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## Lessons for banking reform: A Canadian perspective

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# Lessons for banking reform: a Canadian perspective

**Canada's banks have stood firm throughout the crisis, despite Ottawa's aversion to prescriptive rule-based regulation.**

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The Canadian banking system has performed relatively well during the current financial turmoil. Indeed, in October 2008 the World Economic Forum rated Canada as having the soundest financial system in the world. This strong performance can be attributed to good macroeconomic fundamentals, a conservative risk appetite, and a strong regulatory regime. However, Canada has not been immune to the global financial turmoil and its banking system will continue to face pressures in the wake of the global economic recession. There are certainly areas where improvements can be made.

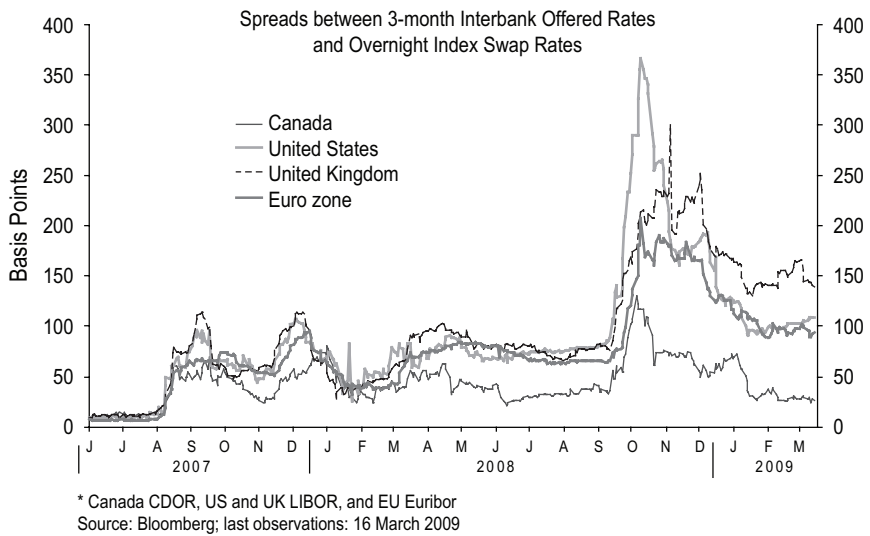
In this article, we begin with a look at the performance of Canadian banks, **Priorities** followed by a review of the regulatory environment and the role it has played in maintaining the health of the Canadian banking system. We conclude with a discussion of key priorities for financial reform in Canada and abroad.

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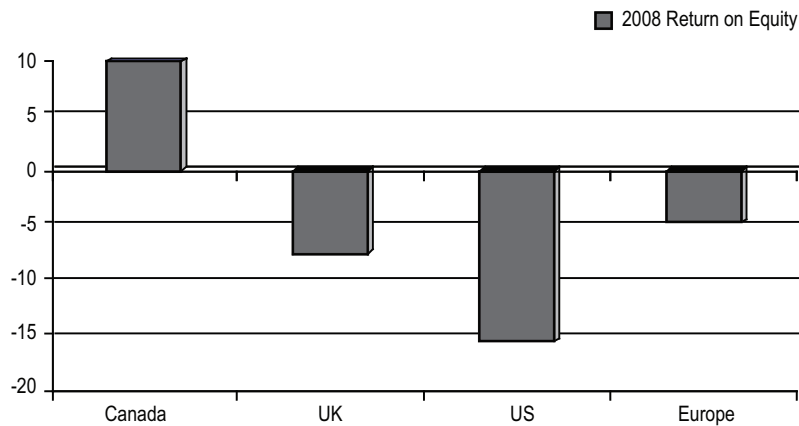
## The performance of the Canadian banking system

Unlike many foreign banks Canadian banks have not required injections of public capital.<sup>1</sup> However, they have not been immune to the funding challenges faced by banks around the world. Like many others, Canadian banks rely heavily on wholesale funding, which accounted for almost half of their total funding in 2008. However, they also have a solid retail deposit base (approximately 30% of funding) and thus rely less on securitisation and repos (20%). In recent months, the liquidity position of Canadian banks has improved as they took advantage of the liquidity facilities provided by the Bank of Canada and raised medium-term funds by selling insured residential mortgages to the Insured Mortgage Purchase Programme offered by the federal government-owned Canada Mortgage and Housing Corporation. They have also benefited from strong retail deposit flows and a slowdown in demand for credit from households and businesses. Funding spreads, while still high compared to pre-turmoil levels, have declined and are well below those in other major jurisdictions.

