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Financial System Review

Highlights—June 2010

Risk Assessment*

Mounting concerns over fiscal sustainability and the exposures of global banks to sovereign risk erupted into a period of severe stress in financial markets in early May, demonstrating the continuing fragility of the global financial system.

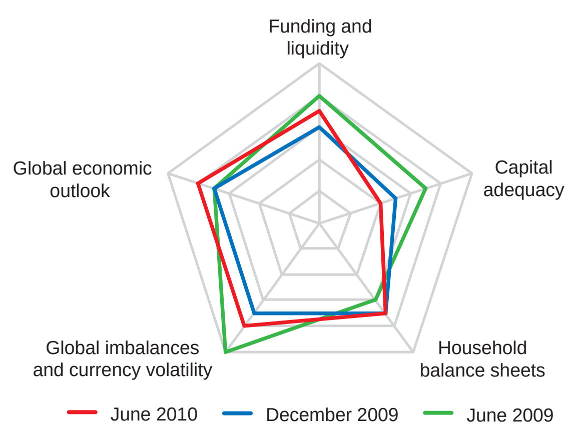
The Canadian financial system has continued to function well, and indeed, has strengthened further since the December 2009 *Financial System Review* (FSR). It is nonetheless vulnerable to renewed stress in the event of a recurrence of severe tensions in global markets. Through indirect channels—notably dislocations in international funding markets, a worldwide retrenchment from risk-taking, and a deterioration in the global economic outlook—fiscal imbalances could have an impact on the global financial system that is disproportionate to the direct exposure of banks to sovereign debt. In addition, the rapid expansion of consumer and mortgage credit implies that a greater proportion of households are likely to become vulnerable to adverse income and wealth shocks as interest rates rise from their exceptionally low levels. The Governing Council thus judges that the overall level of risks to Canadian financial stability has increased (**Table 1** and **Figure 1**).

Despite forceful policy actions to stabilize the global financial system since 2007, several of the vulnerabilities that contributed to the crisis remain, and, in some cases, may have been exacerbated. Safeguarding financial stability will require strong and appropriately targeted policy actions to reform global financial systems and to establish sustainable fiscal positions. Until this is achieved, the financial system is likely to remain fragile.

Table 1: Key risks to the stability of the Canadian financial system

Risk	Level of risk	Direction over the past six months
1. Funding and liquidity	elevated	increased
2. Capital adequacy	moderate	decreased
3. Household balance sheets	elevated	unchanged
4. Global imbalances and currency volatility	high	increased
5. Global economic outlook	high	increased
Overall risk	**elevated**	**increased**

Figure 1: Risk assessment



Note: Each rung indicates a certain perceived risk level: the farther away from the centre, the more elevated the perceived risk.

* This section of the *Review* presents the collective judgment of the Bank of Canada's Governing Council on the key risks and vulnerabilities arising from both international and domestic sources bearing on the stability of the Canadian financial system.

Key Risks

Funding and liquidity

To date, Canadian bank funding markets have been largely unaffected by pressures in global short-term funding markets arising from growing concern about the implications of fiscal strains for the quality of the assets at financial institutions. However, there is a risk of renewed tensions in Canadian funding markets if global pressures intensify, particularly if they are accompanied by a material deterioration in the international economic outlook and a generalized retrenchment in risk-taking. In response to the re-emergence of strains in U.S.-dollar short-term funding markets in Europe, the Bank of Canada—in coordination with other central banks—reinstated its temporary U.S.-dollar swap facility with the Federal Reserve as a precaution, in the event that these strains showed signs of spreading to Canadian markets.

Overall, the level of risk to the stability of the Canadian financial system arising from funding and liquidity issues is judged to have risen since the December FSR, particularly since concerns over global public finances have reawakened tensions in some international bank funding markets. Moreover, reforms to improve the management of liquidity risk at financial institutions will pose some challenges during the transition.

Capital adequacy

Canadian banks remain profitable, and their capital ratios continue to rise. Although they are still experiencing cyclically elevated loan losses, these have fallen markedly in recent quarters. Asset quality in the international banking system has also generally improved since last December, although some pockets of fragility remain, for example, with respect to exposures to the U.S. real estate sector and to euro-area government debt. If these vulnerabilities result in a material deterioration in international economic or financial conditions, the quality of the assets of Canadian banks could be impaired, even though they have low direct exposures to these sectors.

