**RESPONSE TO CONSULTATION PAPER**

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| **Consultation topic:** | Consultation Paper on Draft Regulations for Mandatory Clearing of Derivatives Contracts |
| **Organisation:** | The Global Foreign Exchange Division (GFXD) of the Global Financial Markets Association (GFMA) |
| **Contact number:** | Victoria Cumings - +1 212-313-1141 |
| **Email address:** | Victoria Cumings - vcumings@gfma.org |
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**General comments:**

The Global Foreign Exchange Division (GFXD) of the Global Financial Markets Association (GFMA) welcomes the opportunity to comment on behalf of its members on the *Consultation Paper on Draft Regulations for Mandatory Clearing of Derivatives Contracts* issued by the Monetary Authority of Singapore (MAS) on 1 July 2015.

The GFXD 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 24 global foreign exchange (FX) market participants,[1] collectively representing more than 90% of the FX inter-dealer market.[2] Both the GFXD and its members are committed to ensuring a robust, open and fair marketplace and welcome the opportunity for continued dialogue with global regulators.

The Consultation Paper addresses mandatory clearing of certain interest rate derivatives. It also states, however, that the MAS will review when it may be appropriate to expand the scope of Singapore's mandatory clearing regime to, for example, FX OTC derivatives. Our comments and responses below focus on this element of the consultation.

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

[2] According to Euromoney league tables.

**EXECUTIVE SUMMARY**

1. **The GFXD believes that the MAS should not implement a mandatory clearing requirement for physically-settled FX forwards, swaps or options, or for FX non-deliverable forwards (NDFs), at this time.**

    - Mandatory clearing of these products has not been implemented in either the U.S. or Europe at this time.
    - Significant issues still exist with respect to ensuring the systemically sound clearing and settlement of physically-settled FX products, including FX options.
    - Voluntary clearing of NDFs is still in its infancy at this time and, as such, certain processes, for example around client clearing models and default management, have yet to mature.[3]

2. **The FX market, the world's largest financial market, is a central component of the global payment system and FX products are the critical medium of exchange used by all cross-border payment systems globally.**

    - The volume of transactions in the FX market is very high, and FX transactions are often executed by market participants across geographical borders. As reported by the Bank for International Settlements (BIS) in their 'Triennial Central Bank Survey: Foreign Exchange Turnover in April 2013' (BIS 2013 Triennial Survey) over 75% of FX activity was executed by market participants across five global jurisdictions.[4]
    - The FX market has a high degree of transparency. A study the GFXD conducted in January 2015 with Oliver Wyman (Oliver Wyman Analysis) showed that the FX market is approximately 65% electronically traded.
    - FX transactions are overwhelmingly short-dated in nature, meaning a significant reduction in counterparty credit risk as compared to other classes of derivatives with more long-dated tenors.

3. **The predominant risk in FX transactions is settlement risk, *i.e.* the risk that one party delivers its side of a currency exchange while the counterparty does not**.

    - In the FX market, the main counterparty risk is settlement risk, not mark-to-market risk. The majority of FX transactions are simple exchanges of currency: unlike most derivatives markets where trades are settled financially, the FX market is currently

[3] For example, in Europe, the cleared NDF volume is believed to be only approximately 3% of total NDF volume. http://www.esma.europa.eu/system/files/esma-2014-1185.pdf

[4] BIS 2013 Triennial Survey, available at http://www.bis.org/publ/rpfx13fx.pdf

predominantly physical, *i.e.*, trades settle via exchange of the full notional amount of the underlying currencies.

- Following extensive study of settlement risk by global central banks as a source of systemic risk for the FX market and therefore the global financial markets, the FX market went to considerable lengths to address settlement risk, ultimately leading to the creation of CLS Bank (CLS) in 2002. CLS's settlement system today eliminates virtually all settlement risk to its participants.

- Central clearing counterparties (CCPs) are designed to mitigate mark-to-market risk, not settlement risk. In FX markets, the residual mark-to market risk is today mitigated through the use of credit support annexes (CSAs).

