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Financial Markets Association of Canada
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CHECK AGAINST DELIVERY

Financial Risks and Global Reforms

Introduction

Good afternoon. I want to thank our hosts, the Financial Markets Association of Canada and Women in Capital Markets, for the invitation to speak to you today. I am very pleased to be here.

Last week, the Bank released its *Financial System Review (*FSR*)*, a semi-annual publication in which we summarize the main risks to the stability of the Canadian financial system, and the policy actions required to mitigate those risks. This issue of the FSR also includes three articles that focus on issues related to financial markets.

Today, I am going to devote the largest part of my presentation to one of those articles, which discusses shadow banking, or what we at the Bank prefer to call market-based financing or MBF.[1] We favour this term because it highlights the fact that the credit-intermediation activities that constitute shadow banking—such as securitization or repurchase agreements—are conducted primarily via markets. If properly monitored and regulated, these activities can bring significant economic benefits and do not have to be "shadowy."

The agenda for global financial reform that was launched by the G-20 at its London Summit in 2009 has, to date, been primarily directed at the banks. Banks are the core of the global financial system, and governments and central banks in many countries had to intervene heavily to support them during the crisis. But the financial crisis has shown that MBF activities can also be an important source of systemic risk. Moreover, with the standards applied to banks set to increase with Basel III, the incentives for activities to migrate to shadow banking may increase. For these reasons, the international financial reform agenda, under the auspices of the Financial Stability Board (FSB), is now turning its attention to this area.

In my remarks today, I will describe the key characteristics of the MBF sector, examine potential risks associated with it and discuss the policy options being considered to address these risks. I will conclude with comments on an important aspect of the reform

[1] J. Chapman, S. Lavoie and L. Schembri, "Emerging from the Shadows: Market-Based Financing in Canada," Bank of Canada *Financial System Review* (June 2011):29-38. (http://www.bankofcanada.ca/wp-content/uploads/2011/06/fsr_0611.pdf).

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agenda for this sector, which is the move to strengthen market infrastructure through greater use of central clearing services for derivatives and repo transactions.

First, however, I want to start with a brief summary of our assessment of the key risks to Canada's financial system.

Risks to Canada's Financial System

The process of financial sector repair is continuing and the economic recovery is proceeding at a steady pace in most advanced economies. As expected, however, it is taking considerable time and effort to resolve the underlying economic and financial imbalances. The path to a more resilient global financial system is further complicated by the two-speed recovery in economic activity, with relatively modest growth in advanced economies and increasing signs of overheating in emerging-market economies.

Despite the challenging international environment, the Canadian financial system remains healthy. For example, asset quality at Canada's major banks has improved further in recent months. Moreover, the aggregate financial position of our non-financial corporate sector is solid.

The main source of concern domestically continues to be the high level of debt carried by households, with the aggregate debt-to-income ratio of Canadians at a record high. This raises the risk that the impact of an adverse macroeconomic shock on the financial system could be exacerbated by a deterioration in the ability of households to service their debts. This risk remains elevated and is broadly unchanged since our previous FSR in December.

Aside from our concern about household finances, the principal sources of risks to Canada's financial stability come from the external environment. They are:

- First, **sovereign balance sheets** remain strained in many advanced economies. In the near term, the principal threat is that the acute fiscal strains in peripheral Europe could trigger a generalized retrenchment from risk-taking in global markets, including markets in Canada.
- Second, large **current account imbalances** cannot persist indefinitely. Implementing the structural changes needed to resolve these imbalances will be a lengthy process and the risk of a disorderly adjustment involving sharp movements in asset prices remains high.
- Third**,** while the majority of banks have made substantial progress in strengthening their balance sheets, some foreign banks continue to struggle, and the risk that further progress may be delayed by the **protracted recovery in advanced economies** is still elevated.
- Lastly, a **long period of low interest rates globally** may fuel excessive risk-taking. The "search for yield" could cause risk to be underpriced or lead investors to take on exposures that they may not be able to manage if conditions become less benign. Since December, there has been mounting evidence of this search-for-yield dynamic in the global financial system, although the risk that it could lead to financial instability in Canada remains moderate.

Key Features of Market-Based Financing

The market behaviours I have just outlined—excessive risk-taking and the potential underpricing of risks—can, and often do, manifest themselves in the market-based financing or shadow banking sector.

Let me describe the principal characteristics of the sector. In broad terms, MBF refers to credit-intermediation activities similar to those performed by banks because they involve maturity or liquidity transformation, possibly with some degree of leverage. But, as I mentioned at the outset, these activities are conducted primarily through markets rather than within financial institutions, although they can involve banks as well as other financial institutions, such as securities dealers, finance companies and hedge funds.

