Peer Review of Canada

Review Report

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Foreword

The peer review of Canada is the sixth country peer review under the Financial Stability Board's (FSB) *Framework for Strengthening Adherence to International Standards*.[1] FSB member jurisdictions have committed to undergo periodic peer reviews focused on the implementation of financial sector standards and policies agreed within the FSB, as well as their effectiveness in achieving the desired outcomes. As part of this commitment, Canada volunteered to undertake a country peer review in 2011.

This report describes the findings and conclusions of the Canada peer review, including the key elements of the discussion in the FSB's Standing Committee on Standards Implementation (SCSI) on 13-14 December 2011. The draft report for discussion was prepared by a team chaired by Tom Scholar (HM Treasury, United Kingdom) and comprising Matías Gutiérrez Girault (Central Bank of Argentina), Nicoletta Giusto (Companies and Stock Exchange Commission, Italy), Antonio Pancorbo (Bank of Spain), Carlos Serrano (Mexican National Banking and Securities Commission), and Ravi Shankar (Reserve Bank of India). Jason George and Costas Stephanou (both FSB Secretariat) provided support to the team and contributed to the preparation of the peer review report.

The analysis and conclusions of the peer review are largely based on the Canadian financial authorities' responses to a questionnaire designed to gather information about the actions taken in response to the relevant recommendations of the most recent Financial Sector Assessment Program (FSAP) assessment for Canada.[2] The review has benefited from dialogue with the Canadian authorities as well as discussion in the FSB SCSI.

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1 A note describing the framework is at http://www.financialstabilityboard.org/publications/r_100109a.pdf.

2 The FSAP report for Canada is available at http://www.imf.org/external/pubs/ft/scr/2008/cr0859.pdf.

Glossary

ABCP	Asset Backed Commercial Paper
AMF	Autorité des marchés financiers (Quebec markets regulator)
BCBS	Basel Committee on Banking Supervision
BCP	Basel Core Principle
BOC	Bank of Canada
CAD	Canadian dollar
CCP	Central Counterparty
CDCC	Canadian Derivatives Clearing Corporation
CDIC	Canada Deposit Insurance Corporation
CDS	CDS Clearing and Depository Services Inc.
CDSX	Securities, depository clearing and settlement system operated by CDS
CIS	Collective Investment Scheme
CMHC	Canadian Mortgage and Housing Corporation
CPSS	Committee on Payment and Settlement Systems
CRA	Credit Rating Agency
CSA	Canadian Securities Administrators
CSF	Chambre de la sécurité financière (Québec SRO)
DOF	Department of Finance (Canada)
DRO	Designated Rating Organisation
FCAC	Financial Consumer Agency of Canada
FISC	Financial Institutions Supervisory Committee
FSAP	Financial Sector Assessment Program
FSB	Financial Stability Board
GDP	Gross Domestic Product
IAIS	International Association of Insurance Supervisors
ICP	Insurance Core Principle
IFRS	International Financial Reporting Standards
IIROC	Investment Industry Regulatory Organization of Canada
IMET	Integrated Market Enforcement Team
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
LTV	Loan-to-Value
MOU	Memorandum of Understanding
MRRS	Mutual Reliance Review System
MX	Montréal Exchange
OSC	Ontario Securities Commission
OSFI	Office of the Superintendent of Financial Institutions
OTC	Over-the-Counter
OTCD WG	OTC Derivatives Working Group
RCMP	Royal Canadian Mounted Police
SIFI	Systemically Important Financial Institution
SRO	Self-Regulatory Organisation
TFT	Trade-for-trade (transactions)
TSX	Toronto Stock Exchange
TSXV	TSX Venture Exchange
USD	United States dollar

FSB country peer reviews

The FSB has established a regular programme of country peer reviews of its member jurisdictions. The objective of the reviews is to examine the steps taken or planned by national authorities to address International Monetary Fund (IMF)-World Bank FSAP recommendations concerning financial regulation and supervision as well as institutional and market infrastructure. FSB member jurisdictions have committed to undergo an FSAP assessment every 5 years, and peer reviews taking place typically around 2-3 years following an FSAP will complement that cycle.

A country peer review evaluates the progress made by the jurisdiction in implementing FSAP recommendations against the background of subsequent developments that may have influenced the policy reform agenda. It provides an opportunity for FSB members to engage in dialogue with their peers and to share lessons and experiences. Unlike the FSAP, a peer review does not comprehensively analyse a jurisdiction's financial system structure or policies, nor does it provide an assessment of its conjunctural vulnerabilities or its compliance with international financial standards.

Executive summary

Canada underwent an assessment update under the Financial Sector Assessment Program (FSAP) in 2007-08. The FSAP team reported that the Canadian authorities had implemented the principal recommendations of the 2000 FSAP and concluded that *"Canada's financial system is mature, sophisticated, and well-managed."* At the same time, the FSAP highlighted some issues to be addressed in banking supervision, the functioning of asset-backed commercial paper (ABCP) and structured finance markets, securities regulation, and securities settlement systems.

The main purpose of this report is to assess Canada's progress in addressing these issues. To give some context, section 1 provides a brief overview of market and regulatory developments since the FSAP was published. Sections 2 to 5 examine the main areas identified by the FSAP.

Background

The response of the Canadian authorities to the global financial crisis was swift and effective (see section 1). They adopted a variety of macroeconomic policies to buffer the impact of the crisis on the economy, increased supervisory vigilance, expanded liquidity facilities and pro-actively addressed emerging problems. The strength of the economy and of the financial system at the onset of the crisis meant that no Canadian financial institution failed or required government support in the form of a capital injection or debt guarantees. This resilience, which was achieved in spite of Canada's relatively complex regulatory structure, highlights a number of key lessons for other jurisdictions – namely, the importance of having:

- pro-active and targeted macroeconomic policies, supported by adequate fiscal space and a flexible exchange rate to help absorb external shocks;

- prudent bank risk management, particularly a stable and well-diversified funding profile as well as conservative loan underwriting standards; and
- a comprehensive regulatory and supervisory framework that effectively addresses domestic prudential concerns, including (when necessary) by adopting regulatory policies that go beyond international minimum standards.

The financial system has continued to perform well. But against an uncertain global outlook, the authorities will need to remain vigilant. Two areas for particular attention are the exposure of the economy and financial system to adverse global economic developments, and the increasing indebtedness of Canadian households. The authorities should continue to strengthen macroprudential surveillance and consider expanding the range of relevant tools at their disposal (these currently include the leverage ratio and various government mortgage insurance eligibility requirements).

FSAP recommendations

The Canadian authorities have made good progress in addressing the FSAP recommendations on ***banking supervision, stress testing and the early intervention regime*** (see section 2). The Office of the Superintendent of Financial Institutions (OSFI) has increased its supervisory resources and enhanced its on-site inspections; recent revisions and clarifications to the intervention and resolution regimes have reduced the room for discretion and forbearance and have increased accountability; and the Bank of Canada (BOC) conducts regular stress tests, in collaboration with OSFI, as an input to its *Financial System Review*. OSFI is encouraged to continue to assess the effectiveness of its on-site supervisory activities, including the potential risks associated with the use of external experts. The adoption of Basel III and of the Financial Stability Board's *Key Attributes for Effective Resolution Regimes* should further enhance the resolution framework.

The FSAP focused on the functioning of the Canadian ***ABCP and structured finance markets*** (see section 3) because these markets were significantly affected by the crisis. Fears of contagion risk arising from potential exposures to US subprime mortgages, combined with inadequate disclosures about the composition of the underlying assets and associated leverage, led many investors to exit these markets. As a result, non-bank sponsored ABCP conduits were unable to roll over new paper to repay maturing liabilities. Contractual arrangements allowing such vehicles to access liquidity facilities were also not clear enough, causing some of them to run out of liquidity in a very short period of time

The authorities have taken a number of important steps to address these problems. In particular, existing non-bank sponsored ABCP vehicles have been restructured into medium-term notes (to match more closely the term of the liabilities to that of the underlying assets) and are in run-off mode, thereby avoiding potential spillovers to the banking system; the level of disclosure and transparency has improved, including for bank-sponsored ABCP programs; and reforms are underway to ensure the reliability of the credit ratings process. The priority now is to enact the proposed regulations for structured finance products and credit rating agencies so that they can produce the intended results.

The Canadian authorities have also made progress in addressing some of the FSAP recommendations in the ***securities sector*** (see section 4). Provincial regulators have continued to improve coordination (e.g. with respect to oversight of some self-regulatory organisations) and with the criminal authorities when investigating fraud crimes; a registration regime for operators of collective investment schemes is now effective and on-site inspections are taking place; all provinces have enacted statutory civil liability provisions for misrepresentation in the secondary market; Ontario and Québec have put in place a legislative framework for over-the-counter (OTC) derivatives; the regulatory framework for pension funds focuses increasingly on risk management practices; and new legislation broadly harmonises the regulation of market intermediaries. A number of these initiatives, however, are ongoing and require monitoring to ensure full and effective implementation.

The most important challenge in the securities sector concerns the coordination among provincial regulators. Each Canadian province or territory has its own regulatory authority, although laws and regulations are in general harmonised across the provinces. The Canadian Securities Administrators (CSA) – a voluntary umbrella organisation of provincial securities regulators – seeks to improve, coordinate and harmonise regulation of the Canadian capital markets. The CSA is not a legal entity and has no authority; its efforts depend on the goodwill and consensus of the respective authorities.

Ontario has not adopted the passport rule developed by CSA members, although it has established interface policies with them to streamline regulatory approvals and reduce the regulatory burden on market participants. But going further and establishing a single national securities regulator would bring clear economic benefits – a simpler regulatory infrastructure, easier coordination and information sharing in the event of market distress, and improved cross-border cooperation. The IMF and the OECD have both recommended this, and the federal government has been seeking to achieve it, publishing draft legislation to this end in May 2010. However, on 22 December 2011, the Supreme Court of Canada determined that "the Canadian *Securities Act* as presently drafted is not valid". The federal government has stated that it will review the decision carefully and act in accordance with it.

