BANK OF CANADA
BANQUE DU CANADA

Remarks by David Dodge
Governor of the Bank of Canada
to the Canadian Club of Toronto
and the Empire Club of Canada
Toronto, Ontario
10 December 2007

CHECK AGAINST DELIVERY

Reflections on Developments in the Canadian Financial System

I'm happy to be here in my home town of Toronto to deliver my final public speech as Governor of the Bank of Canada. Nearly seven years ago, I gave my first public speech in Toronto, so it is fitting that I should be here for my last.

It has become a tradition that I deliver a speech late in the year on issues related to the financial system. When I say "financial system," I mean financial institutions and markets, together with the clearing and settlement systems through which financial assets flow. This tradition of speaking about the financial system began in 2004 with a speech I gave to a joint meeting of the Empire and Canadian Clubs about the need to promote economic efficiency in Canada.

You may be asking why the Bank of Canada, with its well-known responsibility for monetary policy, would put such emphasis on financial system issues. The answer is that the two are tightly linked. We care a great deal about the financial system because a serious disruption in it would affect our ability to conduct monetary policy, and because increasing the efficiency of the financial system can increase the effectiveness of our monetary policy. At the same time, contributing to a stable economy through sound monetary policy helps reduce the risk of instability in the financial system. I'll talk about monetary policy a bit later. But first, I want to look back over the past seven years – in particular, the past seven months – and discuss some of the developments that we have seen in terms of financial system issues. To begin, I will give a brief overview of the Bank's role in the financial system, and review some of the issues I've raised in the past few years. Then, I will discuss the dislocations in financial markets that began during the summer, and talk about how problems related to information contributed to the market turbulence. Finally, I'll look at the effects that these events continue to have, both on financial markets and on the outlook for the Canadian economy.

The Bank and the Financial System

One reason for giving these financial system speeches near year-end is so that they coincide with the publication of the December edition of the Bank's *Financial System Review* (FSR). The purpose of my previous speeches was the same as the Bank's purpose in publishing the FSR; that is, to improve public understanding of financial system developments and trends, to point out potential vulnerabilities in the system, to highlight some of the Bank's research, and to promote discussion of financial system issues in general. Ultimately, the goal is to help provide the context that will lead to stronger financial system policies in Canada. The latest issue of the FSR was published last week, and it deals extensively with the market turbulence that began during the summer.

The Bank actively works to promote a financial system that is both stable and efficient. I've already mentioned that financial instability can impair the Bank's ability to conduct monetary policy. But most importantly, a stable financial system is crucial for an economy to function well. In Canada, the responsibility for promoting financial stability is shared by a number of agencies. Our partners include the Department of Finance, the Office of the Superintendent of Financial Institutions, the Canada Deposit Insurance Corporation, and provincial regulators and securities commissions. The Bank is also the ultimate provider of liquidity to facilitate the settlement of financial transactions and is the lender of last resort for financial institutions.

Despite the importance of financial system efficiency, there is no single body responsible for promoting it. What do I mean when I say "efficiency?" An efficient system is one where scarce economic resources can be allocated to the most productive uses in a cost-effective way. In an efficient financial system, investors can get the highest risk-adjusted returns on their investments, and borrowers can minimize the costs of raising capital. Inefficiencies can stunt investment and cut into economic growth.

The Bank of Canada contributes to financial system efficiency through our monetary policy, which keeps inflation low, stable, and predictable. We also have a legislated role to oversee Canada's most important clearing and settlement systems. These systems have been designed to provide certainty that large-value payments or securities transactions will settle in real time, while using relatively small amounts of liquidity. This frees up resources that can be put to better use elsewhere.

Over the past four years, I have tried to highlight some important efficiency issues for Canada. In 2004,[1] I spoke of the need to promote efficiency in our financial institutions, arguing that our policy framework should provide greater incentives for innovation by encouraging competition while, at the same time, giving our financial institutions the scope to improve efficiency. There remains much work to do to encourage innovation, competition, and efficiency.

I also spoke about the need to improve Canada's securities regulation so as to have uniform laws and regulations, based on principles that apply to everyone, but tailored to take into account the differing size and complexity of firms. There has not been as much progress here as I would have hoped. So, Canada remains at risk of seeing its capital markets eroded as business migrates to other financial centres.

I've also talked about the need to improve enforcement in securities markets, because markets work more efficiently when they operate under clear, transparent, and reasonable rules and principles, which are enforced and are seen by all as being enforced. Some progress has been made here, and I welcome the commitment of the RCMP to improve

[1] David Dodge, "Financial System Efficiency: A Canadian Imperative," (Bank of Canada, 2004).

and to implement many of the recommendations set out by Nick Le Pan in his report last week. However, much better co-operation and coordination of efforts among securities commissions, law-enforcement agencies, Crown prosecutors, and ministers of justice and attorneys general is absolutely crucial.