The MBF sector is subject to a different regulatory framework and is typically not regulated or supervised to the same extent as the traditional banking system. But MBF serves useful and legitimate economic functions. It can contribute to the efficient funding and transfer of credit risk. It provides competition for the traditional banking sector and helps diversify credit sources. In fact, the rapid expansion of MBF in the pre-crisis years was driven largely by competitive market forces, financial innovation, and the ongoing expansion and deepening of financial markets. So, if the associated risks are properly managed, MBF can be beneficial to the economy.

In aggregate, the MBF sector is big. MBF activities are significant in several advanced economies, and are comparable in size to traditional lending activities performed by banks. If we estimate total activity by liabilities outstanding, since 1999 the MBF sector in Canada has been about the same size as the traditional banking sector. In comparison, in the United States, at their peak before the crisis, MBF liabilities were roughly twice as large as traditional bank liabilities. They are currently about 25 per cent larger.

Another key characteristic of the MBF sector is its diversity, both within and across countries. It involves a wide range of activities with different levels of benefits and risk. For example, we view government-guaranteed, mortgage-backed securities as part of the MBF sector because they transform illiquid assets into more liquid securities, in part through market channels. But these securities clearly lie at the less-risky end of the range. They do not embed leverage, and credit risk is eliminated by the government guarantees. By contrast, activities at the riskier end of the continuum would include highly complex, opaque and leveraged securities, such as some of the non-bank-sponsored, asset-backed commercial paper (ABCP) that existed in Canada prior to the crisis.

The size and composition of shadow banking also vary across jurisdictions, partly in response to the structure and regulation of the banking system. In Canada, at the end of 2010, the most prominent MBF activities were repurchase agreements (repos), which accounted for over half of total MBF liabilities. This was followed by mortgage-backed securities, at about one quarter of the total, and short-term debt instruments, at less than 10 per cent. In the United States, in comparison, government-sponsored enterprises, money market mutual funds and asset-backed securities represent the major components of the overall MBF sector.

Canada and the United States also differ in the role that regulated financial institutions play in MBF activities. In Canada, regulated financial institutions are dominant players. In addition, the widespread use of government, or government-guaranteed, securities as collateral to underpin these transactions (both repos and mortgage-backed securities) make the sector in Canada relatively less vulnerable.

Key Vulnerabilities in Market-Based Financing

Generally speaking, there are two main concerns with MBF activities: the opportunity for regulatory arbitrage and the possibility of systemic risk. The first one is straightforward: shadow banking activity can be used to circumvent and undermine banking regulations. This may become increasingly important given the new Basel III standards for bank capital and liquidity coming into force.

The second concern reflects a number of vulnerabilities inherent in MBF, perhaps the most important of which is exposure to panics. Entities that rely on MBF are exposed to liquidity crises that resemble a classic bank run. This is owing to their funding structure, with the important difference that MBF lenders are not protected by deposit insurance, and MBF borrowers typically do not have direct access to central bank liquidity. The 2007 crisis in the Canadian market for non-bank-sponsored ABCP was a prime example of how a liquidity crisis can unfold. Short-term instruments were used to fund illiquid, risky and long-term assets. Those instruments also embedded significant leverage. When signs of trouble emerged, investors shied away from ABCP. Maturing paper was not rolled over as investors became more aware of, and concerned with, the potential risks, especially the uncertainty surrounding the willingness and the capacity of the sponsors to provide a liquidity backstop.

A second vulnerability is counterparty credit risk arising from the interconnected nature of the MBF sector. MBF investors are exposed to credit risk, both from their direct counterparties but also, more generally, from their counterparties' counterparties, and so on. The network of obligations that arises from MBF activities thus requires an investor to be aware of the creditworthiness of its direct counterparty, including risks that could arise from how that counterparty is connected to the rest of the financial system. During a crisis, however, the difficulty of properly assessing one's exposure to this complex network and the resulting uncertainty may cause or amplify a financial panic as risk aversion increases.

A third vulnerability is related to the opacity of some of the securitized assets being used as collateral in secured borrowing. During the recent crisis, this type of collateral became more illiquid and difficult to evaluate. This opacity may also impede the transfer of credit risk.

Finally, there is a vulnerability associated with the build-up of leverage that can take place in MBF activities, which can be exacerbated by the lower level of regulation. The build-up of leverage embedded in very complex financial products, followed by forced deleveraging, played a crucial role during the crisis.

Reforming the Shadow Banking Sector

While we have a much better understanding of the MBF sector today than we did before the crisis, we still have much to learn.

The FSB has created a task force to study shadow banking.[2] It is currently assembling information and developing a methodology to systematically monitor the sector and to explore possible regulatory measures.

Broadly speaking, there are four types of responses that policy-makers can consider:

- First, indirectly regulating MBF activities by regulating the banks' involvement in them;
- Second, directly regulating entities that are active in MBF and that pose systemic risk concerns or create opportunities for regulatory arbitrage;
- Third, focusing on instruments and activities that potentially create risk in the financial system, rather than on entities; and,
- Fourth, enacting a range of macroprudential measures, such as those that would reduce procyclicality and strengthen market infrastructure.

