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CHECK AGAINST DELIVERY

Financial Stability through Sound Risk Management

It's a pleasure to be here at the beginning of a new year, one that we hope will end on a stronger note than the last year. The extraordinary turmoil of 2007 and 2008 has brought to the fore many issues and challenges, most of which will be with us for some time as we deal with what has become the deepest financial crisis since the 1930s. Policy-makers around the world have taken bold and timely steps to deal with the financial instability and economic crisis, but it will take time for confidence to be restored and for markets to become fully functional again. There are important lessons to be learned from this crisis, lessons that should help us to be better prepared the next time a shock occurs – and even reduce the probability of a large shock by limiting the buildup of financial imbalances in the first place.

In that spirit, I'd like to talk about the importance of sound risk management for financial system stability. I will begin by briefly discussing what I mean by financial system stability and why it is important. I will then consider some of the weaknesses that the crisis has exposed in risk-management practices, and suggest possible measures to enhance the management of risk in the future. Finally, I'll look at some of the steps that policy-makers are considering to make the financial system more resilient to shocks, before concluding with a brief discussion of the Canadian economy.

The Importance of Financial System Stability

Financial system stability is the capacity of the financial system to do its job under a wide range of circumstances. This is critical to the economic well-being of the country, because the financial system provides the channels through which savings become investments, money and financial claims are transferred and settled, and risk is allocated to those most willing and able to bear it. For the financial system to function properly, households and firms must have confidence in it, and investors must know what they are investing in and what risk they are assuming.

The current crisis demonstrates what happens when the financial system breaks down. We have seen that investors of all types – even the most sophisticated – did not always know or understand what they were investing in. Their frantic search for yield led many to presume that others knew what they were doing and that risk had been priced appropriately. These investors substituted the judgments of credit-rating agencies and others for their own due diligence. This opened the door to abuses in the creation of increasingly complex and opaque structured products with embedded leverage, and in the

origination of loans intended for redistribution. These problems were compounded by a distinct disregard for economic fundamentals, which led many borrowers and lenders to discount the risk of a correction in house prices long after activity in the U.S. housing market had peaked. When the problems finally surfaced, the sudden realization that exposure to defaults was both widespread and difficult to locate led to extreme risk aversion and to a broad loss of confidence that impeded credit expansion and weighed heavily on economic activity.

Canada's financial system has fared relatively well throughout this global crisis, thanks to prudent practices and the important steps that we have already taken in Canada to make our system more resilient to shocks. To be sure, our markets have been strained as a result of the global financial crisis but, for the most part, they have remained open. Importantly, banks have continued to extend credit, albeit on tightened terms. Still, the system has not performed as well as it should have. Bank funding costs have come under pressure, and bond issuance has virtually ceased. Further, our economy is now in recession as a result of the weakness in global economic activity engendered by the financial crisis.

Risk Management: Lessons from the Current Crisis

The current global situation has clearly demonstrated the importance of sound risk management. So, let me turn to lessons that we can draw from the crisis to develop more robust risk-management processes in the future.

As I noted earlier, a key contributing factor to the global financial crisis was the very high leverage embedded in structured products and actively pursued by some financial institutions – primarily those outside Canada. In their search for higher returns, institutions took on more and more risk, while paying less and less attention to the consequences. Risk-management models (such as estimates of value at risk) that were based on a short history of data and a presumption of continuous liquidity did not prepare them for crisis conditions. Reliance on these models led to a myopic focus within institutions that ignored the risk of a significant disruption to the financial system if everyone reacted to a large shock in the same way. Consequently, when significant problems emerged, and correlations between asset-price movements moved towards unity, institutions were often ill-prepared to cope, because they had not developed effective contingency plans. They did not anticipate the broad consequences of widespread deleveraging, forced asset sales that exacerbated the illiquidity in markets, or the broad loss of confidence that followed. It's now obvious that this inability to anticipate and prepare for extremely bad outcomes posed a significant risk to financial system stability.

More robust risk-management practices, grounded in a longer-term, through-the-cycle perspective and appropriately designed stress tests, could have helped to prevent the buildup of leverage that became unsustainable. It has also become clear that risk-management models must take into account the collective impact of individual choices. For, without an understanding of this impact, there is a risk that core markets can close, liquidity can dry up, and the type of crisis we are currently enduring could be repeated. The regulator and the central bank can possibly help in this area. By running coordinated macroeconomic stress-test scenarios, they can observe the details of risk-management

systems at individual institutions and may identify possible feedbacks that are missing in these systems. They could then disseminate the results of these exercises in a suitably aggregated form among risk managers at individual institutions, to help them internalize these externalities.