Finally, Canada has further strengthened its ***securities settlement systems*** in response to the relevant FSAP recommendations (see section 5). In particular, the Clearing and Depository Services Inc. has enhanced both of its existing central counterparty services for fixed income securities and equities; adopted procedures that will reduce the concentration risk on a single settlement bank from settling U.S. dollar-denominated transactions, reduced custody risk by dematerialising a large proportion of physical securities, adopted a modern messages interface and initiated a number of other enhancements designed to improve overall efficiency and operational risk management. The Alberta, British Columbia, Ontario and Québec securities regulators have signed a Memorandum of Understanding with the U.S. Securities and Exchange Commission to strengthen the regulation and oversight framework for cross-border activities. Going forward, the Canadian authorities are encouraged to continue their efforts to bring more safety and efficiency in securities settlement systems.

1. Recent market developments and regulatory issues

Financial system structure

The Canadian financial system is large compared to the economy, with total assets representing 336% of Gross Domestic Product (GDP) as at the end of 2010. The system is primarily bank-based, with more than 74% of its total assets belonging to credit institutions – chartered banks, credit unions and *caisses populaires.*[3]

Table 1: Financial System Structure in Canada as of year-end 2010

	Assets (CAD billion)	*% of total assets*	*% of GDP*
Chartered banks	3,082	70.2	244.3
Investment funds[1]	688	11.9	41.4
Life insurers	553	9.6	33.3
Credit unions & *Caisses populaires*	257	4.4	15.5
Trust and mortgage loan companies[2]	32	0.6	1.9

Source: Bank of Canada. CAD is the Canadian dollar.
[1] The figures for investment funds do not include funds set up to operate pension plans, special non-resident-owned funds, investment clubs, or investment vehicles whose shares are not available to the general public.
[2] Trust and mortgage loan companies exclude bank trust and mortgage subsidiaries. Life insurers and segregated funds are shown at book value. Investment funds are shown at market value.

The banking sector is dominated by the "big six" banks[4], which account for approximately 70% of total banking system assets and offer a full range of banking, investment and other financial services to their clients through nationwide branch networks. Canada's large banks are internationally active - particularly in the US, Latin America and the Caribbean - and generate close to half of their earnings internationally. Their domestic business model relies heavily on consumer and mortgage lending since large Canadian corporations often borrow directly from the capital markets or from syndicates led by foreign banks. Domestically, the big six face strong competition from regional banks and credit unions; in some provinces[5], for example, credit unions serve around half of the population, providing financial services to individuals and small businesses. The credit union system is supported by eight provincial centrals and one federation[6], which provide liquidity and payment settlement services to member credit unions.

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3 Credit unions are called *caisses populaires* in French-speaking communities of Canada.

4 These banks are: Bank of Montreal, Bank of Nova Scotia, Canadian Imperial Bank of Commerce, National Bank of Canada, Royal Bank of Canada and TD Canada Trust.

5 There are ten provinces and three territories in Canada. Provinces are jurisdictions that receive their power and authority directly from the 1867 Constitution Act, whereas territories derive their mandates and powers from the federal government. The provinces are considered to be co-sovereign divisions (each with a lieutenant-governor), whereas the territories are not sovereign but simply parts of the federal realm.

6 Credit Union Central of Canada is the national federation for credit unions in Canada outside Quebec. It is owned by the provincial centrals, which are in turn owned by the individual credit unions.

The life insurance sector is dominated by three large internationally active companies – Manulife, Sun Life and Great-West Life – that also compete in wealth management. The property and casualty insurance sector is highly competitive and includes a number of foreign-owned companies, which collect more than half of net premiums earned locally.

Canada has three stock exchanges: the Toronto Stock Exchange (TSX), the TSX Venture Exchange (TSXV) and the Canadian National Stock Exchange (an alternative exchange for emerging companies), with a combined market capitalisation of nearly CAD 2.3 trillion (137% of GDP) as of year-end 2010. The TSX Group, comprising the TSX and the TSXV, is among the top 10 stock exchanges in the world in terms of market capitalisation, and has 3,741 listed companies. The TSX is weighted heavily towards commodities and has been the dominant exchange in Canada since 2007, but recent entry by alternative trading systems has begun to challenge its position. For example, by the end of 2009, the TSX accounted for 68% of the domestic equities trading, with alternative trading systems accounting for 32%.

The domestic debt market is relatively large in size, although a significant part of it represents government debt. The nominal value of total bonds outstanding at year-end 2010 amounted to just under CAD 2 trillion (124% of GDP, both in local and foreign currency). Of those, corporate bonds amounted to CAD 581 billion, of which more than 50% was issued by non-financial corporations. While the amount of corporate bonds issued in Canada has risen in recent years, private money market instruments, such as commercial paper and bankers acceptances, have declined following the financial crisis (see below). Canadian chartered banks are major investors in CAD-denominated bonds, with these instruments representing approximately 40% of their total assets.

The Montréal Exchange (MX) is Canada's financial derivatives exchange. The over-the-counter (OTC) derivatives markets are concentrated amongst the big six banks and the majority of transactions involving Canadian market participants are entered into with foreign counterparties. Globally, Canada accounts for United States dollar (USD) 12.4 trillion in OTC derivatives, or approximately 2% of the global market, with interest rate swaps and foreign exchange contracts being the dominant products.

Regulatory Framework

Given its federal nature, Canada has a relatively complex regulatory structure. At the federal level, the regulatory framework for the financial sector includes the:

- Department of Finance (DOF), responsible for the overall stability of the financial system and with overarching authority over financial sector legislation at the federal level;
- Bank of Canada (BOC), which provides liquidity to the Canadian financial system, oversees key payment, clearing and settlement systems, and assesses risks to financial system stability;
- Office of the Superintendent of Financial Institutions (OSFI), the prudential regulator and supervisor of federally regulated financial institutions (banks, trust and loan companies and insurance companies) and private pension plans;
- Canada Deposit Insurance Corporation (CDIC), which insures deposits of member institutions and is the Canadian bank resolution authority; and

- Financial Consumer Agency of Canada (FCAC), which protects and informs consumers of financial products and services at the federal level.

In addition to the federal government, the provinces also have jurisdiction over the financial sector. In the case of banks, the federal government is responsible for both their prudential and market conduct regulation. In cases where a bank has a subsidiary engaged in trustee and securities dealing activities, it would also be subject to provincial regulation. Conversely, most credit unions and *caisses populaires* are provincially incorporated and almost exclusively regulated at the provincial level for both prudential and market conduct purposes.[7] Trust and loan companies are regulated at the provincial level for market conduct and at the federal level for prudential purposes, and the same split applies to the life and health insurance sector. The regulation of pension plans is also shared between the federal and provincial governments.

In the securities sector, each province or territory has its own regulatory authority, although laws and regulations are in general harmonised across the provinces. The Canadian Securities Administrators (CSA) - a voluntary umbrella organisation of provincial securities regulators - seeks to improve, coordinate and harmonise regulation of the Canadian capital markets. In recent years, all CSA members, with the exception of Ontario (whose publicly listed companies account for 40% of the total market capitalisation in Canada), developed and expanded a “passport system” through which market participants can use a “principal regulator” as a conduit for approval in all jurisdictions.[8] Provincial and territorial securities regulators rely on self-regulatory organisations (SROs) for the regulation and supervision of the market and its participants, including the Investment Industry Regulatory Organization of Canada (IIROC)[9] and the Mutual Fund Dealers Association of Canada.

There are several mechanisms to facilitate collaboration between the regulatory bodies at the federal level and with the main provincial securities commissions. They include:

1. The Financial Institutions Supervisory Committee (FISC), chaired by the Superintendent of OSFI, which meets at least quarterly and is mandated in the *OSFI Act* to facilitate consultation and the exchange of information on matters relating to the supervision of financial institutions between OSFI, CDIC, BOC, FCAC and the DOF.
2. The Senior Advisory Committee, chaired by the Deputy Minister of Finance, acts as a discussion forum for financial sector policy issues, including macroprudential oversight

[7] Exceptions to this are the Credit Union Central of Canada, which is federally chartered and regulated under the *Cooperative Credit Associations Act*; and most provincial centrals, which are regulated at the federal level under the abovementioned Act, as well as at the provincial level. In March 2010, the Government of Canada introduced, by means of Bill C-9, amendments to the *Bank Act* in order to establish a framework for large credit unions to continue their operations as federal entities. Under the new framework, these credit unions will operate as chartered banks although being organised on a cooperative basis.

[8] Non-Ontario market participants are able to obtain access to the market in Ontario through an interface system in which the OSC makes its own decision but generally relies on the review by the principal regulator. In addition, the passport regulators accept the OSC’s decisions under passport.

[9] The IIROC was established in 2008 through the merger of the Investment Dealers Association of Canada and Market Regulation Services Inc. It regulates securities dealers which operate in Canada's equity and debt markets, and is overseen by the CSA. The organization sets regulatory and investment industry standards and has quasi-judicial powers in that it holds compliance hearings and has the power to suspend, fine and expel members and registered representatives, such as advisers.

and financial stability issues, in order to inform the advice provided to the Minister of Finance. Membership is the same as the FISC although, when appropriate, other government agencies are invited as well.

3. The Heads of Agencies committee, which is chaired by the BOC Governor and includes the DOF, OSFI, the four largest provincial securities regulators (Alberta, British Columbia, Ontario and Québec) and the Chair of the CSA. This Committee acts as a forum to exchange information and views and coordinate actions on issues of mutual concern, such as hedge funds and OTC derivatives.

Other coordination mechanisms include the CDIC Board of Directors (use of resolution tools - see section 2) and the CSA Systemic Risk Committee established in 2009 (identification and analysis of systemic risks in the Canadian capital markets). There is no single entity that is formally responsible for undertaking macroprudential oversight of the financial system although, as noted above, such discussions take place at the Senior Advisory Committee.

A unique element of federal financial regulations in Canada is that they lapse after five years, i.e. the legislation contains a so-called "sunset clause".[10] This clause results in a review of all legislation to ensure that it is current, contributes to stability and growth of the financial sector and, by extension, allows Canada to remain a global leader in financial services. The most recent legislative review was completed in 2007, with the current five-year review being launched in September 2010. The sunset date for financial institution statutes is April 2012.