**Figure 1: Spreads across countries**



**Figure 2: The rate of return of Canadian banks (%)**

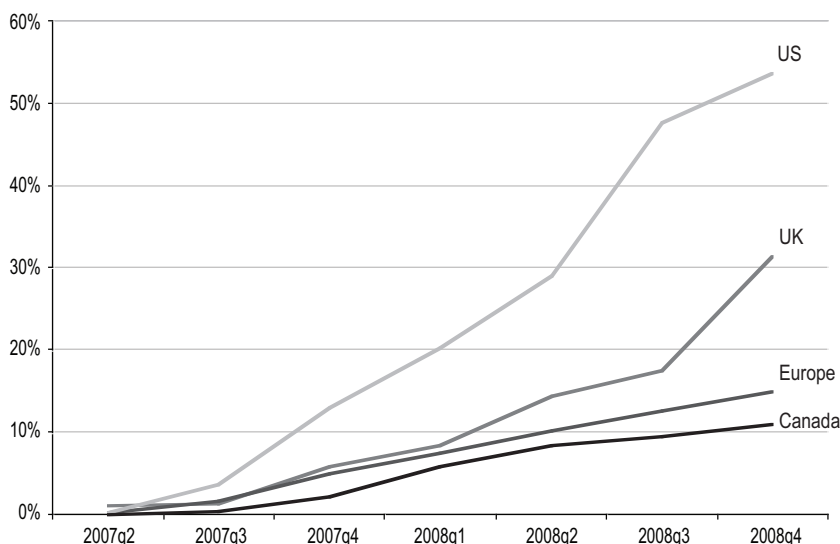


Even as global economic conditions have worsened, Canadian banks remain profitable. Five of the six largest banks reported a profit in 2008 and all six have reported profits for the first quarter of 2009. Return on equity has fallen from peak levels, but is still a respectable 9.9% on average.

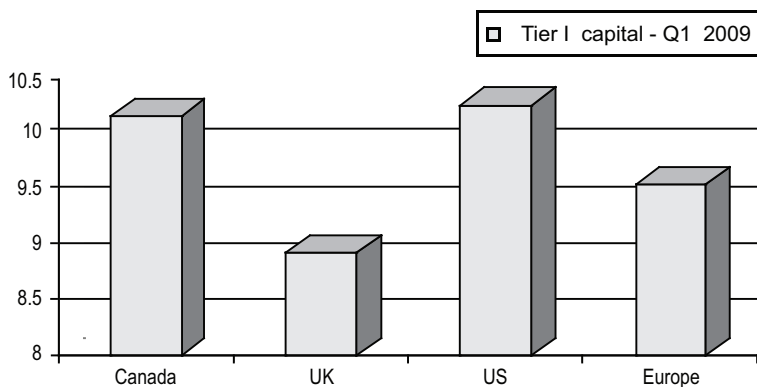
This strong performance is due in part to the relatively conservative risk appetite of Canadian banks. They have still experienced losses due to the financial turmoil and economic slowdown, but to a much lesser extent than in some other countries. While loan losses will almost certainly continue to rise over the near future, the relatively conservative nature of Canadian banks has helped to fortify them against large losses. They did not originate subprime mortgages to any material extent. Also, they are well diversified geographically and across business lines (retail banking, wholesale, and wealth management), and do not participate heavily in markets for the more exotic instruments.

