Canadian Financial System

Introduction:

Over the last 40 years the role of finance and the importance of the financial sector in the Canadian and other advanced economies have grown substantially. For instance, financial liabilities have risen sharply relative to GDP and trading volumes have surged. Finance operates through a complex system of interconnected institutions (banks, dealers, insurers), markets (equities, fixed income, futures, derivatives), infrastructures (monetary system, payments and settlements) and interventions by governments as issuers, regulators and participants. The financial system plays a vital role in supporting and promoting economic activity by facilitating payments, transforming the maturities of assets and liabilities to suit the needs of households and businesses, and transferring funds from savers to borrowers and investors. But it is vulnerable to contagion and subject to occasional turbulence and even crisis, which in turn may greatly harm the economy. Policy regarding the financial system must therefore promote two goals:

- Efficiency: facilitate the allocation of savings to most productive uses by borrowers at low risk-adjusted intermediation costs

- Stability: at the macro level, minimize the contribution of the financial system to the inherent cycles of optimism/pessimism in the real economy; at the institutional level, minimize risk of failure that could have systemic consequences; at the market level, assure continuous markets

At the broadest level, policy should facilitate the development of markets and institutions which enhance efficiency and innovation while at the same time assuring the macro stability of the system. These can be conflicting objectives as financial innovation can become a source of instability if regulation and risk management in the financial institutions fall behind the curve, as they have tended to do in the past. Indeed, the global record seems to be one in which policy promotes efficiency until evidence of financial fragility and stress emerges, and sometimes a financial crisis erupts. In the Canadian context for example, policy primarily worked toward promoting efficiency from the late 1960s to the early 1980s. Then for 25 years or so thereafter, stability commanded as much attention as efficiency. The catalyst for such a rebalancing was the failure of two small domestic banks in the mid-80s. More recently the global financial crisis has squarely directed the attention of Canadian policy-makers on stability, although not because of troubles with toxic assets at domestic banks but as part of an international effort to bolster liquidity and stability in a world of interconnected financial institutions and markets.

Until the recent crisis, the growing scale and complexity of finance were widely believed to enhance both efficiency and stability, although such an assumption was less strong in Canada than in some other countries, notably the United States. Canadian financial institutions took a more cautious approach to financial innovation at some cost to their short-term growth and profits relative to more leveraged foreign competitors, relied relatively less on wholesale funding and kept relatively more liquidity. In part this stems from more stringent, coordinated and effective regulation and supervision in Canada, which provided the right incentives to financial institutions. Moreover, the domestic mortgage market was not a source of instability in the Canadian financial system, in part because mortgage lending standards

remained relatively high, mortgage securitization relatively low, and the generation of complex, risky products quite limited. Notwithstanding the ABCP fiasco, the "boring" Canadian financial system remained robust during the crisis and Canadian taxpayers were spared the burden of bailing out troubled financial institutions.

Besides concerns for financial stability, concerns about the cost and quality of the financial services provided to Canadians. have held in check potential gains of efficiency in the Canadian financial system. Indeed such concerns led the federal government to reject proposals for bank mergers in the late 1990s. At the same time the long-standing resistance of provincial governments to abandon a decentralized system of provincial securities regulation in favour of a single national securities regulator has likely reduced the capacity to oversee effectively the functioning and evolution of securities markets and establish effective forms of cooperation with capital market regulators in other countries.

There are some instructive lessons to learn from how Canada has managed its financial system over the last 40 years or so. This paper therefore aims to trace the development of Canadian financial market policy from the Porter Commission to the present, assessing its successes and shortcomings in meeting the twin objectives of efficiency and stability and dealing with their inherent conflicts, and second examine the challenges ahead in light of what we have learned from the current financial crisis.

Canadian financial market policy

The evolution of the Canadian financial system in the last 40 years or so has been the product of both regulatory and market-driven changes. Initially guided by the Porter Commission, amendments to the Bank Act from 1967 onwards have been key vehicles of regulatory changes. One of their main goals has been to stimulate competition in, and the competitiveness of, the financial sector by allowing its various institutions to respond to technological changes, the globalization of financial services, and demographic developments as they shape the desired asset-liability structure of household portfolios (Freedman 1998).