Crisis Response

The response of the Canadian authorities to the global financial crisis was swift and effective. They adopted a variety of macroeconomic policies to buffer the impact of the crisis on the economy, increased supervisory vigilance, expanded liquidity facilities and pro-actively addressed emerging problems. The strength of the economy and of the financial system at the onset of the crisis meant that no Canadian financial institution failed or required government support in the form of a capital injection or debt guarantees. On the contrary, Canadian banks continued to raise equity in private markets throughout the crisis.

The *Bank of Canada Act* was amended at the outset of the crisis to increase the flexibility of the BOC's operating framework and allow it to conduct open market operations with a wider range of assets. The BOC also introduced new extraordinary liquidity facilities and expanded the eligible collateral for tapping its Standing Liquidity Facility and its Term Loan Facility. The frequency, size, term, eligible counterparties and range of securities of its operations were adjusted as conditions evolved.[11] In addition, in April 2009, the BOC reduced its policy

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[10] The four principal Acts that govern financial sector regulation - the *Bank Act, Insurance Companies Act, Trust and Loan Companies Act* and the *Cooperative Credit Associations Act* - are subject to a 5-year review cycle. The Governor in Council may, by order, extend the sunset date one-time for up to six months. Otherwise, the sunset date must be reset through a legislative amendment.

[11] These actions were complemented by a September 2008 reciprocal swap agreement with the U.S. Federal Reserve as part of coordinated actions among central banks in G7 countries to address elevated pressures in USD short-term funding markets. Although the BOC has not drawn on this swap facility, it was subsequently expanded and extended until February 2013. In addition, on 30 November 2011, the Bank of Canada along with five other central banks agreed to establish temporary bilateral liquidity swap arrangements, so that liquidity can be provided in each jurisdiction, in any of their currencies, should market conditions so warrant (http://www.bankofcanada.ca/2011/11/notices/coordinated-central-bank-action/).

rate to an all-time low of 0.25% and introduced a commitment to maintain it at that level until the end of the second quarter of 2010, conditioned upon the outlook for inflation. As the recovery progressed in 2010, the BOC wound down liquidity operations and gradually raised the policy rate.

In January 2009, the federal and provincial authorities also launched a major fiscal stimulus – one of the largest among advanced economies – totalling about 4% of GDP over two years, which included measures targeted at credit, housing and labour markets. To counteract the effect of the crisis on the supply of credit, the federal government put in place the so-called Extraordinary Financing Framework. The Framework, most of which was wound down by March 2010, supported lending to households and businesses through a number of targeted measures, some of which were aimed at easing financial institutions' access to funds.[12]

The Canadian economy emerged from the recession quite rapidly, with output recovering by early 2010. The rapid turnaround of activity and vigorous domestic demand owed much to the macroeconomic policy measures that were put in place, but also to the recovery in commodity prices (Canada is a large net exporter of commodities) and to a flexible exchange rate. During the crisis, the CAD depreciated sharply against the USD, which helped to buffer the Canadian economy from the fall in global demand.

An effective regulatory framework and prudent risk management by financial firms were other important contributing factors to the stability of the financial system during the crisis.[13]

Capital requirements for Canadian banks are higher than international minimum standards and their actual capital ratios are higher than many of their international peers. While Basel II requires banks to hold minimum Tier 1 and total capital ratios of 4% and 8% respectively, Canadian credit institutions have operated with higher requirements since 1999. In particular, OSFI requires banks and federally regulated trust and loan companies to meet or exceed a 7% Tier 1 and 10% total capital ratios. In addition, common equity is a predominant component of Tier 1 capital, typically accounting for 70-75% of the total.[14] OSFI may also direct a bank or a trust and loan company to increase its capital by imposing additional institution-specific capital charges under Pillar 2 of Basel II.

In addition to the minimum risk-based capital requirements, deposit-taking institutions are subject to an assets-to-capital multiple that sets a cap on leverage: banks as well as trust and loan companies must ensure that total assets, including specified off-balance sheet items, do not exceed 20 times the sum of their adjusted net total capital (with the Superintendent's prior approval, the limit can be raised to 23 times capital).[15] This rule – first introduced in 1982 with a ceiling of 30 and revised downwards in the early 1990s – helped prevent the build-up

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[12] See http://www.actionplan.gc.ca/initiatives/eng/index.asp?mode=7&initiativeID=156 for details.

[13] See "Why are Canadian Banks More Resilient?" by Ratnovski and Huang (IMF working paper 09/152, July 2009, available at http://www.imf.org/external/pubs/ft/wp/2009/wp09152.pdf).

[14] In response to the crisis, OSFI relaxed in November 2008 the non-common equity limit (i.e. preferred shares and innovative instruments) from 30% to 40% of Tier 1 capital. Only one of the big six banks materially increased its non-common equity component of Tier 1 capital to a level approaching the new 40% limit.

[15] See http://www.osfi-bsif.gc.ca/app/DocRepository/1/eng/guidelines/capital/guidelines/CAR_A1_11_e.pdf. In practice, banks must maintain an asset-to-capital measure below an individually authorised amount.

of leverage in the Canadian banking sector prior to the crisis. As of mid-2011, the assets-to-capital multiple of the big six ranged between 13.7 and 18.3 times.

OSFI guidelines do not set a minimum liquidity ratio; instead, stress-testing and contingency planning are emphasised. In addition, OSFI has a domestic cash flow liquidity metric that it uses to monitor liquidity risk at financial intermediaries. Despite the lack of a minimum liquidity ratio requirement, Canadian banks did not face significant funding pressures during the crisis as a result of two main factors. First, their holdings of liquid assets – cash and government securities – heading into the crisis were high. Second, their non-capital funding has traditionally been sourced from wholesale and retail deposits (around 80% of their total funding), thereby providing them with a stable source of long-term funds. The fact that the unsecured interbank market is relatively small and that a large proportion of repo transactions are secured by government or government-guaranteed securities, rather than by private sector debt, also helped mitigate the impact of the crisis on short-term funding markets.[16]

Another contributing factor is that banks were not significantly exposed to troubled US subprime mortgage securities or to anything equivalent domestically. In fact, the structure and regulation of the mortgage finance market contributed to financial stability during the crisis. In Canada, residential mortgages - typically provided at an initial fixed rate that is reset after 3-5 years and amortised over 25 years - comprised 42% of banks' domestic currency loans at year-end 2010 and the vast majority of these are held on the originating bank's books as opposed to being sold and securitized.[17] These practices create strong incentives for banks to employ robust underwriting standards.

From a regulatory perspective, Canadian legislation mandates that all high loan-to-value (LTV) ratio residential mortgages – currently defined as those with a LTV ratio greater than 80% – made by regulated institutions must be insured against default for the full amount by either the Canada Mortgage and Housing Corporation (CMHC)[18] or by a private mortgage insurer. All private insurers have guarantee agreements with the federal government stating that 90% of the value of insured residential mortgage loans will be protected against loss should the private insurer fail.[19] Mortgages with a LTV ratio of more than 95% cannot be

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[16] In 2010, the federal government announced that it will help federally regulated financial institutions diversify their funding sources by introducing legislation setting out a framework for covered bonds. It is expected that this framework will be introduced in 2012. Canadian banks already issue covered bonds without a legislative framework, and OSFI has put a limit on such issuance of 4% of a bank's assets.

[17] See "Canadian Residential Mortgage Markets: Boring but Effective?" by Kiff (IMF working paper 09/130, June 2009, available at http://www.imf.org/external/pubs/ft/wp/2009/wp09130.pdf).

[18] CMHC is an agent Crown corporation and is Canada's premier provider of mortgage loan insurance, mortgage-backed securities, housing policy and programs, and housing research. CMHC's share of the residential mortgage insurance market is about 70% (96% for residential securitisation programs), and it is the only insurer for commercial mortgages (private competitors are prohibited under the federal regulatory regime from insuring such mortgages). The cost of CMHC's residential mortgage guarantee varies from 0.5-7% depending on factors such as the LTV ratio, whether the applicant/borrower is self employed and whether there is third party income validation. See "Canada: Selected Issues Paper" by the IMF (Country Report No.11/365, http://www.imf.org/external/pubs/ft/scr/2011/cr11365.pdf) for more information.

[19] It should be noted that Canada has introduced a legislative framework to formalise existing mortgage insurance arrangement with the private mortgage insurers and the CMHC, including the rules for government-backed insured mortgages. The *Protection of Residential Mortgage or Hypothecacy Insurance Act* enshrines in legislation the framework for mortgage insurance protection that is currently established via individual contract arrangements between the Government and the private mortgage insurers. Key provisions

underwritten by federally-regulated depository institutions. In order to qualify for mortgage insurance, mortgage insurers generally require that a borrower's gross debt service-to-income ratio not exceed 32% and total debt service not exceed 40% of gross household income.

Beginning in 2008, the minimum standards for government-backed mortgage insurance were progressively strengthened in order to limit the rapid increase in house prices and protect against excessive household debt levels. These included lowering the maximum amortisation period for new mortgages (from 40 to 30 years); reducing the maximum LTV ratio to qualify for insurance by the federal government (from 100% to 95% for first home purchases, and from 95% to 85% for refinanced mortgages); raising the minimum down payment on properties not occupied by the owner (from 5% to 20%); requiring all borrowers to meet the standards for a 5-year fixed-rate mortgage in order to qualify for insurance, even if they choose a mortgage with a variable interest rate and/or a shorter term; withdrawing government-backed insurance on lines of credit secured by houses and requiring minimum credit score and loan documentation (e.g. income verification and property valuations).

A notable exception to Canada's comparatively smooth experience during the crisis was the domestic, non-bank sponsored asset-backed commercial paper (ABCP) market, prompted by the freezing of global structured finance markets starting in August 2007. Fears of contagion risk arising from potential exposures to US subprime mortgages, combined with inadequate disclosures about the composition of the underlying assets and associated leverage, led many investors to exit the market. While bank-sponsored ABCP could rely on their parents for liquidity support, this was not the case for third-party ABCP conduits that were unable to roll over new commercial paper to repay maturing liabilities. Contractual arrangements allowing such vehicles to access liquidity facilities were also not clear enough, causing some of them to run out of liquidity in a very short period of time. In response, the federal government partnered with provincial governments in the provision of a senior funding facility to support a private-sector driven restructuring plan for these conduits, known as the Montréal Accord. This initiative helped to protect the stability of Canada's financial markets, although it led to the considerable contraction of the ABCP market (see section 3).