**Question 1: MAS seeks views on the proposal to subject, at a minimum, SGD fixed-to-floating SOR IRS and USD fixed-to-floating LIBOR IRS to clearing obligations.**

We have focused our responses on those questions potentially impacting the FX market specifically, and therefore have no comments in response to this question.

**Question 2: MAS seeks views on whether it would be appropriate to mandate clearing of EUR, GBP and JPY IRS.**

On the same basis as our response to Question 1, we have no comments in response to this question.

**Question 3: MAS seeks views on whether subjecting more types of SGD, USD, EUR, GBP and JPY IRS products, such as basis swaps, forward rate agreements overnight index swap, to clearing obligations, would result in margining efficiencies for market participants.**

On the same basis as our response to Question 1, we have no comments in response to this question.

**Question 4: In relation to the IRS proposed for clearing (see Section 3), MAS seeks views on subjecting transactions that are booked in the Singapore-based operations of both transacting counterparties, *i.e.* a Singapore-incorporated company or a Singapore branch of a foreign entity, to clearing obligations**.

On the same basis as our response to Question 1, we have no comments in response to this question.

**Question 5: MAS seeks views on the proposed exemptions from clearing obligations approach: (a) all banks from mandatory clearing as long as they do not exceed a maximum threshold of S$20 billion gross notional outstanding derivatives contracts booked in Singapore for each of the last four quarters; and (b) all other specified persons that are not banks.**

On the same basis as our response to Question 1, we have no comments in response to this question.

**Question 6: MAS seeks views on the approach to exempt intra-group transactions and public bodies from clearing obligations.**

We support the Asia Securities Industry & Financial Markets Association (ASIFMA) and FIA Asia's response to this question in their joint comment letter.

**Question 7: MAS seeks views on the proposed approach for the commencement of clearing obligations.**

In our view, a gradual, phased-in approach to any introduction of mandatory clearing to the Singapore market would allow the MAS to fully assess the impact of any mandatory clearing determinations in the United States and Europe. We also support ASIFMA/FIA Asia's response to this question in their joint comment letter.

**Question 8: MAS seeks views on proposed considerations in expanding the scope of our mandatory clearing regime.**

We strongly suggest that the MAS does not introduce a clearing mandate for FX products at this time. There currently exist significant challenges with the clearing and settlement of physically-settled FX forwards, swaps and options, and the voluntary clearing of NDFs is still very much in its infancy. We discuss each of our concerns in this regard below.

**The MAS should not introduce a clearing mandate for physically-settled FX forwards, swaps or options.**

As a general matter, the GFXD acknowledges the benefits that central counterparty clearing can bring to the OTC derivatives markets, for example in terms of operational efficiencies and counterparty credit risk reduction.

However, the physically-settled FX market presents different challenges to those seen with the more traditionally centrally-cleared products, such as interest rate derivatives. In particular, it is important to recognize the need to ensure the physical delivery of the full notional amount to settle a deliverable FX trade in the right currency and at the right time. The FX market has particularly large currency and capital needs because of its vast size and because FX trades are predominantly physically-settled via delivery of the full notional amount of each of the two underlying currencies being exchanged. As noted in the U.S. Treasury's Fact Sheet discussing its exemption of FX swaps and forwards from mandatory clearing in November 2012, *"settlement of the full principal amounts of the contracts would require substantial capital backing in a very large number of currencies, representing a much greater commitment for a potential clearinghouse in the FX swaps and forwards market than for any other type of derivatives market."*[5]

CPSS and IOSCO jointly issued in 2012 final 'Principles for financial market infrastructures' (PFMI).[6] Included in the PFMI are a number of key principles to be considered when seeking to apply clearing to the OTC FX market, notably: Principle VII on liquidity risk; Principle VIII on settlement finality; and Principle XII on exchange-of-value settlement systems. As confirmed in a number of discussions with regulatory authorities and market participants, when applied to deliverable FX forwards, swaps and options, these principles would require physically-settled OTC FX products to be cleared only by CCPs that can provide a "guaranteed, on-time clearing and settlement model." The large currency and capital needs required by the FX market to

[5] US Treasury Press Release 'Fact Sheet: Final Determination on Foreign Exchange Swaps and Forwards' , available at http://www.treasury.gov/press-center/press-releases/Pages/tg1773.aspx

[6] BCBS IOSCO 'Principles for financial market infrastructures', available at http://www.bis.org/cpmi/publ/d101a.pdf

physically settle OTC FX products would have to be met by CCPs if such products were to be made subject to mandatory clearing. Specifically, an OTC FX CCP must, for a physically-settled market:

- guarantee the full and timely settlement of the currencies the subject of the trade; and
- ensure the guarantee is credible and addresses extreme but plausible market conditions as identified by rigorous stress testing, including default scenarios.