The 1964 report of the Porter Commission set an important goal for future Bank Act revisions by promoting competition both within the banking system and between banks and other financial institutions as a way to achieve a safe, efficient, equitable and adaptable financial system. It also recommended that "government securities regulation should be further strengthened and a federal regulatory agency established" to give leadership in the development of high and uniform standards of securities regulation and legislation and to work in cooperation with provincial authorities." While its impact on the regulation of financial institutions has been considerable, securities regulation has firmly remained in the hands of provincial governments.

The 1967 Bank Act revisions removed interest rate ceilings on bank loans, introduced federal deposit insurance, permitted banks to invest in non-insured mortgages and to borrow by selling debentures, and impose individual and aggregate (for non-residents) ownership limits on the shares of banks. The subsequent amendments, especially those of 1987 and 1992, largely eroded the former segmentation of the financial system across its five pillars (chartered banks, trust and loan companies, co-operative credit movement, life insurance

companies and securities dealers), first in 1980 by allowing banks to have subsidiaries operating in various financial areas (e.g. venture capital, mortgage loans) and foreign banks to establish subsidiaries in Canada, then in 1987 by permitting financial institutions other than securities dealers to enter the securities business, finally in 1992 by allowing various regulated financial institutions to enter each other's business directly, through subsidiaries or as agents. Thus by the early 1990s financial institutions could develop into financial conglomerates, and indeed Canadian chartered banks did quickly become universal banks (except for limitations on investments in non-financial business), partly through mergers with or acquisitions of investment dealers and trust companies. In part, the resulting breakdown of segmentation reflects an adaptive response to the intensifying concerns about the future profitability and competitiveness of Canadian banks in a world of increasing market funding for corporations, securitization, globalization, and integration of financial functions. One important consequence of being universal banks that provide one-stop service for the full range of household investment vehicles has been a high ratio of depository funding to total assets, which in turn was a key factor behind the relative resilience of Canadian banks during the financial crisis (Ratnovski and Huang, 2009).

Efficiency gains in intermediating between savers and borrowers/investors were considerable, the range of products on offer to savers and borrowers at affordable costs expanded enormously, transactions in foreign currencies and with non-residents increased vigorously. Regulatory and market-driven developments have led to upward trends in the bank shares of consumer loans and mortgage loans, and to a lesser extent business loans, from the late 1970's onwards (Freedman 1998, Calmès 2004). At the same time, the share of loans in non-financial business credit rose to a peak in the early 1980s and has since been on

a downward trend as issuance of stocks, bonds and, from the mid-1990s, commercial paper has grown much faster. For banks, which have become heavily involved in the flotation of corporate securities, this has contributed to the observed shift in the sources of revenues from interest income on loans to non-interest income from fees and off-balance-sheet activities. On the funding side for banks, reliance on wholesale markets tended to grow somewhat faster than retail deposits, but has diminished substantially as a proportion of total funding since late 2008.

Along with changes to the Bank Act, a few important steps were taken to strengthen the infrastructure and regulatory framework of the financial system. In 1980 the Parliament directed a new Canadian Payments Association (CPA), which comprises both banks and non-bank deposit-taking institutions, to take over responsibility for running the check-clearing system from the Canadian Bankers Association and to assume responsibility for planning the future evolution of the Canadian payments system. One signal achievement of the CPA has been the building and implementation from 1999 onwards of the LVTS – Canada's large-value transfer system which provide clearing and settlement services to financial, corporate and government entities via chartered banks and other large deposit-taking institutions. Among other things, this contributed to a more predictable cost of overnight funding for financial institutions. LVTS exceeds world standards for risk control, and at a low cost (Dingle xx). This system continued to function throughout the financial crisis, thereby supporting markets and financial institutions.

The regulatory and supervisory framework itself improved substantially, but only beginning in 1987 after the failure of CCB and Northland Bank in the mid-1980s exposed severe deficiencies in the supervision of deposit-taking institutions. The financial stress caused by

