The Canadian Foreign Exchange Market: Developments and Opportunities

Prepared by the Canadian Foreign Exchange Committee (CFEC)

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Executive Summary

The financial crisis has underscored the importance of markets to financial stability. The impact of the global financial crisis that began in 2008 varied across market products, both within the broader financial market spectrum and within the foreign exchange (FX) arena itself. That said, work is underway globally to identify opportunities to reinforce the resiliency of many markets, including FX. FX markets are central to the financial system, providing a means for funding foreign currency obligations, for hedging FX risks and for other services that enhance financial system efficiency. Canada is the 11th largest FX market by average daily volume and the Canadian dollar (CAD) is the 7th most traded currency in the world.¹

This paper aims to inform the policy discussion by: i) providing a “primer” on the structure of the CAD wholesale FX markets and ii) reviewing the characteristics of these markets that supported resiliency over the crisis period, as well as the opportunities for improvement. It builds on work done by a number of FX committees, including the UK Foreign Exchange Joint Standing Committee and US Foreign Exchange Committee. There is a broad consensus that foreign exchange markets generally functioned relatively well over the crisis period with the spot market the least affected. Shorter dated transactions, including short-dated forwards and FX swaps, performed better than longer-dated forward or option contracts and cross-currency swaps all of which were viewed to have greater market and counterparty credit risk due to their longer duration. The relatively better financial position and balance sheets of Canadian financial institutions was one factor in providing greater stability to Canadian markets over this period with CAD FX swap and forward pricing remaining closer to theoretical values than those of the other main global currencies.

There are numerous risks related to engaging in FX transactions, some of which have implications for the financial system as a whole and that should be of particular interest to policy makers. These include settlement, counterparty, replacement cost, collateral and funding risks. The type and degree of risk varies across FX products; the further one moves from spot to longer maturities and the more complex derivative part of the FX market, the less standardised and subject to central infrastructure the market becomes, thereby increasing FX-related risks. Throughout the history of the FX market, banks have worked on a multilateral basis, with the encouragement and support of central banks, to address the risks associated with the FX market. The industry meets regularly through various domestic and global forums to continually improve risk mitigation processes.

There are several structural elements that currently mitigate these risks and thus support the resiliency of FX markets, not only in CAD but in other currencies as well. First, sound clearing and settlement processes help to reduce risk in portions of the FX market. For example, the CLS Bank² (CLS) provides payment-versus-payment settlement services in 17 currencies, eliminating the settlement risk due to the time lag between the payment and receipt of flows in two different currencies.³ Efforts by CLS to increase the number of currencies, regions, products, and

² Continuous Linked Settlement.
³ The failure of Lehman Brothers did not disrupt settlement of payments through CLS.
participants should be supported where possible, including the provision for same-day settlement in USDCAD spot FX. Some of the issues related to same-day settlement, including potential increased intra-day collateral requirements within the Large Value Transfer System (LVTS), would need to be considered with the Canadian banking community.