To date, even for the deliverable OTC FX options market, which is substantially smaller than the deliverable OTC FX swaps and forwards market, no model put forward by a CCP and/or market participant has demonstrated an ability to implement safe and sound measures that address the above requirements and ensure the market, working with the CCPs, can appropriately manage the liquidity and credit risks associated with clearing these products.

It is reasonable to assume that central banks will be unlikely to embrace mandatory clearing requirements for the deliverable FX market in the absence of evidence that it can be implemented without causing more harm than good to sovereign currencies and existing settlement processes.

In order to try and size the currency requirements facing a CCP when clearing physically-settled FX option trades, the GFXD produced the results of research[7] into the size of the deliverable (physically-settled) OTC FX options market, to establish the scale of the liquidity challenge of clearing physically-settled FX options. In 2013, the FX options market turnover accounted for approximately 6%[8]of the global FX market turnover.[9]

The study, which covered over 90% of OTC physically-settled FX option dealer flow over a number of years, estimated the size of the same-day liquidity risk from a failure of two clearing firms[10] to be the equivalent of $161 billion for each day, across 17 currencies.[11]

Furthermore, the same-day liquidity risk for physically-settled OTC FX options is in addition to the replacement cost risk and market risk which a CCP must manage with respect to its clearing service, and which must also be understood and analyzed in relation to those (and other) risks. Quantifying the size of the problem informs not only potential solutions to the problem but also how interested stakeholders approach finding a solution in the first instance. While the industry is collectively working together to find a solution for FX options clearing and settlement, given the size of the same-day liquidity challenge identified, whether and when a credible, robust and

[7] http://gfma.org/Initiatives/Foreign-Exchange-%28FX%29/FX-Options-Clearing/

[8] Noting that this percentage also contains non-deliverable options, simple and complex exotics. http://www.bis.org/publ/rpfx13fx.pdf

[9] BIS 2013 Triennial Survey.

[10] The two firms chosen represented the largest, combined settlement obligation in each currency on any given settlement date.

[11] http://gfma.org/Initiatives/Foreign-Exchange-%28FX%29/FX-Options-Clearing/

safe solution for clearing physically-settled FX options will in fact be implemented remains uncertain.

The FX swaps and forwards market itself represents some 55% of the global FX market.[12] It could be argued that, therefore, the same-day liquidity risk for FX swaps and forwards might greatly exceed that for physically-settled FX options.

Additionally, in considering factors relevant to the clearing of FX swaps and forwards, we reference the U.S. Department of Treasury's (DoT) 2012 exemption of FX swaps and forwards from mandatory clearing.[13]

In its determination to exclude FX swaps and forwards from a clearing mandate, the DoT concluded that, given the reduced counterparty credit risk profile of the FX swaps and forwards market, the challenges of implementing central clearing within this market significantly outweighed the marginal benefits that central clearing would provide. Regulating deliverable FX swaps and forwards would require insertion of a CCP into an already well-functioning and highly interconnected settlement process, which could result in unnecessary operational and settlement challenges.

Three main reasons were outlined by the DoT for exempting FX swaps and forwards from a clearing requirement:

- FX swaps and forwards involve **fixed terms and the physical exchange of currencies**. Market participants therefore know the full extent of their own payment obligations to the other party to a trade throughout the life of the contract.

- The FX market already has a **well-functioning settlement process**. This is crucial, given that the predominant risk in FX transactions is settlement risk.[14]

- FX swaps and forwards are predominantly **short-term transactions.** According to the BIS 2013 Triennial Survey, approximately 70% of the market for FX swaps and approximately 40% of the market for FX forwards matured in one week or less, and approximately 96% of the market for FX swaps and approximately 95% of the market for FX forwards matured in one year or less,[15] meaning a significant reduction in counterparty credit risk as compared to other classes of derivatives with more long-dated tenors.

