Summary of the 2010 Survey on Canadian Foreign Exchange Hedging¹

NOTICE—Friday, 17 December 2010, 15:30 (ET)

Since 2004, the Bank of Canada has undertaken an annual questionnaire with banks that are active in Canadian foreign exchange (FX) markets, including the eleven members of the Canadian Foreign Exchange Committee (CFEC), to gauge FX hedging activities of Canadian corporate customers. The 2010 survey was expanded to include hedging activities of both domestic financial accounts and international institutional customers with Canadian-dollar exposure, reflecting their increased importance in the FX market. This year's survey was also used to examine the impact of the financial crisis on the hedging activity of institutional and corporate customers, as well as to explore changes in technology that have been adopted by clients. This summary incorporates the survey responses collected in August, as well as information gathered from bilateral meetings conducted in September. The opinions expressed are those of the respondents regarding their customers' FX hedging activity.

While differences among banks' responses on their hedging activity in part reflected the composition of each bank's client base, both by region and by sector, some common key themes emerged, as summarized below. The banks' responses reflect the anecdotal nature of the survey as well as the differences between the hedging behaviour of institutional and corporate bank clients.³

- The U.S. dollar represented the largest FX exposure, up to 80 per cent, depending on the client type, followed by the euro and sterling. There was a noted increase in emerging-market exposure. Consistent with hedging policies, approximately 50 per cent of this currency exposure is hedged.
- Institutional customer volume greatly exceeded corporate customer flow, consistent with the Bank for International Settlements (BIS) triennial FX survey. Exporter FX hedging activity dominates corporate customer flow.
- The impact of the recent level of the Canadian dollar varied by client type. Banks estimated that Canadian importers and foreign institutional accounts were positively affected by the Canadian dollar, while the impact for Canadian institutional accounts was seen as neutral. The recent level of the Canadian dollar was viewed as having a negative impact on Canadian exporters; however, anecdotal reports indicated that exporters have become better placed to deal with the current strength in the Canadian dollar than in the past.
- Banks estimated that the average 2011 budgeted Canadian-dollar rate for their customer base is 0.9527, with a range of 0.8728 to 1.0363.

³ In some cases, however, it may be very difficult for banks to distinguish the exact nature or purpose of the FX trade.

¹ The views expressed here summarize comments from representatives of banks who responded to a survey on the Canadian-dollar hedging practices of their institutional and corporate client base and, as such, do not necessarily represent the views of the Bank of Canada.

² The following institutions participated in the survey: Bank of America Merrill Lynch, BMO Capital Markets, Barclays Capital, CIBC World Markets, Citigroup, Deutsche Securities, HSBC Bank Canada, JP Morgan, National Bank Financial Group, RBC Capital Markets, Scotia Capital, State Street Global Markets Canada, TD Securities, and UBS.

• The financial crisis was seen as having a significant impact on customer hedging behaviour, with accounts adhering more closely to their hedging policies and focusing increasingly on their effectiveness. Customers also became more aware of their counterparty credit exposures, with banks reporting an increased use of the International Swap Dealer Association's (ISDA's) Master and Credit Support Annex agreements. In addition, accounts expanded the number of FX counterparties that they dealt with. Participants also noted an increased use of electronic trading platforms and back-office automation to improve operational efficiency and reduce operational risk.

A more detailed summary of the survey themes is provided below.

What are the composition, FX exposure and hedging activity of bank clients?

The client base targeted in this survey comprised those bank customers that have Canadian-dollar hedging requirements. These customers were increasingly differentiated between institutional clients, including pension and investment funds, and corporate accounts (exporters and importers), with the former now accounting for the majority of hedging volume, according to survey participants. The higher institutional hedging volume was consistent with the trend seen in the BIS Triennial Central Bank Survey of foreign exchange activity with higher relative volume from other financial institutions compared with non-financial customers. For institutional accounts, Canadian pension and investment fund FX hedging activity was substantially larger than that of foreign pension and investment funds. For corporate accounts, Canadian exporter activity comprised a much larger proportion of the foreign exchange hedging flows compared with that of importers. In addition, participants commented that there has been growing interest in Canadian-dollar products from reserve managers and sovereign wealth funds.