the extraordinary surge of interest rates in the early 1980s to tame inflation contributed to the ultimate demise of the two small banks. Up to the late 1980s, the supervision of deposit-taking institutions "had been compromised by ambiguity about the role and mandate of supervision and by weak incentives to respond effectively to troubled institutions" (Engert, 2005). This was evident not only in the failures of the two Canadian banks but also in the increased deposit insurance liability and losses of the Canada Deposit Insurance Corporation (CDIC). This episode heightened the perceived need to reinforce the incentives and ability of supervisory institutions to deal effectively with failing financial institutions. In the wake of the Estey Commission recommendations, important reforms took place in 1987 to strengthen the "financial safety net". First, a newly-created Office of the Superintendent of Financial Institutions (OSFI) replaced the Department of Insurance and the Office of the Inspector General of Banks with the mandate to supervise all federally-chartered depository institutions and insurance companies. Second, CDIC was given more supervisory scope to mitigate the moral hazard and insurance loss associated with deposit insurance. As well, a newly-created multi-agency Financial Institutions Supervisory Committee, (FISC), joining the Superintendent of Financial Institutions, the Chair of CDIC, the Governor of the Bank of Canada and the Deputy Minister of Finance, was charged with regularly discussing issues concerning the supervision of financial institutions, bank-holding companies, and insurance-holding companies, including the development of strategies to deal with troubled financial institutions. FISC increased the scope of the various agents to influence supervisory decision-making and to provide support when confronted with problem institutions. It also gave the Bank of Canada and CDIC the authority to require OSFI to investigate a financial institution.

Since the late 1980's, the supervisory regime has evolved towards clearer goals and improved incentives and greater authority to act with regard to troubled institutions. In turn, this has strengthened the incentives for financial institutions to avoid excessive risks. The regime was importantly clarified and reinforced in the mid-1990s, not coincidentally following the major Bank Act revisions of 1992 which led to major structural changes and efficiency gains in the financial system. In 1996, OSFI's mandate was re-focused on protecting the rights and interests of depositors, policyholders, and creditors while allowing financial institutions to compete effectively and take reasonable risks. This involved not only supervising financial institutions for soundness and law-abiding, but also promptly signaling and advising a financial institution that fails these criteria, promoting the adoption of policies and procedures to control and manage risk, and prudential surveillance of events that may have a negative impact on financial institutions. CDIC and OSFI jointly established a policy of early intervention with regard to a troubled institution according to four stages of increasing seriousness leading to insolvency. OSFI was also given the power to take control of an institution's assets, or of the institution itself, and to restructure or close the institution. In 1999, it started applying a framework for evaluating an institution's risks and the quality of its risk-management practices, and providing the supervised institutions with its assessment.

Besides concerns for financial stability, concerns about the cost and quality of the financial services provided to Canadians have held in check potential gains in efficiency. While the financial services sector policy was reviewed and reformed in the late 1990s, culminating with the adoption of Bill C8 in 2001, large Canadian banks in 1998 had their eyes on two mergers between themselves, which would reduce their number from five to three. Banks claimed that such mergers would generate economies of scale and boost their international

competitiveness. The government turned down the proposed mergers and their potential stimuli to efficiency because of its concern that the Canadian marketplace might not be as well served by a more concentrated oligopoly. Several years later, Allen and Liu (2005) reached the following conclusions from their research:

> "Our findings suggest that, all else held constant, Canadian banks could enjoy cost savings from becoming larger. This does not necessarily imply that the same cost savings would arise from bank mergers, because the business mix and input prices are likely to change after a merger. Even if cost savings can be achieved by joining two banks, those savings may not be passed on to consumers. Whether savings are passed on depends on the market structure and contestability in banks, topics that merit further research." (p.81)

One of the objectives of the subsequent Bill C8 was to make the domestic market for financial services more competitive through the entry of new firms. At the same time it created the Financial Consumer Agency of Canada (FCAC) to strengthen oversight of consumer issues and expand consumer education in the financial sector. In July 2010, FCAC was also tasked with the oversight of payment card network operators and their commercial practices. For these purposes, it monitors banks, federally incorporated or registered insurance, trust and loan companies, federally incorporated credit unions, retail associations and payment card network operators.

Meanwhile, developments on several other fronts have affected the financial system.