Another efficiency issue I've raised is the need to strengthen Canada's regulatory, legal, and accounting frameworks related to private defined-benefit pensions, so that risks are dealt with in an appropriate way.[2] Pension funds can generate important gains in terms of economic efficiency. They help to achieve a more efficient allocation of savings; they are invested by asset managers who have the incentive and the ability to invest across varied asset classes; and, with their very long investment horizons, pension funds can be used to finance long-term investment projects at competitive rates of return. Reviews of pension regulations are under way at both the provincial and federal levels. If we can collectively get these changes right, sponsors would have the appropriate incentives needed to manage risk effectively, thus enhancing the viability of our system of private, voluntary defined-benefit pensions for the good of Canadian workers and firms, and for the benefit of our capital markets.

These issues are critical for Canada's future economic prospects. The role of the Bank of Canada has been to do the research and provide the analysis to inform public policy in these areas. I am confident that this work will continue at the Bank in the years ahead. It is up to the responsible authorities to act on these research findings, and to move these issues forward.

At the heart of many of the issues that I've just mentioned are problems related to information. Indeed, one of the key lessons of the past seven months is how information asymmetries can lead to, or exacerbate, disruptions in financial markets. So let me now turn to a discussion of these recent events, and look at how problems with information contributed to the market turbulence.

Market Dislocations and the Role of Information

To truly understand these events, it's important to have some context. You can find a detailed account of recent events in the December issue of the FSR. The turbulence in financial markets came about against a backdrop of remarkable strength in the global economy. We had seen continuing robust demand for Canadian goods and services that led to a significant improvement in our terms of trade, helping to support the Canadian dollar.

Despite this positive backdrop, there were signs of potential trouble in the global economy. As early as 2003, the Bank had flagged concerns about global imbalances.[3] The high level of global desired savings relative to desired investment naturally served to drive down real longer-term interest rates, even as central banks around the world were in the process of raising short-term policy rates.

---

[2] David Dodge, "Economic and Financial Efficiency: The Importance of Pension Plans," (Bank of Canada, 2005).

[3] David Dodge, "Past Adjustments and Future Trends in the Canadian Economy," (Bank of Canada, 2003).

With the decline in longer-term interest rates, investors stepped up their demand for riskier assets that would deliver greater returns. This search for yield led to a narrowing of spreads between the yields on risky assets and government bonds. This narrowing of risky spreads became so pronounced and so persistent that many central banks began to question whether they adequately reflected the credit risks that were involved. In fact, the Bank of Canada highlighted this precise concern as far back as our June 2004 issue of the FSR.[4] A repricing of risk appeared necessary, but the real question was how, and in what manner, it would take place.

Besides the need for a repricing of risk, other factors have contributed to the market turbulence that began this summer. Originators of loans – both bank and non-bank institutions – were increasingly opting to securitize the loans they made in the form of highly structured asset-backed securities, some of which embedded very significant leverage. These were often sold in tranches that provided varying degrees of protection from the default risk involved. Such structures allowed higher-risk assets to appear to take on the qualities of lower-risk assets. The increased use of leveraged structured products was pioneered in major financial centres such as New York and London, although eventually, non-bank institutions began to market these products elsewhere, including here in Canada. The ease with which these highly structured products were sold fuelled the demand for the creation of higher-risk assets, including U.S. subprime-mortgage loans. This, in turn, contributed to the global decline in lending standards.

At times, the originators of these loans had fewer incentives to carefully assess the creditworthiness of borrowers. This is because the originators were sometimes distributing <u>all</u> of the loans they had made. In these circumstances, once the loans had been securitized and sold, the originator no longer faced the consequence if the borrower defaulted. I'll return to this point a bit later. But for now, suffice it to say that the decline in standards for loan origination, combined with financial engineering, was helping to spur greater lending.

The process of securitization is not new. Securities backed by mortgages, credit card receivables, or other types of assets, have been around for years. Indeed, the development of a market for "plain vanilla" asset-backed securities was important since it allowed for the expansion of credit through the market. Initially, this market developed in a reasonably transparent way, in that the nature of, and risks associated with, the underlying assets were clear. Here in Canada, for example, an investor could know with certainty that the mortgages backing securities met the lending standards set by Canada Mortgage and Housing Corporation, or that the loans backing a security were of high enough credit quality that a bank or a retailer was prepared to stake its reputation on the securities. These plain-vanilla asset-backed securities continue to exist and remain an important source of high-quality market-based financing.