The crisis has exposed some weaknesses and inconsistencies in the application of fair value accounting methods. First, the reliance on market valuations has the potential to amplify the boom and bust cycle in credit and asset prices, by creating a feedback loop between asset values and lending. Second, the application of fair value methods in illiquid or inactive markets may distort information if the models or observable prices used for valuation are inadequate or inappropriate – a problem that is heightened during periods of market stress, when correlations break down. For example, as the liquidity of many markets became impaired in this crisis, there was considerable uncertainty about how to value certain assets and how to compare financial statements.

The Financial Stability Forum (FSF) – which includes senior representatives of national financial authorities from selected countries including Canada, along with international financial institutions and standard setters – has called for improved guidance from standard setters in the use of fair value accounting at times when measurement is challenging, and for improved disclosure by financial institutions. Accounting standard setters have since clarified their position and have proposed increased disclosure standards for the valuation of financial instruments. This is a good first step, considering how essential disclosure of such information is to the efficient functioning of markets and, ultimately, to financial system stability. As the Bank points out in its December *Financial System Review*, good disclosure can foster a better appreciation of the uncertainty surrounding valuations. This may help avoid the mechanistic use of these valuations.

The crisis has also exposed a potential weakness in the new Basel II capital requirements for banks, since these requirements rely on some of the same inadequate risk-management models just described. This topic is also explored in the December *Financial System Review*. The concern is that the new requirements would encourage higher leverage when times are good, further feeding a booming economy and raising the risk of asset-price bubbles and excessive credit expansion. These requirements would also hasten deleveraging in a downturn, thus exacerbating the slowdown and raising the risk of negative feedback between the real economy and the financial system. Regulation should be designed to counter, not reinforce, the natural tendency to procyclicality. It should encourage institutions to build healthy levels of capital reserves during good times, for use in bad times. This would help institutions to withstand economic crises, in addition to dampening the credit cycle. I'm glad to note that the Basel Committee on Banking Supervision is working on ways to address this issue.

Other Perspectives on Improving Financial System Resilience

I have briefly discussed some of the problems in risk management exposed by the current crisis, as well as the negative implications for financial stability. Let me now turn to some steps that regulators and policy-makers can take to foster greater resilience in the financial system.

1. A macroprudential approach

It has become clear that it's time to take a macroprudential approach to financial stability, in terms of both surveillance and regulation. Macroprudential surveillance assesses current risks by looking at the broad economic and financial conditions that can contribute to the buildup of risks to the financial system and to the economy as a whole. Macroprudential regulation aims to strengthen resilience in the financial system by designing standards and codes to limit the buildup of financial and economic imbalances.

The Bank of Canada is well-placed to bring a macro perspective to the oversight of the financial system, since our responsibilities for the conduct of monetary policy require a deep knowledge of the economy and the financial system. We intend to leverage our position in key domestic and international organizations to bring that perspective.¹ In terms of surveillance, we are placing increased emphasis on identifying risks and vulnerabilities to the Canadian financial system and on developing a better early warning system. The Bank's *Financial System Review* was recently revamped with that objective in mind. In terms of regulation, the Bank is drawing attention to the need to mitigate procyclical tendencies within the financial system, to improve transparency, and to keep core financial markets open. In this regard, the central bank has the power to see to it that core markets have continuous access to liquidity by acting as a counterparty to major market participants, if needed, in times of crisis. The principles guiding the Bank's use of that power were discussed in the June 2008 issue of the *Financial System Review*.

2. Continuously open markets and risk-proofed infrastructure

Other measures can contribute to continuously open and resilient markets. For example, efforts outside Canada to create a clearing house for credit default swaps (CDS) have the potential to reduce counterparty risk and to help keep this market open in stressful times. A clearing house offers the advantages of robust operational arrangements and clear workout procedures in the event of a default. Without underestimating the complexities that this would involve, policy-makers could look for other markets that could benefit from being moved onto exchanges or into clearing houses. They could encourage such moves by establishing higher capital requirements for securities that trade outside of continuously open markets and by working to further risk-proof custodial banks.