**Systemic FX Related Risks**

<table>
<thead>
<tr>
<th>Type</th>
<th>Definition</th>
<th>Current Mitigating Mechanisms</th>
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<tbody>
<tr>
<td>Settlement</td>
<td>Risk that counterparty does not deliver a security or its value as per the contract when the other counterparty has already delivered the contracted security or cash.</td>
<td>Continuous linked settlement or bilateral netting.</td>
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<tr>
<td>Counterparty credit</td>
<td>Risk that a counterparty will not settle an obligation/contract for full value when due, or at any time thereafter. Credit risk contains both settlement and replacement cost risks.</td>
<td>Internal credit review processes, strict risk limits, standardized legal master agreements with credit support annexes.</td>
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<tr>
<td>Replacement Cost</td>
<td>Risk that the counterparty will be unable to meet the terms of the contract requiring the holder to replace the existing exposure.</td>
<td>Up-to-date trading systems with counterparty credit limits. Post trade confirmation processes.</td>
</tr>
<tr>
<td>Collateral</td>
<td>Risk that collateral requirements cannot be met.</td>
<td>Collateral posted on a net counterparty basis. Re-setting FX mechanism for longer dated cross-currency swaps.</td>
</tr>
<tr>
<td>Funding</td>
<td>Risk that positions cannot be funded.</td>
<td>Real-time trading systems with risk limits – VaR framework.</td>
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Second, mechanisms are available to manage counterparty credit risk in longer-dated FX products. These include internal credit review processes, strict risk limits and bilateral collateral agreements, such as ISDA’s⁴ Master Agreements and Credit Support Annexes (CSAs).⁵ Netting counterparty credit exposure across financial over-the-counter (OTC) products, including non-FX related products, substantially reduces bilateral counterparty credit exposure, while CSAs provide a collateralized framework for risk reduction similar to the variation margin for exchange-traded products. Despite these types of mitigation mechanisms, and the fact that over 70% of Canadian FX trading is in products with a term less than 7-days, liquidity was disrupted and pricing in FX forwards moved away from covered interest rate parity following the collapse of Lehman Brothers, which could reflect heightened concerns about counterparty credit risk.⁶ Hence, ISDA’s efforts to strengthen CSAs to further reduce counterparty risk should be supported.

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⁴ The International Swap Dealer Association provides the industry standardized legal documentation for counterparties thereby reducing both legal and documentation risk. http://www.isda.org
⁵ Some weaknesses with ISDA documentation were exposed during the Lehman crisis, see http://www.mayerbrown.com/publications/article.asp?id=8431&nid=6
⁶ Heightened counterparty risk could also have resulted from CSAs not being used in all transactions.
The extension of central counterparty (CCP) type structures to certain FX products could help to further mitigate counterparty credit exposure, but could also increase transaction costs, especially for non-financial participants and increase concentration risk. The structure of any proposed CCP is crucial to determine the level of risk reduction and would require adequate risk-proofing, including elimination of settlement risk. The multilateral netting benefit of CCPs, resulting in efficient collateral requirements and potentially lower capital requirements, are most likely to apply if these CCPs are global and cover a wide variety of OTC products. The net benefit could also vary depending on whether the CCPs would apply only to the interbank market or all counterparties. CCPs may be most appropriate for longer-dated FX products due to the longer duration of their counterparty credit risk; however, these products are also less standardized and transparent requiring a higher level of monitoring of their inherent risk within the CCP. The potential benefits to the system as a whole of CCPs for longer-dated FX products may be limited by the very small volume of transactions currently taking place at those longer tenors (see Annex 2), although moving to a CCP could help to increase volumes due to the reduction in the counterparty credit risk.

Third, market-led policies have supported the creation of more transparent, standardized transactions, although more can be done in certain sectors. These include standardization of trade documentation to enable the confirmation process to become more automated. The documentation of the majority of FX transactions is highly standardized, and efforts are underway to improve standardization even further in some FX product areas, including options.

Finally, as is the case with any market, the resiliency of FX markets depends on a solid framework governing the behaviour of participants. For example, proper incentives and monitoring should reduce the prevalence of large maturity and currency mismatches within financial institutions that could result in lopsided one-way flows. This requires effective collaboration between central banks and the financial institutions’ regulators, as well as appropriate access to information. It also requires sound prudential regulation, including appropriate capital, leverage and liquidity requirements in order to reduce the risk that counterparty risk becomes an overwhelming concern.

The assessment in this paper has led the CFEC committee to identify the following five priorities to support the resiliency of FX markets:

a) Establish same-day USDCAD settlement in CLS;
b) Increase use of CLS for FX transactions, including a broader spectrum of participants and extension to more currencies;
c) Better mitigation of credit risk through increased use of Master Agreements and CSAs. Future consideration of other mechanisms to mitigate credit risks such as CCPs where appropriate;
d) Broaden adoption of straight-through-processing, including increased electronic confirmation and settlement; and,
e) More formal standardization of NDF fixing conventions.
Moreover, given that FX markets are global in nature, the CFEC committee underscores the importance of conducting any increased oversight and regulation of these markets in a uniform consultative manner to avoid unintended consequences.

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