Major regulatory reforms

In November 2011, the government introduced the *Financial System Review Act*[20], which includes measures to promote financial stability and ensure that financial institutions continue to operate in a competitive, efficient and stable environment; fine-tune the consumer protection framework by enhancing the supervisory powers of the FCAC; and improve efficiency by reducing the administrative burden on regulated firms and adding regulatory flexibility. The authorities are also working on a number of other regulatory initiatives, notably Basel III implementation, the strengthening of resolution regimes, the introduction of a national securities regulator, and the development of central counterparties (CCPs).

include the authority to prescribe the parameters for insured mortgages, set capital requirements and fee payments, and set information reporting requirements. Amendments were also made to the *National Housing Act* to provide the Government with the authority to prescribe the parameters for CMHC insured mortgages, information reporting and fee payments.

[20] See http://www.fin.gc.ca/n11/data/11-120_1-eng.asp for details.

Basel III implementation: Banks and federally regulated trust and loan companies will implement the new Basel III capital requirements starting in 2013, in accordance with the Basel Committee on Banking Supervision's (BCBS) timetable.[21] Given current conditions, it is OSFI's expectation that the big six banks will meet the 7% common equity Tier 1 risk ratio requirement (using fully phased-in 2019 rules) in January 2013. The authorities have also begun discussions on the implementation of the countercyclical capital buffer, scheduled to be phased-in in parallel with the capital conservation buffer beginning in 2016.

Unlike the Basel III capital requirements, OSFI does not plan to implement the liquidity coverage ratio or net stable funding ratio prior to the BCBS deadlines. In the interim, OSFI will continue to use its own domestic cash flow metrics by major currency and will consult with small banks and foreign bank branches in Canada to determine the application of new liquidity metrics that are commensurate with the narrower scope of their operations.

Resolution regimes: OSFI is undertaking a living will/recovery planning exercise with large deposit-taking institutions. As part of this exercise, banks are being asked to develop a reverse stress test to assess their point of non-viability. Resolution planning, led by the CDIC, will follow next year (see section 2). Work has also begun on recovery planning for one large insurance company, while the remaining life insurers will commence this work in 2013.

National securities regulator: The federal government has been working with ten of the thirteen provinces and territories towards the establishment of a national Canadian securities regulator by July 2012. In 2009, Parliament created the Canadian Securities Transition Office to lead and manage the development of and transition to a Canadian securities regulator. In May 2010, a proposed Canadian *Securities Act* was tabled for information in Parliament and referred to the Supreme Court of Canada for an opinion as to whether Parliament has the jurisdiction to enact the proposed legislation. Hearings were held in the Supreme Court in April 2011. On 22 December 2011, the Supreme Court determined that "the Canadian *Securities Act* as presently drafted is not valid". The federal government has stated that it will review the decision carefully and act in accordance with it (see section 4).

CCPs: The BOC is working with the Investment Industry Association of Canada on an initiative to develop a CCP to clear fixed income cash and repo transactions (see section 5). In December 2009, the Canadian Derivatives Clearing Corporation (CDCC), which currently operates Canada's main CCP for exchange-traded financial derivatives, was selected by the industry to provide these central clearing services. This is expected to mitigate potential concerns about counterparty credit risk and will help ensure the repo markets function continuously, even under stress conditions. The BOC expects to formally oversee the system, which is expected to commence operations in early 2012.

With respect to OTC derivatives, Canada has established an inter-agency OTC Derivatives Working Group (OTCD WG), chaired by the BOC with participation by OSFI, DOF, the Alberta Securities Commission, the British Columbia Securities Commission, the Ontario Securities Commission (OSC) and the Québec markets regulator (Autorité des marchés financiers or AMF). The objective of the OTCD WG is to provide advice and coordinate efforts to meet Canada's G20 commitments related to OTC derivatives, including on clearing.

[21] In February 2011, OSFI provided a roadmap to Canadian banks for the implementation of Basel III (http://www.osfi-bsif.gc.ca/app/DocRepository/1/eng/guidelines/capital/advisories/cptlq_e.pdf).

With respect to the G20 commitment to increase the use of CCPs for OTC derivatives, Canada is considering two options: (1) Canadian market participants could clear certain systemically important products on a CCP located in Canada, with other products cleared offshore; or (2) all products would be cleared at existing and planned global CCPs located in the United States and Europe. In either case, certain safeguards will be necessary to protect the safety and robustness of the Canadian market and for OTC market participants.[22]

Lessons and issues going forward

The resilience of the Canadian financial system during the global financial crisis highlights a number of key lessons for other jurisdictions - namely, the importance of having:

- pro-active and targeted macroeconomic policies, supported by adequate fiscal space and a flexible exchange rate to help absorb external shocks;
- prudent bank risk management, particularly a stable and well-diversified funding profile as well as conservative loan underwriting standards; and
- a comprehensive regulatory and supervisory framework that effectively addresses domestic prudential concerns, including (when necessary) by adopting regulatory policies that go beyond international minimum standards.

In spite of Canada's relatively complex regulatory structure, cooperation between relevant agencies during the crisis appears to have been swift and effective. The various institutional mechanisms described above enabled the effective exchange of information and facilitated discussions that led to coordinated responses. For example, risks in the household sector and their implications for the financial sector as determined by the DOF, BOC and OSFI, led to a series of changes to the mortgage insurance framework decided by the DOF. The effective coordination between regulatory agencies in Canada can be attributed to the fact that the relevant committees have been functioning for a long time (for example, the FISC and the Senior Advisory Committee were set up in the 1980s); that their members have clear mandates that are not affected by the work of those committees; that they are governed by provisions requiring the sharing and protection of information among participants; and that most committees are not enshrined in legislation, thereby allowing flexibility in terms of additional invitees.

The good performance of the financial system both during and after the crisis provides further evidence of its soundness and resilience. Such performance, however, must not breed complacency as the post-crisis period presents a number of challenges. Two of the main ones in the case of Canada are the exposure of the economy and financial system to adverse global economic developments, and the increasing indebtedness of Canadian households.

Exposure to the global economy: The openness of the Canadian economy as well as the significant operations of domestic financial institutions abroad mean that Canada is exposed to global economic developments. Events in the US are of particular importance, since the US operations of Canadian financial institutions represent close to 20% of their assets, while more than 70% of Canadian merchandise exports are directed to the US. Fiscal and financial

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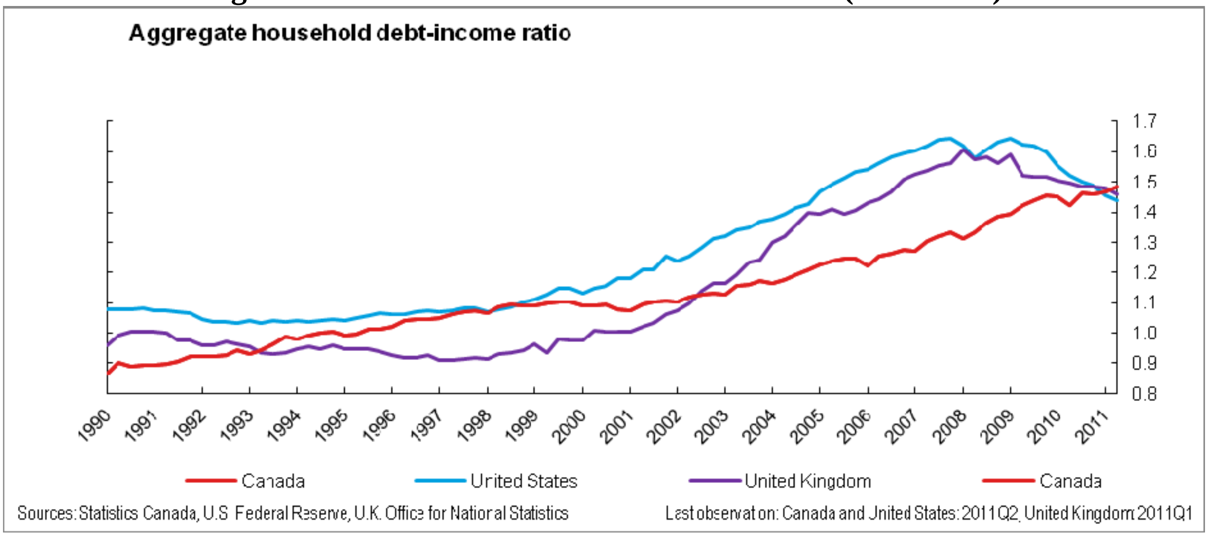
[22] These include acceptable multilateral cooperative oversight arrangements, satisfactory cross-border liquidity arrangements, a robust recovery and resolution regime for CCPs as well as fair and open access to CCPs.

system strains in the Eurozone are another potential source of risk, in spite of the relatively small direct exposures of Canadian banks on public and private sector entities from those countries (2% of total assets). As experienced during the 2007-09 financial crisis, a contraction in world demand and the likely ensuing impact on commodity prices would have an impact on domestic activity given Canada's large net exports of commodities.

Canadian household finances: Profitability amongst credit institutions has been driven in large part by strong growth in the residential mortgage and personal lending markets. However, households are reporting increasingly high levels of indebtedness. According to BOC computations, household credit-to-GDP is significantly above trend, while household debt as a share of disposable income is at a record high of 144% (see Figure 1).[23]

While current levels of bank loan losses (0.3%) and non-performing loans (2%) are still low, an adverse macroeconomic shock affecting growth and employment – such as a global recession – could impair the ability of households to adequately service their debts. This, in turn, could adversely affect the housing market – which is experiencing price-to-income and price-to-rent ratios that are at the highest level in over 30 years – and thereby trigger second-round effects on the financial system. The Canadian authorities have been closely monitoring developments in this sector and the BOC has recently conducted stress tests to quantify the effects on financial institutions (see section 2). Given recent global market developments, it is important for the authorities to continue to strengthen macroprudential surveillance and consider expanding the range of tools at their disposal – which currently include the leverage ratio and various government mortgage insurance eligibility requirements – in order to effectively address any emerging concerns.