As is discussed in the next section, leverage in Canadian banks is well managed, in line with rules maintained by the Office of the Superintendent of Financial Institutions (OSFI). This may have restrained them from growing their

**Figure 3: The cumulative writedowns of Canadian banks (% of shareholder equity)**



**Figure 4: Tier 1 capital, international comparison<sup>2</sup>**



assets as aggressively as in other jurisdictions, thereby helping to maintain their overall quality. Canadian banks also carry substantial amounts of high quality capital to deal with unexpected losses, a result of their own business practices and the regulatory regime. While Basel II requires Tier 1 and total capital ratios of 4% and 8% respectively, Canadian banks are required by OSFI to hold 7% and 10%, and typically hold more in practice. As of the end of the first quarter of 2009, their average Tier 1 capital ratio was 10% and the total capital ratio stood at almost 13%. Perhaps even more revealing is their ability to continue to raise high quality capital in private markets. As the global financial turmoil has continued, markets have demanded high capital ratios of financial institutions. Canadian banks issued close to \$14 billion of Tier 1 capital from private markets since the height of the market turmoil last fall, largely in the form of preferred shares but also common stock and hybrids, suggesting confidence in the Canadian banking sector.

**Solid fundamentals** To summarise, the strength of Canada's banking system has emerged from several sources, beginning with a conservative approach that was combined with diversification across business lines and geographically. It has also benefited from solid macroeconomic fundamentals that include credible monetary policy and sound fiscal management, with years of government surpluses behind it, together with an enhanced focus on system-wide financial stability by the Bank of Canada. Another essential element was a credible and sound regulatory environment, to which we turn next.

## **The Canadian regulatory framework**

The notable features of the Canadian system of prudential regulation that distinguishes it from other countries can be grouped into four categories: (i) the regulatory framework; (ii) market structure and product design; (iii) principled, reliance-based supervision; and (iv) risk-based prudential regulation.

### **(i) The regulatory framework**

Canada's system for regulating banks relies on independent, clearly-mandated agencies that work together on areas of common interest. This structure and co-operation is a source of strength. The OSFI is responsible for prudentially regulating banks<sup>3</sup> and this prudential focus ensures that the soundness of banks is not compromised by competing objectives. Opportunities for regulatory arbitrage are constrained by the fact that it is responsible for prudentially supervising most systemically important financial institutions operating in the country, including banks and federally-incorporated insurance companies. Further, prudential regulation does not occur in a vacuum. The Department of Finance has overall responsibility for federal financial sector policy; the Bank of Canada promotes the economic and financial welfare of Canada through the conduct of monetary policy, its role as lender of last resort, and through its oversight of systemically-important payment, clearing and settlement systems; the Canada Deposit Insurance Corporation provides industry-funded deposit insurance protection for federally regulated financial institutions; federal and provincial agencies – such as, the Financial Consumer Agency of Canada – protect consumers through their focus on market-conduct issues; and, finally, provincial securities commissions regulate capital markets.<sup>4</sup>

These agencies regulate the entities or activities within their mandate – for example, the OSFI prudentially regulates the entire bank, while market conduct regulators regulate all activities within their sphere. This combines regulation by entity (for example, bank creditor protection) and by activity (for example, consumer protection), providing for a comprehensive regulatory framework. Multi-agency fora have been established to promote inter-agency communication and coordination and facilitate issue resolution. As such, good communication, clear delineation of responsibilities, and structured settings for discussion are all established and have served Canada well during the current turmoil.

## **(ii) Market structure and product design**

The structure of a financial services marketplace can also be a source of strength – depending on how entities are organised, products are designed and interaction with the public sector occurs. The Canadian banking system is dominated by a handful of systemically important institutions. They compete to efficiently and profitably deliver a broad range of products across Canada through extensive nation-wide retail distribution networks. While domestic and personal and commercial banking tend to be at their core, these banks have wholesale and international operations that enable them to offer diversified and innovative products and to serve major businesses domestically and internationally. The presence of smaller banks, foreign-owned banks and less regulated financial intermediaries also helps to ensure the Canadian banking market is dynamic. In those cases, other regulators<sup>5</sup> may provide prudential regulation (for example, broker-dealer solvency) and regulate capital markets activities (funds may, for example, be regulated as advisers and issuers).