Overall, it appears less likely now than at the time of the last FSR that capital pressures could undermine financial stability in Canada. However, implementation of enhanced global standards for capital adequacy to strengthen the resilience of the system to future shocks will present transitional challenges for banks, even Canadian banks.

Household balance sheets

The rapid growth of household credit throughout the crisis is a testament both to the resilience of Canada's financial system and economy and to the effectiveness of the domestic and global policy stimulus. It is also an important source of risk: the proportion of Canadian households that are judged to be vulnerable to adverse wealth and income shocks has increased in recent years with the steady rise in aggregate household debt in relation to income. In the event of a significant economic downturn, the credit quality of household loan portfolios could be undermined, prompting banks to tighten credit conditions and some households to reduce spending. Ultimately, this could result in mutually reinforcing declines in real economic activity and in the health of the financial sector.

In the December 2009 FSR, the Bank outlined the key results of a partial stress-testing simulation, which gauged the financial vulnerability of Canadian households in two hypothetical scenarios of sustained growth in the debt-to-income ratio and an environment of rising interest rates. An update to the Bank's stress-testing simulation, using the same assumptions as last December and a refined methodology, still indicates a buildup in vulnerability over the simulation period, although its magnitude has been revised down since December.

Nonetheless, the continued rise in aggregate household debt in relation to income suggests that the vulnerability of the household sector to adverse macroeconomic shocks is still growing. Overall, the Governing Council considers that the risk of system-wide stress arising from material losses on loans to Canadian households remains elevated and is roughly unchanged since the last FSR. The Bank continues to monitor the evolution of household borrowing behaviour to assess the implications of rising indebtedness for the vulnerability of the household sector to adverse macroeconomic shocks.

Global imbalances and currency volatility

The resolution of global imbalances requires a sustained rotation of global demand away from excess consumption in the United States and towards internally generated sources of demand in the developing countries of Asia. A disorderly or delayed resolution of these imbalances represents a key source of risk to the stability of the Canadian financial system. Structural policy adjustments are necessary to ensure a durable and orderly narrowing of these imbalances. A key supporting element should be a transition towards more flexibility in exchange rates, which would improve adjustments to both the current disequilibria and future economic shocks.

The mounting fiscal strains in several advanced economies in the euro area and elsewhere pose a risk to the timely and lasting resolution of global imbalances. Concerns over fiscal imbalances could also result in an abrupt increase in risk premiums and volatility for a wide range of assets and currencies. While Canada's fiscal position is relatively strong, our financial system could be adversely affected by growing fiscal strains elsewhere.

The Governing Council judges that the level of risk to the Canadian financial system associated with global imbalances has increased since the last FSR, primarily because of rising concerns over the sustainability of fiscal positions in a number of countries.

Global economic outlook

The global economic recovery has gained momentum since the December FSR, reflecting the exceptional monetary and fiscal stimulus in many countries, as well as robust growth in many emerging-market economies. However, the Governing Council considers that, despite a more favourable global economic outlook, the downside risk to the stability of the Canadian financial system associated with a renewed downturn in international economic activity has increased. First, an intensification of sovereign risk would weaken global economic growth by tightening financial conditions and/or by accelerating fiscal consolidation. Second, there are also some concerns that abundant liquidity and a sharp rebound in private sector capital inflows for several emerging-market economies since the peak of the crisis may be causing excessive credit growth and the creation of asset-price bubbles in certain countries. There is therefore a risk that some emerging-market economies could cool down abruptly.

Policy Actions And Assessment

While many aspects of the Canadian macrofinancial environment have improved since last December, with the economic recovery proceeding as expected and conditions in Canada's financial system generally strengthening, the Governing Council considers that, overall, the near-term risks to the financial system have increased. This view reflects heightened concerns that worldwide fiscal strains have the potential to cause tensions in interbank funding markets, to derail the global economic recovery, or to trigger a disorderly resolution of global imbalances.

Attaining fiscal sustainability requires credible plans to achieve viable fiscal balances, consistent with the G-20 commitment to enact macroeconomic policies promoting strong, sustainable, and balanced growth. Until these plans are implemented, fiscal challenges will continue to pose a risk for financial stability. In early May, a series of measures were adopted to address the tensions in financial markets arising from heightened market concerns over public finances in Europe. While these measures have been helpful in tempering the recent stress in financial markets, they fall short of providing a lasting solution to fiscal challenges. Governments with fiscal imbalances need to quickly develop and begin to implement realistic plans for achieving sustainable fiscal positions. Since these plans could be complicated by economic and political constraints, there is a risk that another period of severe stress in international financial markets and the global banking sector could occur.