But more recently, we have seen the emergence of increasingly complex structured products, which were developed in response to the demand for higher returns. And as

---

[4] Bank of Canada: *"Financial System Review"* (June 2004), p.4.

these securities have become more complex and opaque, in many cases, it has become harder to assemble and understand all the information needed to determine what kinds of assets are backing the security, the quality of those assets, and the counterparty risk involved.

A final point here has to do with how these complex securities are valued. Trading of these securities in secondary markets is rare. Thus, prices for these securities are not very transparent. Most of these highly structured securities are valued on a "marked-to-model" basis, meaning that statistical models are used to provide values. But the models typically provide only estimates of values, and these estimates can vary widely if there are changes in the underlying assumptions. Indeed, many of the models assume that the assets backing these securities can be readily traded in a liquid secondary market – an assumption that is clearly not always valid. So it becomes extremely difficult to put a firm value on a particular security at any given time.

So, we can now see that many factors made credit markets vulnerable to the recent dislocations. The repricing of risk I mentioned earlier was, in fact, under way before August. By late spring, the spreads on lower-rated corporate bonds had begun to widen to levels closer to historical averages. As we moved into summer, however, we saw rising delinquency rates and higher probabilities of default on U.S. subprime mortgages. And so, there were rising expectations of losses for holders of securities backed by these mortgages. But because of the complexity and opacity of some of these securities, it is extremely difficult for even sophisticated investors to determine, with confidence, both the creditworthiness of the assets backing a particular security and the market value of the security itself. In these circumstances, uncertainty led to contagion and dislocations in money markets more generally, even those markets that have no link to U.S. subprime mortgages. Liquidity, which was recently thought to be too abundant, became scarce. Some investors found that the assets that they assumed were liquid were, in fact, frozen. Investors suddenly became extremely risk averse, leading to a surge in demand for the least-risky assets, such as government bonds and treasury bills.

The lack of transparency and problems with information have clearly contributed to the ongoing market turbulence. The global repricing of credit risk is taking longer than many of us initially expected. This is because it is taking more time to unravel some of these complex and opaque instruments to get to the underlying assets, and then to find values for the assets themselves. In addition, uncertainty remains about the extent to which banks are holding these securities, how much they may be required to take onto their balance sheets, and what value to place on them. This uncertainty has exacerbated problems in the global interbank funding market, but because of their strong balance sheets, Canadian banks have been somewhat less affected. Over time, market forces can still be expected to work out these problems. But markets need information to operate efficiently. So, it is in the interest of market participants to make sure that parties have access to all necessary information.

Globally, markets for structured asset-backed securities remain under stress. In Canada, the problems have been most acute in the market for structured, non-bank-sponsored, asset-backed commercial paper. The information needed to properly price these products is only now beginning to be made available. With this information, investors and the providers of assets and liquidity are now progressing towards restructuring agreements.

As we go forward, we can expect that investors will demand greater transparency where it is now lacking. Vendors of financial instruments will then need to structure them in such a way that market players can clearly see what they are buying. More fundamentally, investors must take on more responsibility for diligent research, so that they can better understand the nature of their investments. Put another way, investors must demand access to appropriate information so that they can do their own homework, and then they must do that homework. It seems to me that many of these desired outcomes will be accomplished through natural market forces responding to these events. For example, when investors demand much higher rates of return for opaque products, there will be a strong incentive for vendors to provide products that are more transparent.

Let me touch briefly on the role of credit-rating agencies in all of this. There is an article in the current FSR that expands on the issues related to the possible reform of the credit-rating process.[5] One thing that is clear is that in the future, credit-rating agencies will find it to their advantage to explain more clearly the rationale for, and limitations of, their ratings for highly structured products. There are some natural, self-correcting market forces at work that should lead the rating agencies to improve their processes. Indeed, those credit-rating agencies that do not work harder to improve their processes will likely have fewer clients willing to pay for their services. As I understand it, most agencies are working on such improvements.

But credit-rating agencies are not to blame for the lack of information about those highly structured products that were sold to highly-sophisticated investors in the so-called exempt market. In the retail market, securities regulators impose strict requirements about the information that must be provided through a prospectus or term sheet. But there are no such requirements in the exempt market. It seems to me that some very basic disclosure is needed in every market. And since securities designed for the exempt market are usually required to carry a rating from a credit-rating agency, one way to ensure that appropriate information is available could be to require issuers to publicly disclose the same information that they make available to credit-rating agencies. In this way, investors would have access to the information they need in order to make informed decisions.