Different regulators often seek to apply similar rules to minimise regulatory arbitrage. As the OSFI requires banks to hold more capital for exposures to unregulated financial institutions, this reduces the amount of such exposures a bank can undertake and leverage is thereby constrained. Overall, the scope of Canada's financial regulatory framework has buoyed public confidence during the turmoil. Public confidence in banks is also enhanced by the depositor protection regime, which is funded by risk-rated premiums on deposit-taking institutions.

### **Reducing arbitrage**

Product design, influenced by public policy and market forces, can also be a source of strength. The following features of Canadian residential mortgages have mitigated problems experienced elsewhere:

- Banks are required to have insurance on mortgages if a purchaser has a loan-to-value ratio over 80%;
- The Canada Mortgage and Housing Corporation, a federal agency, has an explicit sovereign guarantee and is the largest insurance provider;
- Lenders relying on private mortgage insurers receive a government guarantee of losses (from insurer failure) above 10% of the original mortgage;
- The Canadian market for non-prime mortgages has been limited and ended for banks in 2008 when the Canada Mortgage and Housing Corporation ceased insuring such mortgages;

- Mortgagors are personally liable for the loan;
- Mortgage interest is not tax deductible;
- Most mortgages are originated by banks for their own balance sheets and, as a result, apply higher underwriting standards;
- Securitisation of mortgages is primarily for liquidity rather than risk transfer;
- Recognition of gain on sale and mortgage servicing right profits is limited. The OSFI's capital rules require banks, when calculating available capital, to deduct gains on sales arising from securitisations and to cap mortgage servicing rights and other intangibles.

### **(iii) Principled, reliance-based supervision**

The OSFI uses a transparent principles-based supervisory approach. This framework – which articulates regulatory objectives and relies on banks' boards and management to manage their business accordingly, on professionals to report, and on risk-based supervision to assess – has been a source of strength. Unlike rules-based supervision, a principles-based approach more easily adapts to changes and is less open to arbitrage as banks use their own best judgment and must prove compliance. Importantly, key principles, such as good risk management, become a way of doing business – not a compliance exercise. Further, the OSFI uses the work of internal auditors (and other controls) in making risk assessments, and relies on the work of external auditors regarding financial statements – allowing regulators to focus on key issues. Given limited resources, a reliance-based framework built on principles has been very effective.

Within its mandate, the OSFI has substantial discretion to enunciate principles in “guidance” and did so pre-turmoil with beneficial effect.<sup>6</sup> Although it will normally conduct extensive consultations, new legislation or regulations are not required to issue guidance. If financial institutions do not comply with OSFI guidance, the regulator has sufficient practical and legal powers to enforce compliance. The OSFI provides interpretations to clarify its guidance and, if it may have precedential value, publicises its views. During the turmoil, the OSFI has used its power to issue and interpret timely guidance – both to restrict undesirable activities and, subject to compliance with laws and international undertakings (such as Basel II), to permit additional flexibility. As it can act quickly, banks work to resolve issues consensually and in a timely manner. This flexibility gives the OSFI the ability to mitigate issues experienced elsewhere.

The OSFI supervises using a comprehensive, risk-based methodology – applied on a consolidated basis, including all subsidiaries in Canada and abroad. It focuses on an institution's material risks and the quality of its risk management, rather than applying a rules-based approach. Where a bank's risk management and governance is effective, the OSFI can rely on such internal processes. Where it is not, correcting this deficiency is a priority. To enable the regulator and deposit insurance agency to identify potential problems at an early stage and intervene effectively so as to minimise losses, a Guide to Intervention has been developed to promote awareness and enhance transparency. The guide outlines the types of

involvement that a bank can normally expect from the authorities. If issues are unresolved, this process can lead to a bank's restructuring, sale or winding-up. This flexible, well-understood and clear intervention framework contributes to financial stability.

#### **(iv) Risk-based prudential regulation**

Risk-based capital adequacy – that is, the amount and quality of capital and the level of risk and leverage – has been a key source of strength as the turmoil intensified. As noted previously, banks are required to meet supervisory targets on the level and quality of capital, which exceed international minimums. Other financial institutions are required to meet OSFI-specified minimum and supervisory targets. All financial institutions must establish internal targets to provide an operating cushion. Banks' boards of directors are expected to establish internal capital targets to cushion against volatility and unexpected losses from inherent risks – and to avoid breaching supervisory targets. During the turmoil, all major banks have, without reducing dividends, maintained capital in excess of supervisory targets, and have not required injections of government capital. Using internal targets helped to achieve this.