In Canada, improved conditions in funding markets have allowed the Bank of Canada to stop providing Canadian-dollar liquidity through the temporary facilities put in place during the crisis. Outstanding term liquidity is now being gradually wound down. The Government of Canada has also ended almost all of its extraordinary measures and adjusted the rules for government-backed insured mortgages.

While the measures taken by authorities around the world to stabilize the global financial system during the crisis have been broadly effective, they have also heightened expectations of policy support, despite evident public opposition in many countries. To create the proper incentives for effective risk management and to avoid moral hazard, there should be a clear expectation that the shareholders of a failing firm will bear losses to the fullest extent. This is possible only if authorities have effective tools to wind down failing financial institutions in an orderly manner, even if they are large and complex. This implies that a framework should be in place to limit the repercussions on the financial system as a whole.

Given its unprecedented scope, pace, and complexity, there is a risk that regulatory reform could have unintended consequences. At least equally important is the risk that key elements of the reform agenda will be diluted, either because of complacency as economic and financial conditions improve or because of fears that reforms could harm a still-fragile recovery. Carrying out reforms will be more challenging because of the need for substantial international co-operation to address cross-border spillover effects and to avoid regulatory arbitrage. A balance will have to be struck between implementing the improved global standards consistently across jurisdictions and respecting the unique circumstances of each country.

Reports

As illustrated by the recent crisis, safeguarding financial stability requires that financial institutions and market-makers have access to resilient sources of funding, even in times of system-wide stress. Strengthening the regulations and infrastructure supporting funding markets to reduce the risk of contagion of future liquidity shocks is a key priority for authorities worldwide. The *Financial System Review* includes four reports exploring issues relevant to this work. In addition, a fifth report outlines the Bank of Canada's framework for evaluating, through stress-test simulations, vulnerabilities of the financial system arising from household balance sheets.

In the early stages of the crisis, the Bank of Canada established a set of principles that guided its interventions to mitigate the risk of serious system-wide financial disturbances. These have proven useful in developing and using new liquidity facilities to address tensions in funding markets. **The Bank of Canada's Extraordinary Liquidity Policies and Moral Hazard** discusses how these principles can be used to mitigate moral hazard.

A key vulnerability that contributed to the propagation, across jurisdictions and currencies, of tensions in U.S. funding markets during the crisis was a buildup of cross-currency maturity mismatches in U.S. dollars, primarily at

European financial institutions. **The Impact of the Financial Crisis on Cross-Border Funding** explores the dislocations that occurred in cross-border funding markets, particularly in foreign exchange swap markets, and the response of both the industry and policy-makers to alleviate these strains. Efforts to improve the resilience of these markets under stress and the implications for cross-border funding markets of the liquidity standards proposed by the Basel Committee on Banking Supervision are also discussed.

The Role of Securities Lending in Market Liquidity provides an overview of the securities-lending market and of certain practices that played a role in amplifying tensions in funding markets during the crisis. As discussed in the December 2009 FSR, this market provides essential funding liquidity to financial institutions and market-makers, which, in turn, are the key providers of liquidity to the financial system. It may therefore be a source of contagion during times of stress. The report presents recommendations for strengthening the resilience of the securities-lending market.

One of the key lessons of the crisis is that liquidity depends on information. Market participants may be reluctant to trade assets whose underlying characteristics are not well known, because their performance may be difficult to assess under changing conditions. In times of stress, when uncertainty increases, market liquidity can dry up if information is insufficient. **Securitized Products, Disclosure, and the Reduction of Systemic Risk** discusses issues related to disclosure for asset-backed commercial paper and publicly-issued term asset-backed securities in Canada. It argues that disclosure standards that are tailored to the particular features of these markets would provide a more solid basis for restarting them.

For years, the Bank of Canada has been using microdata on the balance sheets of Canadian households to complement its analysis based on aggregate data. **The Bank of Canada's Analytic Framework for Assessing the Vulnerability of the Household Sector** presents the Bank's methodology for conducting stress-testing simulations to evaluate the effect of hypothetical macroeconomic scenarios on the distribution of the debt-service ratio across households and, ultimately, on their solvency. The report also describes recent methodological advances made by the Bank in using these data.