Figure 1: Evolution of household indebtedness (1990-2011)



A distinguishing feature of the Canadian mortgage market is that a large part of it is explicitly backstopped by the government via the CMHC and the guarantees provided to private

[23] See also the IMF's 2011 Article IV report on Canada (Country Report No. 11/364, December 2011, available at http://www.imf.org/external/pubs/ft/scr/2011/cr11364.pdf).

mortgage insurers. In particular, the government backs all of CMHC's obligations, including those associated with mortgage default insurance and securitisation programs.[24] CMHC is subject to government oversight, follows risk management practices that are commensurate with OSFI's insurance industry guidelines, and engages in regular dialogue with the DOF and members of the Senior Advisory Committee. However, it is not regulated or supervised by OSFI and it has some flexibility to adjust its underwriting criteria as long as they remain consistent with minimum standards set by the Government. It is therefore important that the Canadian authorities continue to closely assess the contingent liability to the public finances posed by CMHC and ensure that its underwriting standards remain appropriate.

2. Banking supervision, stress testing and early intervention regime

The FSAP noted that Canada was fully compliant with the 1999 version of the Basel Core Principles (BCPs), and found OSFI to be compliant with the four revised BCPs that were assessed (liquidity risk, operational risk, interest rate risk in the banking book, and supervisory techniques) and to have made robust preparations for the implementation of Basel II. However, given the reliance-based bank supervisory system and the need to assess risk in a complex and evolving environment, it recommended that OSFI consider allocating additional resources for cross-checking of submissions provided by financial institutions, including in on-site inspections.

In terms of failure resolution and crisis management, the FSAP reported that the agencies represented in the FISC had adequate powers to manage systemic problems and that contingency planning was well-developed. Nevertheless, it recommended that transparency be buttressed by reducing the room for discretion and forbearance in bank intervention and resolution.[25]

Finally, building on the already close cooperation on financial stability analysis with OSFI and the BOC's strong capacity in modelling, the FSAP recommended that the BOC regularly conduct system-wide stress tests as an input for its Financial System Review.

Steps taken and actions planned

Cross-checking of submissions: OSFI's supervisory methodology employs a mix of on-site and off-site work to evaluate the condition of banks, their inherent risks, and any corrective measures that may be necessary to address supervisory concerns. To make the most effective use of scarce resources, OSFI's supervisory methodology relies upon the institutions' oversight functions (e.g. internal audit), but only after OSFI has determined that they produce sound and reliable information for supervisory purposes. This also allows OSFI to assess

[24] As at end-2010, the CMHC has mortgage insurance-in-force of CAD 514 billion (around 40% of GDP), while its securitisation guarantees-in-force totaled CAD 326 billion. There is significant overlap between these two operations since only insured mortgages are eligible for securitisation programs.

[25] At the time of the FSAP, the "structured early intervention" regime provided for, but did not mandate, specific supervisory actions as certain capital thresholds are breached. Similarly, the Minister of Finance might waive certain CDIC interventions for public interest reasons. According to the FSAP, in these and other provisions, the Canadian crisis management framework provided considerable scope for supervisory discretion and regulatory forbearance.

whether appropriate controls are in place and are being followed at the operational level; where they are not, correcting this deficiency becomes a supervisory priority. OSFI also relies on external auditors for the fairness of financial statements and uses their work to modify the scope of its supervisory review. Supervisors also review the external auditor's working papers to gather information that may be useful in their assessment of the institution.

Since the 2008 FSAP, OSFI has added substantial resources in a number of areas that have allowed it to enhance its risk assessment. The Supervision Sector, in particular, has increased its headcount over the past five years, enabling it to expand its so-called "monitoring work" and undertake more timely and risk-based review work. Most new staff in that sector are hired directly from the financial industry. Where knowledge gaps exist, both focused and broad-based training programs are provided.

OSFI has also selectively augmented its supervisory coverage by making use of third-party consulting services on a targeted basis. This is typically undertaken in the context of certain business lines or functions (e.g. capital markets) where an independent, third-party perspective is being sought and/or where there is a need for benchmarking of industry (including global) practices. The outcome of these third-party reviews informs OSFI's overall assessment of the institution and could influence the allocation of resources during follow-up reviews and/or targeted monitoring.

Drawing upon lessons learned from the current crisis, OSFI's Practices Division led a comprehensive review of the supervisory framework in 2010.[26] The outcome of this review resulted in adjustments to OSFI's assessment of risk, particular as it relates to the liquidity and actuarial functions.

Bank intervention and resolution: The bank intervention framework in Canada is based upon inter-agency consultation requirements that are intended to provide a check on supervisory discretion and forbearance. As previously mentioned (see section 1), the prudential supervision of individual financial institutions is discussed at the FISC. Bank resolution is the responsibility of the CDIC, which is subject to a least-cost resolution requirement. The BOC Governor, OSFI Superintendent, FCAC Commissioner and the Deputy Minister of Finance are all members of the CDIC Board, allowing built-in consultation mechanisms and checks. In addition to being the resolution authority, the CDIC has the power to terminate an institution's deposit insurance (which would have the effect of closing the institution), unless advised by the Minister of Finance that it is not in the public interest to do so. This waiver power remains in effect but has never been used, and it is implicitly understood that it would be used only in exceptional circumstances.

To enable the prudential regulator and deposit insurance agency to identify potential problems and intervene at an early stage, OSFI issued in 1995 a "Guide to Intervention for Federally Regulated Deposit-Taking Institutions"[27] The Guide serves two main purposes: it clarifies the steps that OSFI can be expected to take as the viability of a financial institution

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[26] The framework describes the principles, concepts, and core process that OSFI uses to assess the safety and soundness of financial institutions, and identify issues or areas of concern early in order that timely corrective actions may be taken, when needed. See "Supervisory Framework" (December 2010, available at http://www.osfi-bsif.gc.ca/app/DocRepository/1/eng/practices/supervisory/sframew_e.pdf).

[27] See http://www.osfi-bsif.gc.ca/app/DocRepository/1/eng/practices/supervisory/Guide_Int_e.pdf.

deteriorates, and it explains the respective roles and actions of OSFI and CDIC during the intervention process, thereby enhancing transparency of the overall early intervention regime. In February 2008, OSFI revised the Guide to reflect the evolved relationship between CDIC and OSFI and the intervention activities that each organisation could undertake. The revision also clarified when certain actions would take place by tightening the descriptions of each of the "stages" of intervention mentioned in the Guide. The intervention regime is complemented by OSFI's legislated early intervention mandate, which provides a framework for accountability.[28]

Options for dealing with troubled financial institutions are broad and include supervisory actions, a legislative regime that anticipates the taking of control of a non-viable financial institution with positive capital, and a number of resolution options whose goal is to protect insured depositors and minimise disruption to the Canadian financial system.[29] Canadian regulators and financial institutions have also been working together to develop recovery and resolution plans. Draft recovery plans have been developed for the largest six banks and revised recovery plans are expected to be finalised in 2012. OSFI received first submissions of the draft recovery plans in early 2011 and a subsequent submission of complementary material in August 2011. A further recovery plan submission is expected by February 2012, after which the plans are expected to be subjected to review by national authorities and by relevant international regulatory counterparts. Draft resolution plans, led by CDIC, are in the early stages of development and are expected to be completed by end-2012.

The implementation of Basel III is expected to further enhance Canada's bank intervention and resolution frameworks. In particular, the requirements for minimum loss absorbency in Tier 1 capital will reduce the scope for discretion in the provision of public support by triggering conversion to equity of various forms of debt such as non-viability contingent capital. In order to implement the BCBS minimum requirements to ensure loss absorbency at the point of non-viability, OSFI published an Advisory for Non-Viability Contingent Capital on 16 August 2011, which sets out OSFI's expectations with respect to the issuance of non-viability contingent capital by deposit-taking institutions.[30] At present, no Canadian bank has issued such instruments, although there continues to be active interest in them. Canada is also involved in the ongoing work by the FSB on bail-in as a means to recapitalise troubled financial institutions.

Stress testing: OSFI and the BOC conducted the first annual macro stress test of the six largest Canadian banks in 2008. The objective of this exercise was to identify system-wide vulnerabilities that would materialise under an adverse macroeconomic and financial scenario. The macro stress test has increased in complexity and comprehensiveness since it was first launched. Currently, the exercise has a quantitative component that aims at assessing vulnerabilities related to market, credit and interest rate risks (on both the banking and trading books). It also has a qualitative component that focuses on funding strains within the context of the stress scenario and strategies at the level of individual institutions, and their

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[28] See Section 4 of the *OSFI Act* (http://laws-lois.justice.gc.ca/eng/acts/O-2.7/index.html).

[29] These include winding up or restructuring an institution; providing open bank assistance; offering assisted transactions; employing a bridge bank resolution strategy; and various recapitalisation options and tools.

[30] See http://www.osfi-bsif.gc.ca/app/DocRepository/1/eng/guidelines/capital/advisories/nvcc_e.pdf.

implications from a system-wide perspective. The BOC continues to develop a macro-financial risk assessment model of the banking sector, which will be used to augment the systemic risk analysis in the stress test.

The annual macro stress test helps to inform views on systemic risk presented in the BOC's semi-annual "Financial System Review".[31] The results of this test are not used to recapitalize individual banks and Canadian regulators do not publicly release such results out of concern that they would be viewed as regulator-approved and thereby reduce investors' incentive to undertake their own credit assessment. Instead, Canadian regulators have focused on encouraging greater disclosure of institutions' financial information to the market.

In addition, as part of its ongoing supervision, OSFI periodically requests banks to complete 'ad-hoc' stress tests, which seek to quantify stress impacts to a specific product or portfolio. On-site supervisory reviews of stress testing are included as part of the Internal Capital Adequacy Assessment Process, where each banks' enterprise wide stress testing process and use of the results (i.e. in decision making, integration in risk appetite etc.) are reviewed.