As common equity is permanent and absorbs losses, the OSFI requires that it is, by a material amount, the predominant component of Tier 1 capital.<sup>7</sup> Given that it can be more difficult and expensive to raise common equity during stress – and markets highly value common equity during stress – the OSFI's pre-turmoil requirement that common equity is 75% or more of Tier 1 capital has been a source of strength. Capital adequacy depends on a bank's risks – which the Basel II capital framework tries to measure. The OSFI has established principles to help manage concentration risk: banks limit single name exposures to 25% of regulatory capital. Basel II establishes higher risk-weighted assets for riskier business, but the OSFI demands that banks with higher risks should offset that risk with higher capital targets.

Focusing on risk-based capital adequacy ensured that banks with greater risks entered the turmoil with greater cushion against unexpected losses. In addition to risk-based capital adequacy, Canadian banks must meet a leverage (assets to capital multiple) test, that typically ensures a ratio of total assets to total capital of no more than 20 times. In practice, banks must maintain asset-to-capital measure below an individually authorised amount. A bank meeting certain conditions may be assigned a maximum authorised multiple of up to 23 times; alternatively, a bank may be assigned a lower multiple than 20 times. Asset-to-capital measures capture elements not well reflected in the risk-weighted framework and recognise that excessive leverage is itself a risk. In the Canadian case, they acted to constrain leverage before the current turmoil – as banks needed to manage their leverage, they introduced less leverage into the Canadian system.

Finally, general allowances (such as, loan loss provisions) cushion against loss and complement capital. The OSFI's rules may require additional capital if provisions are inadequate – and may permit certain "excess" provisions to reduce required capital. To help cushion against loss, the regulator promotes an anticipatory approach to provisioning (that is, inherent losses not yet specifically

**Containing leverage**

identified) and suggests a floor of 0.25% of loans below which it would not normally expect general allowances to fall.

### **What next for financial reform?**

Despite having performed relatively well since the onset of the global financial turmoil, Canadian banks have nevertheless faced some serious challenges. This has led to major steps by the government and the Bank of Canada to ensure that they have continued access to key funding markets and can service the credit demands of businesses and households. Taken together, these and other initiatives have provided considerable support, although they have not yet eliminated the uncertainties surrounding financing and the risks to bank lending. The ongoing financial difficulties have prompted international discussion on desirable changes to financial systems. There is an evident need for substantive reforms in countries around the world, and while Canada's issues may be less acute, progress in this area is important for Canada as it is elsewhere. An ambitious agenda for regulatory reform has been put forward by the G20 during the London Summit in April, based on the work of the G20 Working Group on Enhancing Sound Regulation and Strengthening Transparency. It will require time to implement all of its recommendations, but it is nevertheless very helpful to know what kind of financial system should emerge as economic conditions improve and financial stability is restored. Within the broad range of possible initiatives, developments in the Canadian banking sector suggest several areas that deserve particular emphasis at the international level.

**Caught in the crossfire** One of the most striking elements of the Canadian experience has been the speed and depth of the financial contagion that occurred across national borders, despite the solid underpinnings of the domestic financial system. Most of the difficulties being faced by Canadian banks originated from outside the country. This is not to suggest that there were none of domestic origin – a poorly structured non-bank asset-backed commercial paper market is one example of homegrown problems. However, the modern reality is that every country has a large stake in the global effort to build a more sustainable financial framework. Finding solutions at the international level will require an extraordinary degree of international cooperation. International organisations and other mechanisms are already adapting to meet changing demands. A reconstituted Financial Stability Forum in the form of the Financial Stability Board, with an expanded membership, for example, is a welcome development. The extent to which events abroad can affect domestic financial systems also argues in favour of an enhanced global financial surveillance mechanism, as is being put in place by the Financial Stability Forum and the International Monetary Fund. These surveillance mechanisms should incorporate the analysis that is produced at a growing pace by domestic authorities responsible for financial stability.