Overall, the survey participants indicated that the largest proportion of client foreign currency exposure is to the Canadian dollar against the U.S. dollar, followed by the euro and sterling. The Canadian dollar accounts for approximately 80 per cent of the FX exposure of corporate clients but only 50 to 60 per cent of institutional client exposure. While there were mixed responses to the question of whether FX exposure had increased from the previous year, there was a consensus that emerging-market exposure and hedging activity had increased for both types of accounts, with institutional clients broadening their investment portfolios and corporate customers increasing their offshore acquisitions or sources of materials.

Approximately 50 per cent of foreign currency exposure was hedged by both corporate and institutional clients, a percentage that is consistent with many clients' hedging policies. Banks also commented that some corporate accounts have a different hedging strategy for capital projects than for revenues or expenses. In general, hedging behaviour was driven by the current level of the currency, with clients adjusting the length or term of the hedge depending on their view of whether the currency was under-or overvalued relative to their expectations. However, a number of respondents noted that there had been less hedging as a result of the recent tight trading range for the Canadian dollar this year, since the currency had remained close to their expected level. Based on the survey, emerging-market hedging has increased, but some clients are constrained in their ability to hedge certain emerging-market

exposure because of the limited availability of hedging products, the cost of hedging and the relatively small size of this exposure compared with other currencies.

The type of FX product used to hedge foreign currency exposure is determined largely by the core business of the client according to the banks surveyed. For corporate customers, over 50 per cent of FX hedging is executed through FX forwards, with FX options accounting for 10 to 15 per cent of hedging volume. The majority of option usage is related to plain vanilla option strategies, and the use of structured options remains limited, owing to accounting rules. However, it was noted that a few of the larger corporate accounts are to an increasing extent focusing on the actual economic value of a hedge as distinct from its accounting treatment, prompting an increased interest in option hedging. Institutional clients also establish their FX hedges primarily through FX forwards, with options accounting for 10 to 15 per cent of the total FX hedging volume. However, the institutional accounts were very active in regularly rolling these hedges through FX swaps because of the longer duration of their investments, contributing to the greater overall hedging volume from these accounts. Institutional accounts benchmark their FX activity primarily against the London fix (11:00 ET), whereas the corporate customer base is more focused on the Bank of Canada noon rate fix (12:00 ET).

Bank responses also indicated that Canadian exporters use natural hedges to reduce the amount of FX hedging that they require, for instance, by borrowing in U.S. dollars to hedge U.S.-dollar revenue or U.S. acquisitions. Some commodity producers are also said to hedge only their commodity price component and not the FX exposure, since they have anticipated that gains in commodity prices will offset any appreciation in the currency.

The banks noted that the frequency with which clients execute their hedging varies by client category, with institutional clients hedging more frequently, including daily or weekly, whereas the vast majority of corporate clients hedge only on a monthly or quarterly basis.

What are participants' expectations for the Canadian dollar and for its impact on bank clients?

The impact of the recent level in the Canadian dollar has varied by client category. The surveyed banks indicated that for Canadian institutional accounts, the impact has been largely neutral with a range of impact from neutral to moderately negative as Canadian-dollar strength has had a slight impact on foreign portfolio performance. However, according to the responses, the impact for foreign institutional accounts, including reserve managers, was seen as neutral to very positive, with most reporting a positive impact. Banks estimated that Canadian exporters had a more negative impact from recent

⁴ Financial product categories within the survey included FX forwards, FX swaps, plain vanilla FX options, structured FX options, FX futures, cross-currency swaps and other. FX forwards are an agreement to buy or sell currency at a specific date in the future. An FX swap is a simultaneous purchase and sale of identical amounts of one currency for another at two different value dates. A plain vanilla FX option gives the buyer the right, but not the obligation, to exchange one currency for another at a predetermined FX rate and at a predetermined time in the future for a specified nominal amount. Structured FX options are more complex option contracts (strategies) that are usually utilized to reduce the cost of the option. FX futures are standardized FX (forward) contracts that are traded on a futures exchange. A cross-currency swap involves the exchange of principal and interest in one currency for the same in another currency.