Money and capital markets have expanded enormously, with issuance of paper, stocks and bonds accounting for an increasing share of corporate sector funding. Important, early stimuli to financial market development were the removal of interest rate ceilings on bank lending in the 1967 revision to the Bank Act followed by a reduction in the chartered banks' secondary reserve ratio. This contributed to a sharp expansion of the treasury bill market, which in turn buttressed the expansion of private capital markets. Since the mid-1990s, markets for futures and derivatives have experienced considerable growth and the repo market has become a core funding source for banks and market makers. Securitization as a source of funding and investment opportunities through fixed-income markets has also grown substantially in importance until the recent financial crisis. The restructuring of the Canadian stock exchanges in the late 1990s allowed specialization and enhanced the expansion of the Montreal and Toronto stock exchanges. All this being said, the long-standing resistance of provincial governments to abandon a decentralized system of provincial securities regulation in favour of a single national securities regulator has likely limited the capacity to oversee effectively the functioning and evolution of securities markets and establish effective forms of cooperation with capital market regulators in other countries.

Another factor contributing to the stability of the Canadian financial system relates to housing. Not only was the housing price cycle relatively subdued in Canada over the last decade, but the negative impacts that a fall in housing price could have had on mortgage defaults, lenders' losses and the value of mortgage-backed securities were bound to be much smaller than in the United States. Mortgage lending standards remained relatively high in Canada as the maximum allowable loan-to-value ratio without compulsory government insurance was relatively low and the quality of verification and documentation relatively high. The size of the sub-prime market

and the fraction of mortgage securitized remained relatively modest. Two other factors prompted financial prudence from Canadian borrowers. In Canada, the homeowner is personally liable for any deficiency that remains after the foreclosure and sale of his/her home. In addition, because mortgage interest is not tax deductible in Canada, in contrast with the U.S., Canadians would tend to buy smaller, more affordable homes relative to their income than Americans would. In the 2000's, greater leverage in the mortgage market through no money down and extended amortization mortgages were allowed, but in 2008 CMHC ceased insuring non-prime mortgages and more recently the federal government tightened macro-prudential rules in regard to mortgages in response to high household indebtedness.

Monetary policy experienced regime shifts over the last 40 years, which eventually led to better macroeconomic outcomes and more efficient financial markets. Monetary targets prevailed in the late 1970s, followed by a search of a nominal anchor over much of the 1980s and a shift to inflation-targeting in the early 1990s (Thiessen 2001). Inflation-targeting anchored inflation expectations and contributed to reduce economic volatility and long-term interest rates. The publication of the Monetary Policy Report starting in 1995, the introduction of fixed action dates in December 2000 and the regular release of the Financial System Review from 2002 onwards buttressed Bank of Canada's credibility by increasing transparency and accountability in policy-making. Fixed action dates also led to improvements in the efficiency of the Canadian money market.

The financial crisis

Canadian banks fared quite well compared with international competitors during the financial crisis. They held less toxic assets, had strong capital ratios, higher levels of liquid assets as a share of total assets, and relatively high ratio of depository funding (Ratnovski and Huang 2009). In the background, rates of mortgage delinquencies and defaults remained low in Canada. Canadian life insurers, on the other hand, suffered large losses from reserve increases on their variable-annuity and segregate fund guarantees during the crisis. They continue to face substantial market risk. While their capital positions have exceeded the target level imposed by OSFI, one issue is whether existing capital requirements for segregated-fund guarantees are high enough. OSFI has released a draft advisory on this.

Canadian financial institutions did not escape financing pressures as funding markets became quite illiquid for a while. The importance of having continuous markets became stark as well as the crucial liquidity supply role of the central bank and the federal government (through its insured mortgage purchases) in helping institutions to obtain funding without having to engage in fire sales of less liquid assets in illiquid markets.

Canadian financial institutions started experiencing funding pressures in the summer of 2007. These pressures intensified in the fall of that year and then again in the fall of 2008 as counterparty concerns became very serious following the failure of large financial institutions in foreign markets. Liquidity premia in funding markets for government securities and financial institutions experienced spikes at that time. Funding markets, which include those for Government of Canada securities, repo, securities lending, unsecured private money markets, and foreign exchange provide essential liquidity to, and connect major players in, the financial system (Fontaine, Selody and Wilkins 2009). If they dry up, financial institutions and non-financial corporations can incur very serious liquidity problems as the experiences not only of

Lehman Brothers but also of AAA-rated General Electric in the United States vividly illustrate. That is where the role of a central bank as lender of last resort comes into play and it did in a big way in the advanced economies, including Canada. The Bank of Canada deployed a range of tools and facilities to provide liquidity in the system, starting in the summer of 2007 with traditional instruments (overnight special purchase and resale agreements and excess settlement balances) and by the fall of 2007 gradually expanding its framework with respect to terms to maturity, amounts, counterparties and eligible securities as the situation deteriorated (Zorn, Wilkins and Engert 2009). By the summer and fall of 2009, financial market conditions had sufficiently improved that the Bank withdrew several extraordinary liquidity measures.