Lessons and issues going forward

OSFI has made good progress in addressing the FSAP recommendation to increase its supervisory resources and thereby enhance its assessment of risk. Its on-site supervisory model, which relies on the financial institutions' own oversight functions and on third parties (such as external auditors), differs from approaches in other countries, without this appearing to be detrimental to its effectiveness. Going forward, OSFI is encouraged to continue to assess the effectiveness of its on-site supervisory activities in order to ensure: (i) first-hand independent verification of information provided by supervised institutions (whether undertaken by the supervisory authority's own staff or through external experts under the supervisors' oversight); and (ii) that it has comprehensive knowledge and understanding of the governance, activities, processes, controls and risks of the supervised institution. The potential risks associated with the use of external experts will also need to be considered as part of this assessment.

Canada has developed a pragmatic and effective early intervention regime that appears appropriate in the context of the size and structure of its banking sector. In addition, the CDIC has a wide range of resolution tools at its disposal to manage institutions' failure. The Minister of Finance retains the power to reject certain CDIC interventions for public interest reasons, although this power has never been used. Recent revisions and clarifications to the intervention and resolution regimes have reduced the room for discretion and forbearance and have increased accountability. Going forward, Canadian authorities are encouraged to further enhance their resolution framework by adopting Basel III as well as the FSB's October 2011 *Key Attributes for Effective Resolution Regimes for Financial Institutions*.[32]

The BOC has also addressed the FSAP recommendation to conduct regular stress tests, in collaboration with OSFI, as an input for its *Financial System Review*. This experience will prove useful in the international debate about the use of system-wide stress tests as a tool for

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[31] See http://www.bankofcanada.ca/publications-research/periodicals/fsr/.

[32] See http://www.financialstabilityboard.org/publications/r_111104cc.pdf.

macroprudential oversight and for institution-specific supervisory actions. While stress tests are powerful diagnostic tools to assess banking sector resilience to certain stressed scenarios, they present various methodological, conceptual and practical limitations that need to be taken into account when interpreting (and communicating) their results and when using them to motivate supervisory actions.

3. ABCP and structured finance markets

The turbulence in global financial markets at the time of the FSAP had a significant impact on Canada's ABCP market, which had been an important source of short-term financing for Canadian firms prior to the crisis (see section 1). Given the risk of spillovers to the banking system, the FSAP recommended careful monitoring and management of the situation. It also encouraged market participants to take steps to ensure that conduits and other structured finance products are sufficiently transparent, supported by reliable ratings, and that authorities ensure that market participants continue to move in this direction.

Steps taken and actions planned

Restructuring of ABCP market: The Canadian non-bank ABCP market underwent industry-led restructuring based on a plan - known as the Montreal Accord - prepared by the Pan-Canadian Investors Committee (an association of banks, investors and asset underwriters) in December 2007. The Montreal Accord required significant concessions from investors in the affected paper and the banks that provided the assets and backstop liquidity facilities to the conduits. For example, investors were required to accept a major extension in the terms of their investments in order to deal with liquidity problems; in return, banks agreed to a substantial widening in the market-based credit triggers and an 18-month moratorium on margin calls for these vehicles based on these new triggers.

With these private sector concessions in place, and in order to reach a final agreement, the federal Government and the provinces of Alberta, Ontario and Quebec agreed to establish a CAD 4.45 billion senior financing facility in order to help the trusts comply with potential margin calls resulting from credit losses during the moratorium period. The restructuring transaction covered 20 trusts and was finalized in January 2009; the 18-month moratorium ended without the senior facility being used.

Since the financial crisis, the Canadian bank-sponsored ABCP market has experienced a steady decline due to the amortisation of older facilities and few new asset purchases, while non-bank sponsors have exited the market. More recently, the overall size of the ABCP market has stabilised, with an outstanding amount of around CAD 25 billion in September 2011 (compared to CAD 120 billion prior to the crisis in 2007).

The Canadian authorities have also undertaken a number of steps to strengthen the monitoring and enhance the transparency of the ABCP and structured finance markets.

Monitoring of ABCP market: In response to the market turmoil, members of the CSA closely monitored issuers with material amounts outstanding of ABCP and asked those that did not provide sufficient disclosures of fair value assumptions or did not make appropriate use of certain inputs in their valuation models to correct their disclosures prospectively; performed focused, on-site compliance reviews of a sample of large portfolio managers to determine investors' exposure to ABCP investments that were purchased by their portfolio manager on a discretionary basis[33]; and formed a working group to consider regulatory issues stemming from the credit market turmoil. In October 2008, the working group issued a consultation paper outlining proposals in response to the turmoil in the credit markets in Canada, particularly in relation to the non-bank ABCP market.[34] Members of the CSA have been working on a number of proposals included in that paper (see below).

Transparency of conduits and structured finance products: A number of steps were taken to improve the level of disclosure and transparency in the ABCP market since the crisis, three of which are worth highlighting. First, as previously noted, the BOC expanded in March 2008 the list of securities eligible to be pledged as collateral under its Standing Liquidity Facility to include Canadian dollar-denominated ABCP that met specific criteria – such as being sponsored by a bank with a minimum stand-alone credit rating equivalent to at least “A” under the BOC’s credit rating definition methodology and being subject to enhanced disclosure requirements concerning the asset pool. Second, in 2009, Dominion Bond Rating Services, the Canadian bond rating agency that is the main issuer of ratings for this market, revised the format of its reports on securitized products to promote improved transparency and provide enhanced disclosure for market participants.

Finally, in April 2011, members of the CSA published a draft framework for the regulation of securitised products to improve investor protection through enhanced transparency and disclosure requirements as well as to modify the current exemptions that investors use to access these products in the exempt market.[35] The main features of that framework include:

- enhanced prospectus disclosure requirements for securitised products issued by reporting issuers;
- new prospectus exemption rules for securitized products that require, in most cases, the delivery of an “information memorandum” to investors;
- narrower class of investors who can buy products on a prospectus exempt basis; and
- continuous disclosure and prescribed monthly reporting obligations for both reporting issuers and issuers in the exempt market.

The comment period on the proposed framework ended in August 2011. Members of the CSA are currently analysing comments received from market participants. Once the authorities finish their review of comments received, they will issue a new draft regulation and will release it for an additional round of comments in 2012.

With regard to credit rating agencies (CRAs), members of the CSA published a proposed regulatory regime in July 2010. It was amended and republished for comment in March 2011 to be consistent with emerging international standards, particularly those in the United States

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33 One of the problems during the ABCP market turmoil was that many of these instruments were sold to retail investors who were unable to conduct a proper assessment to determine their suitability and, in some circumstances, were not even aware that they were investing in them.

34 See http://www.osc.gov.on.ca/documents/en/Securities-Category1/csa_20081006_11-405_abcp-con-paper.pdf.

35 See http://www.osc.gov.on.ca/en/SecuritiesLaw_ni_20110401_41-103_securitized-products.htm.

and Europe. Under this framework, CRAs would apply for designation in Canada (referred to as designated rating organisations or DROs) and their ratings would be eligible for regulatory purposes. The framework imposes internal controls on DROs, including requirements to:

- maintain, enforce and comply with a code of conduct that is compatible with the International Organization of Securities Commissions (IOSCO) *Code of Conduct Fundamentals for Credit Rating Agencies*;
- implement policies and procedures to identify and manage conflicts of interest in connection with the issuance of ratings;
- prohibit the issuance of ratings in the event of certain conflicts of interest; and
- appoint a compliance officer for monitoring compliance with the code of conduct.

The framework would also require public disclosures of methodologies, third-party due diligence and ratings history. The draft regulation, in its current form, fully complies with the IOSCO principles. It makes compliance with the code of conduct mandatory, and the securities regulator will have the power to conduct compliance reviews and take enforcement action as needed.

Lessons and issues going forward

The turmoil in the ABCP market raises important lessons on the necessary building blocks – namely, promoting adequate transparency and disclosure; ensuring investor suitability; strengthening the oversight of 'gatekeepers' such as CRAs; and avoiding perverse incentives by sponsoring institutions to offload assets – while retaining the risk – that may arise from accounting conventions and regulatory rules (e.g. 'true sale' definition). Some of these lessons are particularly relevant for the ongoing work by the FSB to strengthen the oversight and regulation of the shadow banking system.[36]

The authorities have taken a number of important steps to address these problems. In particular, existing non-bank sponsored ABCP vehicles have been restructured into medium-term notes (to match more closely the term of the liabilities with that of the underlying assets) and are in run-off mode, thereby avoiding potential spillovers to the banking system; the level of disclosure and transparency has improved, including for bank-sponsored ABCP programs; and reforms are underway to ensure the reliability of the credit ratings process. The priority now is to enact the proposed regulations for structured finance products and CRAs so that they can produce the intended results.[37]

4. Securities regulation

The 2008 FSAP concluded that the regulatory framework for the securities market in Canada exhibits a high degree of implementation of the IOSCO Principles. The FSAP did identify

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[36] See the FSB report on "Shadow Banking: Strengthening Oversight and Regulation" (October 2011, available at http://www.financialstabilityboard.org/publications/r_111027a.pdf).

[37] A recent BOC Financial System Review article notes that, although market-based financing has proven to be relatively resilient in Canada, the financial crisis has demonstrated that the system is not immune to potential vulnerabilities in this sector, whether homegrown or transmitted from abroad. See "Emerging from the Shadows: Market-Based Financing in Canada" by Chapman, Lavoie and Schembri (BOC Financial System Review, June 2011, available at http://www.bankofcanada.ca/wp-content/uploads/2011/06/fsr_0611.pdf).

however, some gaps in the regulatory and supervisory framework for collective investment schemes (CIS). It also noted that the enforcement of securities laws needed further improvement and that there was scope to improve the coordination and harmonisation among the provincial regulators in order to eliminate gaps and overlaps as well as to make efficient use of resources. Moreover, since securities markets operated under provincial regulation and supervision, the FSAP noted that there would be advantages and additional efficiencies in moving beyond a passport system (which was being implemented at that time) towards a single national securities regulator. It also recommended that OSFI and the provinces ensure that the regulatory framework for pension funds focuses increasingly on the adequacy of risk management practices and resources, in addition to the traditional solvency approach.