Three points merit emphasis. First, it is important that the approach to reform strikes an effective balance between the benefits of market-based financing and the risks. Second, given the important differences in the structure of market-based financing across countries, it is important to balance the need to take account of these differences against the need for international consistency to address common risks and to avoid creating cross-border arbitrage opportunities. Third, the approach taken should put a premium on adaptability, since changes in regulation and innovation can lead to rapid expansion and mutation of these activities. This also implies that the MBF sector necessitates continuous monitoring to identify emerging vulnerabilities.

Strengthening Market Infrastructure

A number of reforms are already under way both in Canada and globally to address shadow banking risks exposed by the crisis. Let me turn to one aspect I just alluded to, which is to strengthen market infrastructure. One of the key lessons of the crisis was the excessive vulnerability of the financial system to individual institutions, where weaknesses in one financial institution had cascading effects on others, ultimately posing risks to the entire financial system. For example, the near-collapse of Bear Stearns threatened the viability of the tri-party repo market. As a result, central banks took extraordinary measures to support core funding markets. Similarly, the failure of Lehman revealed the vulnerabilities and unforeseen exposures that had been propagated through the commercial paper markets and derivatives markets, among others. That is why the agenda for global financial reform is aimed at strengthening both individual financial institutions and financial market resilience.

And here, infrastructure plays a critical role. As I just noted, the Lehman crisis highlighted the systemic importance of the highly complex, multi-counterparty, cross-border derivatives markets. As a result, the G-20 decided that all standardized over-the-counter (OTC) derivatives should be cleared through central counterparties (CCPs) by the end of 2012. CCPs can act as firewalls against the propagation of shocks across market participants. But in order to reap these benefits, CCPs have to be carefully designed and subject to robust regulation and supervision.

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[2] "Shadow Banking: Scoping the Issues," Financial Stability Board background note, 12 April 2011 (http://www.financialstabilityboard.org/publications/r_110412a.pdf).

The Bank of Canada is responsible for overseeing major clearing and settlement systems for the purpose of controlling systemic risk. [3] Two key infrastructure initiatives that we are involved in address systemic risk by enhancing the resiliency of the system.

We are working with the industry to develop a domestic CCP for Canadian-dollar repos that will underpin the resiliency of that core funding market. Again, I want to remind you that repos are half of market-based financing in Canada. It is our expectation that this system will be designated for oversight when it begins operating, likely later this year.

And the Bank is working on how best to implement the G-20 commitment for OTC derivatives—a market in Canada of roughly $9 trillion notional, of which $6 trillion is interest-rate swaps. Its size and interconnectedness point to its systemic importance and the critical need for rigorous oversight. One way to build resiliency may be a domestic infrastructure for centrally clearing OTC Canadian-dollar denominated derivatives.[4]

As market infrastructure supporting the Canadian financial system evolves, the Bank will continue to exercise its oversight role. We must be able to fulfill our legislative responsibility for oversight of major clearing and settlement systems—not just at a moment in time, but over time. If all aspects of systemic clearing systems were within Canada—for example, the physical location, management, and risk controls—clearly it would be easier to fulfill that responsibility. If, on the other hand, those systems were managed in foreign jurisdictions, then the Bank would need to judge the extent to which it could rely on foreign authorities for principal oversight—a judgement that has not yet been required. And, if our ability to rely on foreign jurisdictional authorities were to diminish over time, we would also need to ensure that we would have the ability to remedy the situation. We at the Bank must be able to fulfill our obligations to Canadians to ensure sound management of the risks associated with these systemically important clearing and settlement systems.

Conclusion

Let me conclude. Throughout the global financial crisis, Canada's financial system showed its strength and resilience. Nonetheless, an important lesson from the non-bank ABCP episode in particular and the global crisis more generally is that our financial system is not immune to vulnerabilities in market-based financing. The sector represents roughly half of the financial system in several advanced economies. Since the crisis, it has not been subject to the same degree of regulatory reform as the traditional banking system. That is now changing.

This is why regulatory authorities in Canada, including the Bank of Canada, are actively involved, both at the FSB table and here in Canada, in assessing market-based financing activities and helping to develop new financial regulations and market infrastructure,

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[3] The legislative authority is set out in the Payment Clearing and Settlement Act. Systems which are currently designated as having the potential to pose systemic risk are: CDSX, which is the system that clears and settles securities transactions; the Large Value Transfer System; and CLS Bank, a global system for the settlement of foreign exchange transactions.

[4] See J. Slive, C. Wilkins and J. Witmer, "Access to Central Clearing Services for Over-the-Counter Derivatives," Bank of Canada *Financial System Review* (June 2011):39-45 (http://www.bankofcanada.ca/wp-content/uploads/2011/06/fsr_0611.pdf).

such as central clearing services, that will reinforce the safety and efficiency of our financial system.

More broadly, with the international financial system still facing serious risks, it is crucial that we maintain the momentum of reform.

Thank you.