David Dodge: Turbulence in credit markets – causes, effects, and lessons to be learned

Remarks by Mr David Dodge, Governor of the Bank of Canada, to the Vancouver Board of Trade, Vancouver, 25 September 2007.

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I'm very happy to be back in Vancouver and to have the opportunity to address the Board of Trade for the fourth and final time in my capacity as Governor. When considering a topic for today, I had planned to use the quiet moments of the summer to organize my thoughts about the evolution of the Canadian and global economies since 2001, and offer some ideas about the lessons that could be learned from the events of the past seven years.

Unfortunately, as many of us here well know, this past summer was rather short on quiet moments. In August, the attention of policy-makers and the business community in general was focused on some fairly serious turbulence in financial markets. And so, rather than using my speech today to look back over the past seven years, I will instead look back over the past seven weeks and review what has taken place in global and Canadian financial markets. Of course, events are still unfolding and will likely continue to evolve for some time. Still, it's not too early to discuss some of the causes and effects of the market turbulence and, along the way, identify some of the lessons to be learned from these events. I will also talk about the actions that the Bank of Canada took in response. I'll then have a few words to say about the potential impact of the market turbulence on the outlook for the Canadian economy.

Turbulence: causes and effects

To get a grasp on the events of the summer, it's important to have some context. The turbulence in financial markets did not come about against a backdrop of economic weakness. Indeed, over the past number of years, the global economy has shown remarkable strength. We were also seeing encouraging signs of growth being spread more evenly. At the same time, there was continued robust demand for Canadian goods and services, and this led to a significant improvement in Canada's terms of trade, helping to support the Canadian dollar.

But there were signs of potential trouble in the global economy. To begin with, we were seeing a growing excess of desired global savings relative to desired investment. Quite naturally, this 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.

With the decline in longer-term interest rates, investors stepped up their demand for riskier assets that would deliver greater returns than investments with a lower risk. This search for yield led to a narrowing of spreads between the yields of risky assets, such as lower-rated corporate bonds, and the yields on government bonds. The narrowing of risky spreads became so pronounced and so persistent that many central banks – including the Bank of Canada – began to question whether these spreads adequately reflected the credit risks that were involved. A re-pricing of risk was probably necessary, but the real question was how, and in what manner, it would take place.

Besides the need for a re-pricing of risk, other factors contributed to the market turbulence this summer. Originators of loans – both bank and non-bank institutions – were increasingly opting to securitize the loans they made, including U.S. subprime mortgage loans. By "securitize," I mean to bundle loans together into securities backed by the cash flows generated by the loan repayments. These securities were often sold in tranches that offered varying degrees of protection from the default risk involved. These structures allowed higher-risk assets to take on the qualities of lower-risk assets, and this fuelled the demand for the creation of higher-risk assets, which led to a global decline in standards for mortgage loans and the emergence of bonds with weaker covenants. Further, some of these assets embedded significant leverage.

The originators of these loans had fewer incentives to carefully assess the creditworthiness of borrowers, because once the loan 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 this decline in lending standards, combined with financial engineering, was helping to spur merger and acquisition activity, including private-equity takeovers, as well as lending in markets such as the U.S. subprime mortgage market.

The process of securitization is not new. Securities backed by mortgages, credit card receivables, or other types of assets, have been around for years. But increasingly complex securities have been developed in response to the demand for higher returns. And as these securities have become more complex and opaque, in many cases it has become harder to determine the quality of the assets at the root of the security and to assess the counterparty risk.

This is not to suggest that the evolution of these new, complex instruments has been a negative development. Indeed, these instruments have allowed the separation of different types of risk, such as credit and market risk. This has promoted better risk-management practices, and has allowed different types of risk to be borne by those best able to do so. Securitization has encouraged innovation and enhanced the ability of the banking sector to originate new loans while remaining well capitalized.

The final point to make in terms of the causes of this summer's turbulence has to do with how these complex securities are valued. Trading of these securities in the secondary market is rare and, if trading does occur, it takes place in the over-the-counter market. As such, 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 assumptions on which they are based. Indeed, many of the models assume that the assets underlying these securities can be readily traded in a liquid secondary market. In August, it became clear that this assumption would not always hold.

So, we can now see many of the factors that made credit markets vulnerable to this summer's dislocations. The re-pricing 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 that were 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 was extremely difficult for 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 nothing to do with U.S. subprime mortgages. Market 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. Even the market for overnight loans was affected. 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 re-pricing of credit risk is an ongoing process, and the events of this summer represent a bump in the road. Unfortunately, that bump means that it may take a while to achieve an appropriate pricing of risk. This is because it will take 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. Over time, market forces can be expected to work this out. But markets need information in order to operate efficiently. So, it is in the interest of market participants to make sure that parties have access to all the necessary information.