The ABCP crisis that erupted in August 2007 in Canada demonstrated the inherent fragility of the ABCP market and the fact that the risks embedded in very complex and opaque financial products are often not properly communicated to and understood by investors. Issues of ABCP were exempt from prospectuses so investors were in the dark concerning the composition and nature of the assets underlying the ABCP programs. Since the crisis, progress has been made towards increasing the transparency and disclosure of ABCP programs. These include "measures undertaken by the Bank of Canada to introduce transparency requirements and minimum quality standards for ABCP accepted as collateral in its liquidity facilities, increased transparency on the part of bank sponsors, and enhanced transparency and disclosure measures for both ABCP and term ABS introduced by credit-rating agencies" (Selody and Woodman 2009).

The financial crisis raises some issues for the conduct of monetary policy in Canada and other advanced countries in view of the limitations and potential of policy interest rates. Besides the problem of the zero lower bound, and whether price level targeting might help deal with this, there remains the question of whether the policy rate should be adjusted to supplement the

coordinated use of prudential tools when imbalances in a specific market can spill over to the entire economy. Boivin, Lane and Meh (2010) reckon that this may be appropriate but that the resulting greater flexibility required in an inflation-targeting regime could be challenging in practice. In their view, more work is needed to bring understanding of these issues to the level required to clarify the implications for the monetary policy framework. The end of monetary policy history has not yet arrived.

Financial reform (to be developed)

What lies ahead in Canada is essentially an agenda spearheaded by public authorities to buttress financial stability in conformity with the G-20 reform blueprint. This agenda aims at improving the resiliency of financial institutions, building robust financial markets and reducing the interconnectedness between institutions and markets (Carney 2010).

At the core of decreasing the vulnerability of financial institutions to booms and busts are the provisions of the Basel III agreement to create global standards for liquidity, raise the quantity and quality of Tier 1 capital, and introduce a leverage ratio and a capital conservation buffer, to be complemented by a countercyclical buffer which would vary over time. The timetable for full implementation extends to 2019.

In complement, an OSFI draft advisory has proposed implementing capital standards with regard to the segregated-fund guarantees of Canadian life insurers, which would better cover the risks associated with foreign equity holdings and fixed-income investments.

The key initiative with respect to making financial markets more robust is reforming Canadian markets for OTC derivatives as per a G-20 commitment. This calls for standardized OTC derivatives to be traded on exchanges or electronic platform and cleared through central counterparties (CCPs) by end-2012. An inter-agency working group, chaired by the Bank of Canada, issued a discussion paper in October 2010 and the Canadian Securities Administrators, gathering provincial regulators, issued a consultation paper in November 2010. In parallel, the Canadian Derivatives Clearing Corporation works at developing a CCP for the Canadian repo markets to make these markets more efficient in good times and less vulnerable in difficult times (they experienced significant illiquidity in the fall of 2008). Standardization and CCPs will reduce counterparty risk, increase transparency and help prevent spillover effects of an institution's failure.

Many possible measures have been proposed for dealing with bank resolution – the risks posed by large, interconnected institutions. These include inter alia capital surcharges, systemic risk levies and living wills. For Canada, contingent capital, which has been the object of proposals by OSFI and BCBS, seems the preferred tool for dealing with bank resolution. They would improve the capacity of the private sector to contribute to the resolution of failing banks while reducing risks to the public sector and improving incentives to limit risk-taking.

The new capital and liquidity rules will impose transitory costs over the medium term. The OECD has recently estimated that the higher capital requirements of Basel III effective as of 2019 would increase bank lending spreads by about 50 basis points over about five years, thereby cutting GDP growth in the United States, Europe and Japan by an average 0.15 percentage points per annum over this period. Over and above the warranted costs of higher capital requirements, the precise and detailed rules proposed will add to operational and

compliance costs for banks and financial intermediaries. But the long run stability benefits flowing from greater capital and liquidity requirements should outweigh transition costs provided the new principles are adopted globally and applied in a way to minimize the dead weight loss of operational inefficiency. Here again international cooperation and coordination will be required.