Another issue that we need to think about is how to get the right incentives in place for loan originators, so that credit quality is maintained and credit can be appropriately priced. I mentioned earlier that, in some cases, the creation of loans largely for immediate securitization reduced the incentive for originators to maintain credit standards. Since the originators were immune from default risk once the loan was completely securitized and sold, they lacked the proper incentives to adequately assess the creditworthiness of the borrower. It may be that natural market forces will go a long way towards rebalancing incentives, but the question can be asked: Are there ways to encourage the more

---

[5] Mark Zelmer, "Reforming the Credit-Rating Process." Bank of Canada *Financial System Review* (December 2007): p 51-57.

appropriate use of securitization? It may be possible, for example, to have asset-backed securities carry some type of "branding" or "certificate of origination" that would provide a clear incentive for the loan originator to exercise due diligence in extending the loan before it is securitized. Or, we can look for ways to encourage originators to keep a substantial portion of the riskiest tranche of the product they are selling on their own books.

Implications for Monetary Policy and the Economy

Let me now discuss the impact of these recent market dislocations, both on our work at the Bank of Canada, and on the Canadian economy. The impact on the Bank has been two-fold. First, we have undertaken open-market buyback operations and made sure that Canadian banks have had access to our Standing Liquidity Facility, so that they have been able to deal with any overnight liquidity difficulties. This is a normal role for any central bank, and it will continue. But, in the wake of recent events, we are currently looking at whether some types of liquidity disruptions in Canada might be better addressed if the Bank of Canada had a facility that would provide liquidity at terms longer than overnight. We are also examining changes necessary to allow the Bank to accept a wider range of securities for our buyback operations.

The Bank’s other role, of course, is to conduct monetary policy with the aim of delivering low, stable, and predictable inflation. We have been working to ensure that the financial system has the proper amount of liquidity so that the overnight interest rate – our key policy rate – remains close to target. But what we have seen since this summer is a widening of the spread between short-term market interest rates, such as the rate for commercial paper, and our target for the overnight rate. This is important, because these short-term market rates are a crucial link in the way monetary policy is transmitted: from our key policy rate, to the cost of credit, to spending, production, employment and, ultimately, to the rate of inflation.

These wider spreads have persisted, and they represent a tightening of credit conditions in Canada. These tighter credit conditions have come as financial market difficulties have intensified over the past few weeks and as bank funding costs have increased globally. At the same time, there is an increased risk attached to the prospects for demand for Canadian exports because the outlook for the U.S. economy – particularly the U.S. housing sector – has weakened. Uncertainty related to all of these factors has led to exceptional volatility in financial and currency markets globally.

While there remain upside risks to inflation in Canada, all factors considered, the Bank judges that there has been a shift to the downside in the balance of risks around our October projection for inflation. In light of this shift, we lowered the target for the overnight rate last week. Before our next interest rate decision in January, we will assess all economic and financial developments and the balance of risks, and do a full projection for the economy and inflation.

Conclusion

Ladies and gentlemen, as you know I will be stepping down as Governor of the Bank at the end of January, and concluding more than thirty-five years of involvement in economic policy within the public service. Since this is my last public speech as Governor, I thought it might be apt to conclude my remarks today with three of the most important lessons for economic policy that I – and I believe many Canadians – have learned over the past thirty-five years.

The first lesson is that both individuals and firms must always be prepared to adjust quickly to changing global economic circumstances. The world will evolve in ways that we cannot predict, so we must be prepared to deal with change and seize new opportunities as they arise. Perhaps even more importantly, we should not cling to activities that are no longer economically justified, however difficult and painful adjustment may be. Not adjusting is not an option. In the end, rapid adjustment is less painful than prolonging activities where we no longer hold a comparative advantage. This is the lesson that I and many other Canadians learned from our difficulties in the 1970s and the early 1980s.

Second, we have all learned the importance of achieving and maintaining sustainable levels of public debt. Canadians paid a very real price in the 1990s to control the growth of public debt, and have wisely used the favourable conditions of the past decade to bring down the ratio of public debt to GDP. Although conditions will not necessarily be as favourable over the next decade as they have been recently, nonetheless, further efforts to reduce the debt-service burden are needed in order to prepare for the inevitable effects of the aging of our population.

Third, we have all learned that the most important contribution a central bank can make to economic welfare is to maintain confidence in the future value of money. In the 1970s, we all witnessed the economic and social instability caused by high and volatile inflation. In the 1980s, we paid the price of recession to get inflation under control. Since the early 1990s, our inflation-targeting regime has kept inflation low, stable, and predictable at 2 per cent. This, together with fiscal consolidation, has helped to keep growth more steady, employment to rise to historically high levels, and unemployment to fall to levels not seen for decades. My colleagues at the Bank will continue to search for technical improvements in our inflation-targeting regime, but I am confident that the Bank and my successor, Mark Carney, will continue to keep inflation low, stable, and predictable, for the benefit of all Canadians.

Finally, let me close by saying that it has been an enormous privilege for me to be able to serve Canadians for three and a half decades. I am grateful for having had that opportunity, and I am hopeful that, in some way, my efforts over the years may encourage others to follow in the service of Canada and its people.