This is the first lesson to be learned – the importance of transparency in financial markets. Two weeks ago in London, I spoke about how the events of the summer helped to make a clear case for transparency. Investors should 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 do their own homework instead of simply relying on the word of credit-rating agencies. 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. Similarly, credit-rating agencies will likely find it to their advantage to explain more clearly the rationale for, and limitations of, their ratings for highly structured products. They should make it clear that their ratings should not be used with the same degree of certainty as ratings for conventional, single-name issuers, and that the securities involved do not trade with the same degree of market liquidity. There will undoubtedly be calls for tighter government regulation for credit-rating agencies. But I would caution against any knee-jerk regulatory response. Given the events of the summer, it seems likely that those credit-rating agencies that do not work harder to ensure that users understand the nature of their ratings will soon have fewer clients willing to pay for their services.

There is one other lesson I want to mention at this point. We need to think about how to get the right incentives in place for loan originators, so that credit quality is maintained and credit is appropriately priced. As I mentioned earlier, the creation of loans for immediate securitization reduced the incentive for originators to maintain credit standards. This indicates a classic principal-agent problem: Since the originators were immune from default risk once the loan was securitized and sold, they often lacked the proper incentives to adequately assess the creditworthiness of the borrower. We need to think hard about how to get the incentives right. It may be that natural market forces will go a long way towards rebalancing incentives, but there may also be an active role for policy-makers in this regard. Another issue related to securitization concerns the capitalization of banks. If banks are moving securitized loans off their balance sheets, but still providing liquidity guarantees for these securities, how much capital should they be required to set aside? The authorities at the Basel Committee may need to revisit this issue in light of recent experiences.

This summer's turbulence had an effect on many segments of the money markets, including the market for overnight funds. The overnight market is now well on its way back to normal operations in Canada, and I'll talk about that in a few minutes when I discuss the role of the central bank. However, problems in other areas of the money markets have not yet been resolved.

In terms of the market for asset-backed commercial paper (ABCP), about two-thirds of Canada's roughly $120 billion ABCP market is composed of conduits sponsored by our major domestic banks. These banks have agreed to provide global-style liquidity support to their conduits, and investors have every reason to be confident that our banks have the capacity to continue to support their conduits as necessary. Although the spreads between bank-sponsored ABCP and treasury bills have narrowed a bit in recent days, it is somewhat surprising that they have not narrowed further and more quickly, given the strong balance sheets of Canadian banks.

The remainder of Canada's ABCP is third-party, or non-bank-sponsored, and roughly three-quarters of this is highly structured. Because liquidity for this paper was guaranteed only in the event of a "general market disruption," liquidity providers – most of whom are international banks – declined to step in as this paper has come due. Thus a fundamental work-out, or restructuring, of third-party ABCP is required. Discussions in Montréal between investors and liquidity providers as to how to achieve such a restructuring are progressing. I would encourage the parties involved to support this process – all investors and all international banks. I remain hopeful that, over time, this process will lead to useful results.

The role of the central bank

Now let me talk about the actions of the Bank of Canada over the past seven weeks. Essentially, our actions helped us fulfill two fundamental roles of a central bank – providing liquidity to the payments system, and formulating monetary policy.

In terms of the first role, it is absolutely normal and proper that central banks should provide liquidity to the payments system, especially when financial institutions are faced with markets that have become illiquid. This is precisely the situation in which we found ourselves this summer. With money markets seizing up, many institutions found it difficult to obtain necessary liquidity. So the Bank of Canada, like other central banks, made it clear that institutions could access our regular liquidity facility when required. The Bank of Canada's Standing Liquidity Facility can be accessed daily, at a rate 25 basis points above our target for the overnight rate, by direct clearers involved in Canada's wholesale payments system. To access this liquidity, institutions can pledge a range of easily priced securities as collateral.

The events in August placed strong upward pressure on the overnight interest rate, moving it above our target. And so we carried out open-market buyback operations to inject liquidity, with the goal of bringing the actual overnight rate closer to our target. We also temporarily expanded the list of securities that market participants could use as collateral in these buyback operations. In addition, we provided liquidity by increasing our supply of settlement balances as we normally do when we see an increased demand for cash balances. All told, our actions were effective in helping to improve the functioning of the overnight money market. So we have now restored our original list of securities eligible for use in buyback operations, and we have gradually reduced the level of settlement balances. And while it is true that many term money market spreads remain abnormally wide, the market is functioning. There have been increasing numbers of transactions in this area and spreads are beginning to narrow. In these circumstances, there does not appear to be anything the Bank of Canada could usefully do to improve the functioning of this market.

