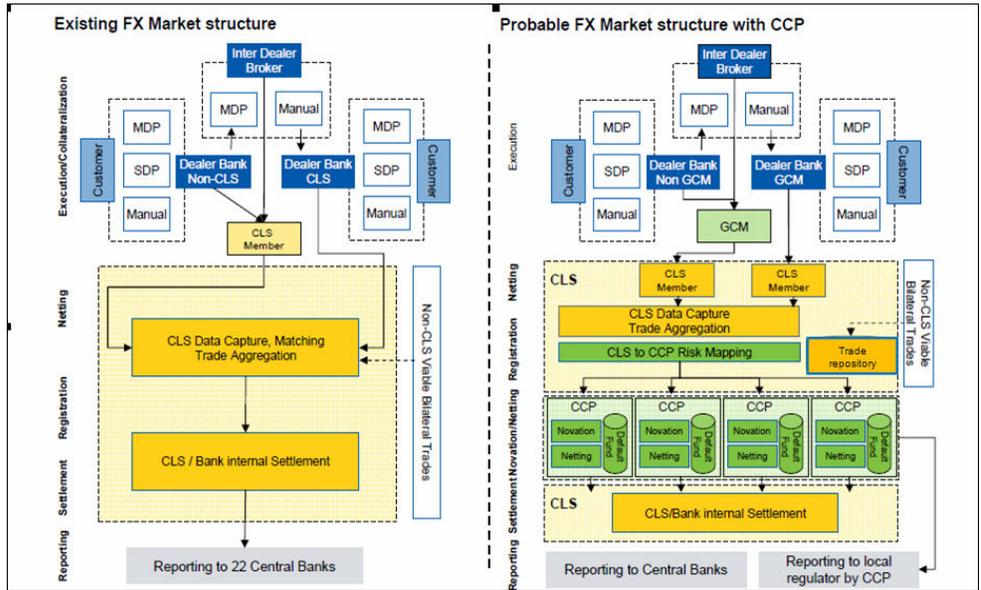
⁴ These calculations assume that all trades under 1 year have the MTM credit risk vs. settlement risk breakdown of a 6 mo. trade, and that all trades over 1 year have the breakdown of a 2 yr trade (based on Oliver Wyman analysis). In reality, the MTM credit risk number is probably even lower, since 68% of FX forwards and swaps have a maturity of less than 1 week.

⁵ In its 2008 review of the interdependencies of payment and settlement systems, the CPSS concluded:

“Over the past 30 years, technological innovations, globalisation and financial sector consolidation have fostered a broad web of interconnections among a large number of payment and settlement systems, both within and across CPSS countries. These interconnections reflect efforts on the part of systems and institutions to seek new business opportunities and to reduce clearing and settlement costs. They also reflect efforts by central banks and the financial industry to promote the low-cost and safe transfer of money and financial instruments. The focus of the CPSS on reducing foreign exchange settlement risk and the work of the G30 to reduce risk in securities settlement systems, for example, have both led to tighter, more integrated settlement processes.”

“The development of tighter interdependencies has helped to strengthen the global payment and settlement infrastructure by reducing several sources of cost and risk. Yet, tightening interdependencies have also increased the potential for disruptions to spread quickly and widely across multiple systems and markets.” Interdependencies Report, p. 1.

industry plans to increase usage of CLS Bank, or worse, cause participants to cease using CLS Bank, for cost or operational reasons, thereby increasing settlement risk.



Overall, we believe that the significant operational risk and costs to the global payments system of implementing a mandatory CCP are disproportionate when compared to the benefits in addressing the 0.9% - 1.7% of mark-to-market credit risk for counterparties not using CSAs.

Appendix B – European Commission and US Treasury public comments

We note Patrick Pearson's (European Commission) comments regarding convergence at the Risk Conference in New York on 2 November 2010:

"We would expect European regulators, before they even think of taking a decision on mandatory clearing of foreign exchange, to consult with the US and other jurisdictions. And you would probably have to wear a pretty big pair of boots to come up with a different decision. So the process and procedures and mechanics are in place for Europe to end up in the same place as South-east Asia or the US or anywhere else.

We have gone through Dodd-Frank, and we have only really identified seven or eight major discrepancies. This is not a coincidence. That is the way convergence has to work. You do convergence upstream, not afterwards. Convergence upstream is making sure the outcome is very similar - and that is what we have been doing.

It is critical that Europe and the US converge in the regulations and their approaches. It is critical because if we don't do it, the law of gravity will apply - the industry will seek the regulation that comes at the lowest cost."

We further note Secretary of the US Treasury's statement made before the Senate Committee on Agriculture, Nutrition and Forestry in December of 2009 on the nature of the foreign exchange markets.

"The FX markets are different. They are not really derivative in a sense and they don't present the same sort of risk and there is an elaborate framework in place already to limit settlement risk. These markets actually work quite well. We have a basic obligation to do no harm, to make sure that as we reform we don't make things worse and our judgment is because of the protection that already exists in these foreign exchange markets and because they are different from derivatives, have different risks and require different solutions, they require a different approach."⁶

⁶ Testimony of Timothy Geithner, Secretary of the Treasury, Before the United States Senate Committee on Agriculture, Nutrition & Forestry Hearing on December 2, 2009 on Over-the-Counter Derivatives Reform (as reported in Reuters. "Highlights: Geithner's testimony on derivatives and risk." December 2, 2009. uk.reuters.com/article/idUKTRE5B13JW20091202).