Steps taken and action planned

Coordination among provincial regulators (IOSCO Principle 1)[38]*:* Securities markets in Canada are under a system of provincial regulation and supervision in which 13 regulators administer separate sets of securities laws and regulations. The FSAP acknowledged that the provincial regulators were coordinating their actions under the umbrella of the CSA through a mutual reliance review system (MRRS) for issuers and CIS as well as a national registration system for registrants. Nonetheless, it suggested that provincial regulators improve their coordination since, from the perspective of market participants, there remained significant duplication and unnecessary compliance costs that could be eliminated. Although a passport system was being implemented to rationalise the system, many market participants and the IMF assessors were of the opinion that a single national regulator model was the best alternative to ensure coordination.

At the time of the FSAP, the passport system was not fully in force; since then, it has been further developed (by all provincial regulators with the exception of Ontario) and now includes prospectuses and registration of dealers, advisers and investment fund managers. The passport system will be further expanded to include CRAs in the spring of 2012. In addition, the federal government has been working with most provinces and territories to establish a single national securities regulator. However, following the recent Supreme Court of Canada decision, the government is now assessing the decision and will have discussions with provincial and territorial governments, after which it will decide on a way forward (see section 1 and below). Three provinces (Alberta, Manitoba and Québec) have been opposed to this initiative, since they believe that the passport system sufficiently coordinates and harmonizes regulation of the Canadian capital market.

Gaps in CIS regulation (IOSCO Principles 3, 17 and 18): The regulatory and supervisory framework for CIS at the time of the FSAP contained some significant gaps. In particular, CIS operators were not subject to a registration regime. As a result, regulatory agencies were not able to impose eligibility criteria and it was not clear whether they had full disciplinary authority and powers over CIS operators. Although reviews had been carried out, the supervision of mutual funds and their operators was not a regular part of the oversight program of at least one major provincial regulatory agency. Moreover, only conventional

[38] The numbering of the IOSCO Principles refers to the *Objective and Principles for Securities Regulation* at the time of the FSAP and not to the revised *Objective and Principles* approved in 2010.

mutual funds were required to appoint a custodian. In response, the FSAP recommended that a registration system for CIS operators should be established and all publicly offered CIS should have a custodian. It was acknowledged at the time that statutory amendments and proposed rules were pending in order to address these deficiencies.[39] The FSAP also recommended that provincial regulators enhance the continuous disclosure review system for CIS, if necessary, by developing a more defined risk based approach.

Following the entry into force of new legislation and rule in September 2009 (NI 31-103), the registration of CIS operators is now required for managers of all investment funds, regardless of the type of investment strategy employed by the fund, dimensional thresholds or the way in which the managed funds are distributed (i.e. under a prospectus or based on a prospectus exemption). The requirements in the securities law applicable to CIS operators vary depending on the type of managed funds, but as registrants, all managers need to comply with rules on capital and insurance, financial reporting, compliance, conflicts of interest and outsourcing. The transition period for Canadian investment fund managers to comply with this new legislation expired in September 2010. International and domestic fund investment managers that do not have a head office in Canada have a longer transition period, which expires in September 2012.

In October 2010, the CSA published a proposal for comment outlining the factors and criteria that would result in the registration of CIS operators that do not have a head office in Canada or that have a head office in one Canadian jurisdiction and conduct CIS operations in another Canadian jurisdiction (non-resident CIS operators). These operators currently rely on a temporary exemption from registration that will expire in September 2012; the CSA is expected to determine where and when they will need to register prior to that time.

As regards the issue of transparency to investors, risk-based criteria are currently used to select CIS for reviews of their continuous disclosure documents and a number of targeted reviews have also been conducted.

As of March 2008, the obligation to appoint a custodian applies to all CIS whose securities are publicly offered. The relevant custodial requirements are consistent with those that, at the time of FSAP, were already applicable to redeemable mutual funds.

Even before NI 31-103 was implemented, the AMF had begun undertaking on-site inspections as part of its supervision of CIS. In addition, the OSC has been conducting on-site inspections of CIS operators for a number of years prior to the implementation of the new law and the creation of the investment fund manager registration category.

SROs and exchanges oversight (IOSCO Principles 7 and 26): The FSAP acknowledged that provincial regulators had developed a coordinated approach to the regulation and supervision of SROs. Exchanges were regulated and supervised by a "lead regulator" whose recognition order and oversight programme were relied upon. The approach for SROs was slightly different and relied on a "principal regulator" acting only as a coordinator. The FSAP identified SROs as an area where additional coordination was needed. The FSAP also criticised the approval process for SRO rules by provincial regulators, stating that they take

[39] National Instrument 31-103 *Registration Requirements and Exemptions* (NI 31-103) and proposed amendments to National Instrument 41-101 *General Prospectus Requirements* (NI 41-101).

place on the basis of “consensus” and that this approach may prevent timely actions. Improvements were also recommended in the on-site inspections of SROs.

The Canadian authorities report that an MOU and a Joint Review Protocol regarding the oversight of the IIROC are now in place between provincial regulators to streamline supervisory coordination. An MOU will be finalised soon in connection with the Mutual Fund Dealers Association. To improve SROs oversight, several coordinated reviews have been conducted after the FSAP. In addition, the AMF carried out an on-site inspection of the Chambre de la sécurité financière (CSF) in late 2008 that found full compliance with relevant laws - although the AMF issued recommendations to improve certain internal processes, including the offering of professional development opportunities to representatives. A new inspection will be scheduled and completed by March 2012.

It should be noted that on-site visits of SROs are currently conducted on a 3-year cycle, but they could be conducted more frequently if deemed appropriate for higher risk areas. In that respect, a working group comprised of staff from a number of CSA members concluded that the CSA should introduce a risk-based approach to oversight of SROs. The working group is in its initial stages of considering such an approach to allow more frequent reviews in those areas identified to be high risk. Finally, in the area of market trading oversight, an MOU to improve market surveillance was entered into by the equity and derivative exchanges.

Enforcement actions and coordination with criminal authorities (IOSCO Principle 10): The FSAP noted that enforcement in Canada had shown positive changes but that further enhancement was needed. In particular, criminal enforcement appeared to be particularly weak, while the fragmented system of provincial regulation created challenges in the enforcement of securities law. A coordinated approach, with clear lines of accountability and benchmarks between criminal and securities law enforcement, was recommended. Retention of qualified personnel also appeared to be a challenge, especially for criminal enforcement.

The National Securities Fraud and Economic Crime Prosecutors Affiliation (‘Affiliation’) was created in November 2007 to make recommendations to better investigate and prosecute large economic crimes. Its membership includes senior staff from provincial Attorney General offices and major securities regulators. In addition, several initiatives are underway that will enhance the coordination between securities regulators and criminal authorities when investigating and prosecuting fraud crimes. Since 2003, the federal government has created the Integrated Market Enforcement Teams (IMETs) to investigate and prosecute capital market fraud that was of national significance and that involved actions of publicly traded companies. The Canadian authorities report that, since the FSAP, the Royal Canadian Mounted Police (RCMP) has implemented a series of recommendations to increase the effectiveness of IMETs. In addition, the OSC and the RCMP are partners in the Joint Securities Intelligence Unit, whose mandate is to collect, disseminate and investigate international, inter-provincial, and provincial securities frauds, thefts and forgeries.

Since September 2010, the AMF established a joint investigation unit task force with the *Sûreté du Québec* (Quebec provincial police force), composed of 20 members. The mandate and primary objective are the same as stated by the OSC for its partnership with the Canadian police. In relation with this partnership, the AMF created two different committees. The first one analyzes the file that the AMF wants to transfer for investigation on the criminal side and the second one decides which organization will investigate the case. The structure is subject to a protocol that was adopted by all parties.

The Canadian authorities also noted that the number of regulatory enforcement actions in recent years has increased, while the average length of investigations by the OSC and the AMF has been reduced. A CSA Committee seeks to coordinate regulatory enforcement actions, which are ultimately undertaken by each individual regulator. Finally, since 2008, the CSA has published an annual report of enforcement activity across Canada.

Cooperation (IOSCO Principle 12): The regulators of the four largest provinces are signatories of the IOSCO Multilateral Memorandum of Understanding (MMOU) and have shown a clear commitment to exchange information and assist other regulatory agencies both domestically and internationally. The FSAP noted, however, that for some regulators the MOUs must be approved by the relevant provincial or territorial minister to whom they are accountable. In this respect, the FSAP concluded that the AMF and the Government of Quebec should work together on defining an efficient procedure for the approval of MOUs. Subsequently to the FSAP, the AMF notes that it is working with the government to make the signing process of MOUs more efficient.

Issuers (IOSCO Principle 14): The FSAP stated that issuers were subject to disclosure requirements at the moment of authorisation as well as on an on-going basis. Nevertheless, it encouraged the Government of Quebec to give prompt approval to the new framework for derivatives markets, as well as all provincial regulators to expand liability to continuous disclosure obligations.

A new regulatory framework entered into force in Québec in 2008 and the AMF is going to adopt shortly new rules on OTC derivatives. The AMF will have new powers in connection with derivatives markets and relevant participants. Ontario has also put in a place a new legislative framework for OTC derivatives and is working with other securities regulators in Canada to harmonize regulations in this area. Moreover, a number of focused reviews of reporting issuers were undertaken in order to improve transparency in the securities (including exempt) markets, while further regulatory proposals are under discussion, such as on CRAs and securitised products (see section 3). Finally, all Canadian provinces have enacted statutory civil liability provisions for misrepresentation in the secondary market.

Differences in the regulation of market intermediaries (IOSCO Principle 21): Market intermediaries (investment dealers, mutual fund dealers and advisors) were subject to a registration regime based on eligibility criteria that included integrity, financial viability, and capacity to carry out their services (including proper internal controls and risk management mechanisms). The FSAP pointed out that given the complexity of regulation of securities intermediaries across provinces, further efforts should be undertaken to harmonise the regulation. The FSAP also recommended that the Government of Québec explore bringing mutual fund dealers under the *Securities Act*.