The events of the summer have also had some important implications for our role as the country's monetary policy authority. Before explaining these implications, I should start with some background. The Bank's policy rate is our target for the overnight interest rate. This rate is crucial for the transmission of monetary policy throughout the economy. When we adjust our target for the overnight rate, we set in motion a chain of consequences that influences other interest rates in financial markets and, through the cost of credit, spending, production, employment and, ultimately, the rate of inflation. By adjusting our target, we are aiming to keep total demand and supply in the economy in balance, thus keeping inflation low, stable, and predictable.

During the summer, however, we saw 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. Should these wider spreads persist, it would represent a tightening of credit conditions in the economy that would occur independent from any movement in our target for the overnight rate. Thus, any given policy rate would be somewhat more restrictive than was previously judged.

This leads me to what is perhaps the most important lesson that central bankers can learn from these events. Let me emphasize this by returning to the point I made earlier about how the process of securitization enhanced the ability of financial institutions to make loans. It seems to me that in recent years, central bankers may not have fully appreciated just how much the increase in securitization represented an easing of credit conditions. Loans were being shifted off balance sheets, allowing more loans to be made. If securitization led to the creation of loans that would not otherwise have been made, then this was a source of demand in the economy that we as central bankers likely did not fully take into account. Any given policy rate would thus be less restrictive than was earlier judged, implying that interest rates globally might have been lower than would have been optimal. However, since both global and domestic inflation have been largely contained over this period, we should not exaggerate the magnitude of this effect.

A reduction in securitization now seems likely, and we can expect a degree of re-intermediation by financial institutions. All other things equal, in Canada, this will lead to a higher cost of credit relative to the overnight interest rate than was the case prior to this summer. But how much tightening will this lead to in the longer run? And will the process of re-intermediation persist, and thus affect the conduct of monetary policy going forward? These are key questions that we at the Bank of Canada need to think about. And it may be some time before we have definitive answers.

The potential impact on the Canadian economy

Finally, the more immediate question is: What are the implications of the turbulence in money markets for Canada's economy? As the Bank noted in its interest rate announcement earlier this month, the near-term economic prospects for the United States are weaker than earlier expected, as events in financial markets will likely exacerbate the adjustment in the U.S. housing sector, making it more pronounced and more protracted. This implies weaker U.S. demand for Canadian exports. However, economic growth in Canada in the first half of this year turned out to be stronger than we had projected, and near-term prospects for economic growth outside North America continue to be very favourable. And so at our last fixed announcement date, we said that the Canadian economy now appears to be operating further above its production potential than we had estimated at the time of our July *Monetary Policy Report Update (MPRU)*. Domestic demand remains robust, buoyed by our continued strong labour market, rising wages, and higher-than-expected increases in housing sales and prices. But as I mentioned, the turbulence in financial markets has meant some tightening of credit conditions for Canadian borrowers. This should temper the growth of domestic demand, although the extent of this effect is difficult to assess.

Against this background of a likely weaker track for exports and tighter credit conditions, along with signs of stronger domestic demand, we judged that the current level of our target for the overnight interest rate – 4 1/2 per cent – is appropriate. However, there are significant upside and downside risks to the outlook for inflation. On the upside, there is a possibility that household demand in Canada could be stronger than anticipated, while on the downside, the ongoing adjustment in the U.S. housing sector could be more severe and spill over to the U.S. economy more broadly. In recent days, the Canadian dollar has moved sharply above the trading range assumed in the July *MPRU*, and we need to look at the causes of this strengthening, should it persist. And, as always, we need to assess the effect of movements in the exchange rate on the balance of aggregate demand and supply in the Canadian economy. In addition, as I noted, there is uncertainty about the extent and duration of the tightening of credit conditions in Canada and, hence, about the tempering effect this will have on the growth of domestic demand. Gauging the effects of the financial market turbulence on credit conditions, and the implications for the Canadian economy, will be one of the Bank's most pressing tasks over the coming months.

We will provide analysis of these issues in our next *Monetary Policy Report*, which will be published on 18 October.

Conclusion

Ladies and gentlemen, let me conclude. This was not a very pleasant summer for many people. Turbulence in financial markets is not easy to deal with, and it is certainly not welcome. But if we can learn from these events and retain the valuable lessons, then global financial markets can emerge from this turbulence stronger and more efficient than before. Ultimately, this can be to the benefit of us all.