#### **(i) Priorities for countercyclical regulation**

Effective regulation nevertheless begins at home. A macroprudential overlay that complements sound microprudential regulation and supervision is an essential component of this. A system-wide perspective which incorporates all significant

financial activities, including banks, markets, and their interactions with the real economy, is necessary to evaluate the risks faced by financial institutions and the potential for the propagation of adverse shocks in the system, as well as the potential for macroeconomic factors to adversely affect financial institutions and markets. It is critical that domestic authorities aim to avoid damage to the financial system as a whole. To make this approach work requires effective communication across the authorities responsible. The multi-agency committees established in Canada and described earlier, are the basis on which the necessary communication has been achieved during the financial turmoil. This structure has proved helpful in bringing to the table both a microprudential and, to an increasing extent, a macroprudential perspective.

The macroprudential approach also leads naturally to a focus on the potential for procyclical behaviour within the financial system that might reinforce economic upturns and downturns. As the current turmoil has grown, a key concern in Canada has been the potential for the increased reticence to lend during a cyclical downturn to be reinforced by primarily market-driven pressures to add to capital (or at least more carefully conserve capital) in an environment where it may be difficult to do so. Canadian banks have been successful at raising Tier 1 capital from private markets since the height of the turmoil last fall; although the need to do so demonstrates the pressures they face to maintain high capital levels. To minimise this risk, it would have been desirable if the global banking system had entered the current turmoil with more capital. To mitigate the potential for the regulatory framework to contribute to procyclical behaviour, a number of avenues are being pursued internationally. Although broad implementation of relevant changes should wait until after more stable conditions return, it is extremely important to examine how we can ensure that the financial system does not serve to amplify shocks but instead helps to absorb them.

### **Market pressure**

One of the most promising avenues of research is the potential role for countercyclical capital buffers. Although risk is often perceived to diminish during good times, perhaps allowing for lower levels of capital, our experience is that it is during good times, especially very good times, that risks are built up. Capital, which is intended to guard against unexpected losses, should be augmented when the macroeconomic environment is buoyant so that buffers exist that can, if market pressures allow, be drawn down under more difficult conditions. Many difficult questions remain to be answered as to how these buffers could work in practice. An important issue is what variable (or variables) or metrics might be used to indicate the need to increase capital. If variables are used, they would ideally be consistent with the objectives of the buffer – for example, to guard against those circumstances that lead to higher macroprudential risks. As a result, credit growth and assets prices should be among those variables receiving consideration. Further, while firm-specific variables should be considered, these would raise the concerns that capital would increase/decrease for idiosyncratic reasons which may not create, or draw down, buffers at the right times and may not provide the systemic protection sought. Another important issue is ensuring that, regardless of which variables or metrics are used to adjust the buffers, the correct signals are sent on when to adjust them up or down so that they do not generate unintended consequences for the economy or financial system.

**Off-balance leverage** A leverage ratio, such as the asset-to-capital measure implemented by OSFI, could also be an effective means to prevent an inadequate level of capital emerging during a period of robust financial activity, when assets are rising quickly. Leverage ratios for some global banks exceeded 30 or even 40 times, creating significant vulnerabilities. A leverage ratio should include off-balance sheet items to the extent possible, given the recent experience of how they may be brought back onto the balance sheet.

While much of the attention has focused on financial institutions themselves, it is also important to consider the implications of their behaviour for financial markets and financial-market prices. In particular, regulations and market practices regarding capital for trading book activities, for risk-management systems within institutions, and for margin requirements, can lead to procyclicality in asset prices and thus contribute to procyclicality within the financial system as a whole. For example, methodologies which focus on the recent volatility of asset prices may suggest very low capital or margin requirements during periods of booming financial activity associated with low volatility. A sudden increase in volatility and falling asset prices could lead to much higher required capital or higher margins. This may encourage asset sales that further undermine market prices and impair the willingness of market makers to supply needed liquidity. These issues require more analysis, with increased consideration being given to the use of through-the-cycle measures.