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[12] BIS 2013 Triennial Survey.

[13] http://www.treasury.gov/press-center/press-releases/Pages/tg1773.aspx

[14] Settlement risk comprises approximately 94% of the maximum loss exposure in FX products with maturities of less than one year, and approximately 89% for FX products with maturity of greater than a year. Oliver Wyman Analysis.

[15] BIS 2013 Triennial Survey.

The DoT also noted:

- The complexities around introducing CCP clearing into the FX market, specifically the large currency and capital needs that would arise if CCPs were responsible for guaranteeing settlement, given the sheer size and volume of trades in the FX swaps and forwards market.

- The operational challenges and potentially disruptive effects that arise from introducing a layer of clearing between trade execution and settlement.

**The MAS should not introduce a clearing mandate for NDFs at this time.**

As mentioned in the Executive Summary, clearing of NDFs is very much still in its infancy. The number of CCPs offering NDF clearing is small[16] and the number of firms offering client clearing services for NDFs is also small. As such, the ability for market infrastructures to develop to support NDF clearing, and implement processes for managing events such as a counterparty default, has not been established or, more importantly, tested. Premature introduction of mandatory clearing may unnecessarily introduce additional risk to the market and, as a result, undermine the benefits of central clearing.

Such considerations were relevant in ESMA's recent response to its NDF clearing consultation in Europe:[17] ESMA determined that the European NDF market was not yet ready to support a mandatory clearing obligation at that time.

Whilst we expect the volume of NDFs being voluntary cleared to grow over time, especially as other regulations become live, such as those concerning the exchange of margin, we want to highlight several specific factors that we believe should be considered in determining the scope of any NDF clearing mandate:

- **Application of EMTA published currency templates without modification**. As part of their commitment to derivatives reform, the G20 Leaders agreed that all standardised contracts would be cleared through CCPs. To ensure the level of standardisation achieved to date in the NDF market is preserved, any clearing mandate for NDF contracts should be sufficiently clear that it only applies to standardised contracts which incorporate industry standardised currency templates in the form published by the Trade Association for the Emerging Markets (EMTA) (*i.e.*, without modification). This would ensure the clearing mandate does not encompass instruments with non-standard terms. Faced with limited liquidity, CCPs would find it difficult to manage the default of a clearing member responsible for transactions in varying currencies and maturities.

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[16] CME Group (ClearPort), LCH.Clearnet (ForexClear) and the Singapore Exchange (SGX).

[17] http://www.esma.europa.eu/system/files/2015-esma-234_-_feedback_statement_on_the_clearing_obligation_of_non_deliverable_forward.pdf

- **Tenor of One-Year.** Any clearing mandate for NDFs should be limited to contracts with a tenor of one year or less. Open interest in these contracts is concentrated in shorter-dated tenors, there is insufficient liquidity in these contracts beyond one year to support clearing and, given the limited liquidity, CCPs would find it difficult to manage the default of a clearing member responsible for transactions with maturities greater than one year.

- **Extended Phase-In Period.** Any determination to introduce a clearing mandate for NDFs requires a sufficiently extended phase-in period, both in terms of timing and of the participants required to clear, to allow market participants to address issues arising from the fact that NDF clearing is in its infancy.

**Global co-ordination in respect of clearing mandates is required because the FX market is a central component of the global payment system.**

The FX markets are global and thus cross-border in nature. As reported by the BIS in its 2013 Triennial Survey, over 75% of FX activity was executed by counterparties across five global jurisdictions; hence the continued view of the GFXD that FX regulations should be harmonized at the global level.

FX transactions are also overwhelmingly short-dated in nature.[18] For example, an analysis we conducted with Oliver Wyman in January 2015 estimated 98% of traded volume having less than one year maturity. Additionally, the FX market is automated and transparent. The existence of a large number of multi-dealer and single-dealer electronic communications networks in the FX market has led to a high degree of systemic redundancy and resiliency. Furthermore, this high level of electronic trading results in transparency for market participants through the diverse availability of pricing information.