movements in the Canadian dollar, with an average response of moderately negative, ranging from neutral to very negative. However, anecdotal reports from the surveyed banks indicated that exporters are better placed to deal with the current Canadian-dollar strength than they were in previous years, with Canadian-dollar gains being somewhat offset by the strength in commodity prices. Canadian importers were seen largely as having had a positive to very positive impact from the Canadian-dollar movements over the past year. Banks reported that, on balance, hedging over the past year had a slight positive benefit to their clients' activities, although some banks noted that importers had partly missed out on further appreciation in the currency.

Survey participants were asked to estimate the budgeted Canadian-dollar rate used by their clients for both 2010 and 2011. The average estimate of the budgeted rate for the Canadian dollar for both 2010 and 2011 was close to the middle of the range that has contained the currency since May (see Table 1 for the estimated Canadian-dollar rates). However, the range of average estimates was relatively wide, at close to 15 cents for 2010 and 18 cents for 2011.

Table 1: Survey participants' average estimate of their clients' budgeted Canadian-dollar rate for 2010 and 2011*

	2010	2011
Average	1.0441 (0.9578)	1.0496 (0.9527)
High	1.1058 (0.9043)	1.1458 (0.8728)
Low	0.9617 (1.0398)	0.9650 (1.0363)

^{*} U.S. dollars per Canadian dollar are shown in parentheses.

What impact did the financial crisis have on client hedging and how has it changed hedging behaviour?

In general, the one consistent theme from the survey responses was the increased awareness of counterparty or credit risk by clients and, as a result, banks reported that the use of ISDA's Master Agreements and their associated Credit Support Annexes (CSAs) increased in the wake of the financial crisis. This was particularly true for corporate accounts where the penetration of these agreements was lower prior to the crisis. The majority of institutional FX hedging, close to 100 per cent with some banks, is now conducted under these agreements, and although this is lower for corporate accounts, most banks now require longer-dated corporate FX transactions to be conducted under these agreements. Banks noted that the advantage of these agreements was their ability to allow clients to net positions in order to free up credit lines, particularly for active clients who had multiple, offsetting positions on the same settlement date. These agreements were generally seen as potentially reducing the direct transaction cost of the hedge for the client. However, a few banks mentioned that some corporate accounts do not have the ability to monitor or post collateral and are therefore less inclined to sign these agreements, especially CSAs.

The surveyed banks indicated that some customer hedging behaviour changed as a result of the crisis, with both institutional and corporate clients adhering more closely to corporate policies or adopting stricter hedging policies following an increased focus on the effectiveness of their internal hedging

strategies. Banks noted that corporate clients also became increasingly aware of the hedging strategy of their direct competitors and that some clients also expanded their list of FX counterparties to increase their flexibility when transacting their FX hedges, reflecting the reduced market liquidity and the lower availability of credit lines. Plain vanilla FX options were noted as an attractive hedging product because of their limited impact on credit lines, especially since large FX movements over the crisis substantially used up their existing credit lines. However, it was also noted that the use of options dropped as their cost increased with the rise in FX implied volatility through the crisis. Banks also mentioned that hedging activity declined for corporate accounts as a result of the high uncertainty regarding the outlook for both revenues and expenses over the course of the crisis, with some lingering impact from this uncertainty in more recent periods as well. According to the respondents, conditions in the FX market have generally improved since the crisis, with trading conditions considered to be normal for terms of up to one year. However, due to tighter credit conditions, terms beyond one year have still not recovered to pre-2007 levels. The ability to settle FX trades through CLS Bank was mentioned by participants as having a positive impact on FX volumes through the crisis, and several participants mentioned that adding same-day CLS settlement would further reduce settlement and operational risk.

The use of technology and automation had also increased, with both institutional and corporate clients increasing their use of electronic trading platforms and back-office automation. Automation has led to increased straight-through processing, thereby reducing both operational burden and risk, which has allowed some clients to increase their trading volumes.

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