Recent events have demonstrated the value of well risk-proofed clearing and settlement systems. For example, the use of CLS Bank to settle foreign exchange transactions was a stabilizing factor, especially during the working out of the Lehman Brothers bankruptcy. By providing simultaneous settlement of both transaction legs (payment-versus-payment), CLS Bank virtually eliminates the credit-risk component of foreign exchange transactions. Yet Canadian institutions use CLS Bank relatively less than their international counterparts. This is partly because CLS Bank doesn't currently allow for settlement of same-day, bilateral Canadian-U.S. dollar transactions. Nonetheless, there would be benefits from a greater use of CLS Bank by Canadian institutions. The Bank of Canada encourages them to consider using CLS Bank for managing their foreign exchange settlement risk, while bearing in mind that other risks associated with foreign exchange transactions not addressed by CLS Bank must also be managed.

¹ M. Carney, "From Hindsight to Foresight" (Speech to Women in Capital Markets, Toronto, Ontario, 17 December 2008).

3. Improved transparency

We must also do much more to encourage improved transparency and disclosure, particularly for complex financial instruments. The opacity of many highly structured products contributed importantly to the turmoil. Progress has been made in encouraging greater transparency. The FSF has provided a template for the disclosure of banks' exposures to these products. Closer to home, the Bank of Canada has set out disclosure requirements, available to all investors, for asset-backed commercial paper that it would be prepared to accept as collateral. But those steps must be taken further. Investors require relevant and digestible information tailored to their particular level of sophistication. Here, credit-rating agencies have a very important role. So do institutions that distribute financial products – they have a responsibility to know their clients and to supply them with products and advice consistent with their clients' investment goals, risk appetite, and investment knowledge. The International Organization of Securities Commissions (IOSCO) has launched a task force to address gaps highlighted during the crisis, by developing new standards designed to strengthen financial markets and protect investors. Domestically, the Investment Industry Regulatory Organization of Canada (IIROC) has made several recommendations related to product due diligence, focusing on product transparency, management of conflicts of interest, and dealer use and disclosure of credit ratings.

4. Work with global partners

At the international level, the Bank of Canada is working with its global partners to strengthen financial stability. It is contributing to FSF work on procyclicality issues related to bank capital, loan-loss provisioning, and margin requirements. Canada is also actively engaged with its G-20 counterparts and is directly involved in several working groups considering potential regulatory improvements in a broad range of areas. These include: strengthening transparency and disclosure; reinforcing international co-operation in the management and resolution of cross-border crises; promoting integrity in financial markets; assessing measures to mitigate procyclicality; and improving risk-management practices. The activities of the working groups will culminate in action plans for the next summit of G-20 leaders in April.

At the outset of these remarks, I discussed the importance of sound risk management for financial system stability. Many lessons have been learned from the current crisis, and we can foster a more robust and more stable financial system through improvements in the critical areas that I have just outlined. The benefits of such stability would be felt throughout the Canadian economy.

The Canadian Economy

Let me close with some remarks about the Canadian economy. As we noted in our December policy announcement, the outlook for the world economy has deteriorated significantly since October. The global recession will be broader and deeper than previously anticipated. Global financial markets remain severely strained. Measures taken by major governments are beginning to encourage credit flows, although it will take more time before conditions in those markets normalize. In addition, monetary and fiscal policy actions announced late in 2008 are expected to support global economic growth. Nonetheless, the Canadian economy is entering a recession as a result of the weakness in global economic activity, the associated decline in our terms of trade, and

the drop in household and business confidence. The depreciation of the Canadian dollar is providing an important offset to the effects of weaker global demand and lower commodity prices, and the monetary policy actions taken in October and December (a 150-basis-point reduction in the policy interest rate) will provide timely and significant support to the Canadian economy. As we prepare for the next interest rate announcement on 20 January, and the *Update* to the Bank's *Monetary Policy Report* two days later, we will continue to monitor carefully economic and financial developments in judging to what extent further monetary stimulus will be required to achieve the 2 per cent inflation target over the medium term.

Conclusion

In conclusion, let me stress again the importance of sound risk management for financial system stability. Risk cannot be avoided; it must be anticipated and managed. The current crisis has exposed serious flaws in prevailing risk-management models and showed ways to enhance our ability to manage risk. Policy-makers are also considering steps to make the financial system more resilient so that we may be better prepared for the next storm.

Thank you for your attention. I'd now be pleased to take your questions.