Other areas being examined in international fora under what might broadly be described as the procyclicality agenda include provisioning arrangements and minimum capital requirements. The danger is that potential changes will be analysed in isolation, without due regard to how capital requirements and financial behaviour may evolve in response to the interaction of different capital-related initiatives. It is critical that proposals covering these different elements be assessed in concert and cumulatively, evaluating their aggregate impact on the banking system.

## **(ii) The scope of regulation**

Another important issue is how the activities of banks and markets have overlapped to an increasing extent and become more interdependent. This intertwining poses particular challenges for financial stability. The development of the shadow banking sector, including large investment banks, mortgage brokers, finance companies, structured investment vehicles, hedge funds and other private asset pools, did not go as far in Canada as in some other jurisdictions. Nevertheless, the scope of regulation must adjust to adequately capture the risks generated by these activities.

**Expanded regulation** An expanded perimeter for regulation, as proposed by the G20, is also consistent with a macroprudential perspective. All financial activities that could pose a systemic risk to financial stability should be appropriately supervised and regulated. This includes pools of capital of material size, leverage and maturity mismatches. To avoid regulatory arbitrage, the regulatory framework should strive to treat similar financial institutions and activities consistently, with the emphasis on functions and activities as opposed to legal status – thereby placing activities that generate similar risks into the same regulatory bucket

even if undertaken in different institutions. Banks require robust markets in order to operate effectively. Core markets that are essential to the financial system include those for interbank lending, for commercial paper and for repos for high-quality securities. Financial authorities, including central banks and regulators, must enhance measures that ensure these markets will remain open even under periods of stress. Improving the functioning of key markets such as securitisation and credit default swaps by ensuring robust infrastructure and, where practicable, standardising products is also a priority. It is neither feasible nor desirable to sharply separate the activities of commercial banks and capital markets, but it is necessary to better understand both the differences and interdependencies between them in order to regulate where needed and to do so more effectively.

### **(iii) Additional steps**

Finally, a range of other important action items are being actively debated within international fora. They are too numerous to cover here but include, for example, measures to improve the quality of bank capital, the effect of relying on wholesale funding, the risks posed by off-balance sheet exposures, the role of credit rating agencies, and the need for improved international solvency resolution. However, to minimise the potential for, and the impact of, future global financial system crises, the key lesson that we draw is the need to combine a macroprudential perspective with a traditional (micro)prudential regulatory perspective, and implement the cooperation that this implies across the relevant authorities at the national and international levels. □

## Notes

1. The Canadian banking system is highly concentrated: six large banks account for 90% of total deposits in the financial system. While other deposits are held by smaller regional banks and credit unions, the figures in this article relate to the six largest banks unless otherwise specified.
2. Note the Tier 1 capital numbers in other countries (for example, in the United States) may include capital provided by governments and, as such, may be considered to overstate the capital in those institutions when compared to Canada.
3. The OSFI balances depositor protection against allowing banks to compete and take reasonable risks. The OSFI co-ordinates consolidated prudential regulation of all banks and other federally-incorporated financial institutions and considers system-wide and sectoral issues that may negatively impact such institutions. While the OSFI may require corrective action for deficiencies, the boards of financial institutions are ultimately responsible for success.
4. Securities commissions are currently under provincial jurisdiction, but the federal government committed in early 2009 to work with willing provinces to streamline the securities regulatory system and to enhance its efficiency by establishing a Canadian securities regulator.
5. For example, provincial regulators may regulate securities firms and provincially incorporated deposit taking institutions and insurers.
6. In addition to risk-based capital adequacy, principles that were enunciated before the turmoil and have proven to be a source of strength include: the importance of stress testing to anticipate the implications of the adverse scenarios; the use of capital adequacy planning to raise capital when advantageous and to balance shareholder distributions and capital maintenance (to date, due to proactive programmes to maintain robust capital, no major financial institutions have reduced dividends due to the turmoil); and requiring liquidity policies, including contingency plans, for banks.
7. Until January 2008, the OSFI limited non-common Tier 1 capital (preferred shares and innovative/hybrid instruments) to no more than 25% of Tier 1 capital – in January 2008, this limit became 30% – late in 2008, to provide banks with additional flexibility, the OSFI increased this limit to 40% of Tier 1.