We emphasize the importance of ensuring that the regulatory treatment of FX products remains internationally consistent. Cross-border markets cannot operate in conflicting regulatory landscapes and the natural outcome, should this be the case, is unwanted fragmentation of what is an already highly automated, transparent and well-functioning FX market.

For instance, how would counterparties to a trade executed between Singapore and Europe manage their regulatory obligations, should only one party be required to clear? The outcome would likely take one of three paths:

- execution and thus liquidity would become concentrated with counterparties that have a mandatory clearing obligation;

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[18] FX forwards up to 7 days maturity 39.8% of daily average traded volumes; over 7 days and up to 1 year 55.5%; over 1 year 4.6%. FX swaps up to 7 days maturity 70.1% of daily average traded volumes; over 7 days and up to 1 year 26.0%; over 1 year 3.9%. BIS 2013 Triennial Survey.

- the party that is not required to clear would be forced to clear, and incur extra costs (such as clearing and operational costs); or
- the trade is not executed, impacting the end-user's ability to hedge.

Clearly, in a global, cross-border market, any such increased bifurcation of liquidity is not desirable. For example, in the interest rate swaps market, indications have emerged that liquidity in cross-border pools has fragmented along geographic lines, coinciding with the introduction of the U.S. swap execution facility (SEF) regime in October 2013.[19]

Furthermore, situations where there is a clearing requirement in one counterparty's jurisdiction but not the other's could lead to conflicts of law, inconsistencies and legal uncertainty. All this could have possible negative impacts on competition as market participants select their counterparties for trading on the basis of regulatory rather than business factors.

**The predominant risk in FX transactions is settlement risk.**

In the FX market, the main counterparty risk is settlement risk, not mark-to-market risk. Settlement risk has been virtually eliminated due to the creation of CLS Bank in 2002, an organisation operating a payment-versus-payment settlement system and which is subject to a cooperative oversight arrangement among 22 central banks whose currencies CLS Bank settles (including the MAS).

CCPs, on the other hand, are designed to mitigate 'mark-to-market' risk, which is managed in the FX markets through CSAs between counterparties.

The MAS should take into consideration the predominant risks for FX OTC derivatives - settlement risk - and, in this context, aim for international convergence.

**Conclusion**

For the reasons explained above, the GFXD believes that the MAS should not implement a mandatory clearing obligation for physically settling FX forwards, swaps or options, or for NDFs, at this time.

[19] An April 2015 ISDA study has shown that the October 2013 effective date for SEF compliance has had an impact on trading relationships in the derivatives markets: liquidity in the interest rate swaps market fragmented following the start of the SEF regime, and split further since the first made-available-to-trade determinations came into force in February 2014. Trading between U.S. persons and non-U.S. persons has declined. http://www2.isda.org/search?headerSearch=1&keyword=SEF

Operational, liquidity, credit and other risk issues still exist with respect to ensuring the systemically sound clearing and settlement of physically-settled FX products, and even with NDFs, which are financially-settled, voluntary clearing is in its infancy.

Furthermore, mandatory clearing of these products has not been implemented in either the U.S. or Europe at this time. The GFXD is supportive of the U.S. and European approaches and determinations to date in respect of mandatory clearing for OTC FX products, and encourages the MAS to consider making similar determinations in recognition of the points we make in this letter.

Furthermore, for the sake of global harmonization, the MAS should consider the way in which other jurisdictions have thought about and treated mandatory clearing of FX products, in assessing the appropriateness of any such regime in Singapore. As ESMA noted in its determination on NDF mandatory clearing, in cross-border markets, participants are concerned that the application into force of clearing mandates should be globally synchronised to the greatest extent possible. In this regard, we welcome the reference in the Consultation Paper to the MAS considering international agreements and consultations in reviewing when it may be appropriate to expand the scope of the Singapore mandatory clearing regime.

**Question 9: MAS seeks views on the draft SF(CDC)R attached in the Annex B.**

On the same basis as our response to Question 1, the GFXD has no comments in response to this question.