NI 31-103 and related statutory amendments were approved and came into force across Canada on 28 September 2009. This new legislation has rationalized registration categories and introduced two new categories of registration for Exempt Market Dealers and Investment Fund Managers. According to the Canadian authorities, there remain some areas of differences among the provinces in the regulation of market intermediaries - in particular:

- the western provinces and the territories provide limited exemptions from the requirement that a person in the business of trading in securities in the exempt market register as an exempt market dealer; and
- in Québec, firms and individuals in the mutual fund and scholarship plan sector are subject to a specific regulatory framework that differs from other jurisdictions.

Government bond trading transparency (IOSCO Principle 27): The FSAP identified an exemption to the transparency requirements applicable to the trading of government debt. It recommended that provincial regulators consider whether additional transparency is needed in this market. In response, the authorities report that, on the basis of a review undertaken on bond market transparency worldwide, it was considered premature to impose additional requirements that could result in an uneven playing field compared to other countries.

Regulatory framework for pension funds: In 2009, OSFI issued a Risk Assessment Framework for Federally Regulated Pension Plans, and it has subsequently launched other initiatives focusing on risk management and stress testing. The Framework is used as a basis for both implementing OSFI's risk-based approach to identifying pension plans requiring additional supervisory attention by OSFI, and for communicating with pension administrators regarding the risks facing their plan and the quality of their risk management practices. A number of changes to federal legislation and regulations also encourage administrators to better manage risks to defined benefit pension plans.[40] Finally, the Canadian Association of Pension Supervisory Authorities is developing guidance that will set out expectations for employers and plan administrators on the prudent investment of pension plan assets and the advantages of developing a funding policy. Draft guidelines on prudent investment practices and on pension plan funding policies were released for comment in March 2011.

Lessons and issues going forward

The Canadian authorities have made progress in addressing some of the FSAP recommendations in the securities sector. In particular, provincial regulators have continued to improve coordination among themselves (e.g. with respect to oversight of some SROs) and with the criminal authorities when investigating fraud crimes; a registration regime for CIS operators is now effective and on-site inspections are taking place; all provinces have enacted statutory civil liability provisions for misrepresentation in the secondary market; Ontario and Québec have put in place a legislative framework for OTC derivatives; the regulatory framework for pension funds focuses increasingly on risk management practices; and new legislation broadly harmonises the regulation of market intermediaries.

A number of initiatives, however, are still ongoing and require monitoring to ensure their full and effective implementation. Moreover, additional steps could be undertaken in some areas as described below.

Coordination among provincial regulators (IOSCO Principle 1): Ontario has not adopted the passport rule developed by CSA members, although it has established interface policies with them to streamline regulatory approvals and reduce the regulatory burden on market

[40] For example, changes implemented in 2011 allow federal pension plans to provide letters of credit in lieu of solvency special payments, up to a maximum of 15% of pension plan assets, providing an alternative means for sponsors to satisfy their funding obligations.

participants. However, while the passport system has introduced some efficiencies in terms of regulatory approvals, it does not address policy development or enforcement matters. Although the provincial authorities maintain that coordination is achieved through the CSA, that body is not a legal entity and its efforts are dependent on the goodwill and consensus of its members. The current regulatory structure is complex and may give raise to potential inefficiencies, duplications or gaps. It would be beneficial for Canada to ensure that all of its provinces and territories participate in a harmonised regulatory structure.

Through the proposed Canadian *Securities Act*, the federal government has been seeking to establish a single national securities regulator. Ten provinces and territories were participating in this effort, although three other provinces (including Québec) were not. A single national securities regulator, as recommended by the IMF and the OECD[41], would bring clear economic benefits – a simpler regulatory infrastructure, easier coordination and information sharing in the event of market distress, and improved cross-border cooperation. However, on 22 December 2011, the Supreme Court of Canada determined that "the Canadian *Securities Act* as presently drafted is not valid". The federal government has stated that it will review the decision carefully and act in accordance with it.

Gaps in CIS regulation (IOSCO Principles 3, 17 and 18): The mandatory registration of CIS operators has substantially addressed the main gap in regulation highlighted by the FSAP. As regards the mandatory appointment of custodians for all CIS, only publicly offered CIS (qualified as reporting issuers) are subject to custodian requirements. Non-publicly offered CIS, which typically include hedge funds, are not captured by these requirements. The Canadian authorities have specified that such funds are subject to specific requirements regarding the holding of client assets under Part 14 of NI 31-101.[42] The CSA, in accordance with Principle 7 of the revised IOSCO Principles (2010 version), is reviewing the adequacy of the "perimeter of regulation" by looking at a number of regulatory issues, including the issue of exempted CIS that are not required *per se* to have a custodian. In the context of such an exercise, the CSA may decide to impose further obligations.

SROs and exchanges oversight (IOSCO Principles 7 and 26): Notwithstanding the efforts to streamline coordination among provincial regulators, there remain some concerns in the review and approval process of rules for SROs and in the oversight reviews of SROs. In particular, the "consensus" approach has not been changed and some duplications in periodic reporting obligations to provincial regulators highlighted in the FSAP still need to be addressed. Moreover, an MOU has not yet been entered into with one of the SROs; the expectation is that it will be signed in the near future and that it will reflect the oversight approach adopted for the IIROC.

Enforcement actions and coordination with criminal authorities (IOSCO Principle 10): The Canadian authorities acknowledge that developments in this area are still ongoing. Current initiatives, particularly the newly instituted Affiliation, should be further monitored to verify

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[41] See the IMF's 2010 Article IV report on Canada (Country Report No. 10/377, December 2010, available at http://www.imf.org/external/pubs/ft/scr/2010/cr10377.pdf) and the "OECD Economic Surveys: Canada, September 2010 - Overview" (available at www.oecd.org/dataoecd/23/38/45950025.pdf).

[42] Part 14 of NI 31-103 applies to all registrants, and as such, both the CIS operator and the portfolio manager of the fund will be subject to the requirement to hold the funds' assets separate from the registrants' own property and to hold the assets in trust.

whether and how they would actually address the existing issues. Indeed, the Affiliation seems to be more focused on conducting research and making recommendations than in ensuring actual coordination in particular investigations. Moreover, it appears that many of the ongoing actions, like the creation of the IMETs, were already in place before the FSAP was carried out; at that time, these initiatives were criticized by market participants for their lack of accountability and benchmarks. Although some recommendations to improve the operation of the IMETs have been implemented following the FSAP, the impact in terms of increasing effectiveness is uncertain - for example, anecdotal evidence does not support the claim that criminal sanctions have actually increased. Moreover, it is not clear whether and to what extent the existing coordination initiatives cover financial offences other than fraud, thefts and forgeries - although it should be noted that the AMF and OSC have made good progress with respect to the enforcement of purely securities-related offenses.

Cooperation (IOSCO Principle 12): Discussions between the AMF and the Government in order to streamline the approval process of MOUs are still ongoing and may need further monitoring. The four Canadian securities regulators that are members of IOSCO have signed the IOSCO MMOU, while the other provincial and territorial securities regulators are not IOSCO members and cannot therefore sign it. The authorities state that these other regulators would have the ability to cooperate internationally.[43]

Issuers (IOSCO Principle 14): Québec has established a new regulatory framework for derivatives that grants the AMF authority to oversee these products. Ontario has also put in place a new regulatory framework for OTC derivatives. Regulatory developments in other provinces to strengthen the resilience and transparency of credit derivatives markets and implement the G20 commitments in this area should be monitored and supported.

Differences in the regulation of market intermediaries (IOSCO Principle 21): The entry into force of the new legislation harmonizing the regulation of market intermediaries is an important step to address FSAP concerns. Nevertheless, the underlying rationale for the remaining areas of differences should be assessed to determine whether the differences add unnecessary complexity and/or are an obstacle to the proper supervision of the entire securities sector.

Government bond trading transparency (IOSCO Principle 27): Since the exemption on transparency requirements relating to government debt securities is still in place, regulators should periodically review the existing exemptions in order to evaluate the need and benefits of increasing transparency.

5. Securities settlement systems

The FSAP assessed the observance of the Committee on Payment and Settlement Systems (CPSS)-IOSCO standards by the Canadian Depository Securities Settlement System (CDSX), Canada’s main securities depository clearing and settlement system for equity, fixed income and money markets operated by the Clearing and Depository Services (CDS). The FSAP

[43] In a limited number of cases, the Canadian securities regulators that are signatories to the IOSCO MMOU acted as intermediaries in answering requests from abroad addressed to other Canadian regulators that are not party to the MMOU.

concluded that CDSX was sound, efficient and reliable, and that it complied with almost all CPSS-IOSCO recommendations. It noted that the legal basis for the system's operation was solid, its functionality was well-developed, its risk-mitigation procedures were effective, and its governance structure was effective and transparent. Nevertheless, the FSAP made some recommendations to further strengthen the risk management procedures of CDSX, including:

- The CDS should assess the costs and benefits of acting as a CCP for trade-for-trade (TFT) transactions and should reconsider introducing a securities lending facility to reduce settlement failure;
- To protect the CDSX from inherent credit and liquidity risks in CCP services, the CCP functions should be separated from the settlement and custody functions, with the CCP being a distinct legal entity;
- Reduce the concentration of settlement cash for U.S. dollar denominated transactions on a single settlement bank;
- Eliminate the circulation of physical securities through CDS' regional offices by immobilising or, preferably, by dematerializing them;
- CDS should adopt a modern messages interface that is more user-friendly;
- Cooperation between the BOC and the provincial securities regulators should be strengthened and formalized. Similarly cooperation between the Canadian authorities and the relevant United States authorities should be strengthened for oversight of cross-border activities; and
- The workings of committees established by CDS should be made more transparent, taking into account the interest of non-bank participants.

Steps Taken and Actions Planned

CCP and securities lending: CDS has enhanced both of its existing CCP services. The fixed income securities CCP (FINet) expanded its security eligibility and introduced intra-day novation and netting. The CCP for equities (CNS) extended its settlement window and upgraded from batch settlement, to real-time continuous settlement. In addition, a new central clearing service for fixed income securities is currently under development by the CDCC. TFT settlement continues to be operated within CDSX.

Regarding the introduction of a securities lending facility within CDSX to meet the settlement obligation, the Canadian authorities feel that the current environment (of low settlement failures) has not changed sufficiently to warrant reconsideration of the introduction of such services at this time. The CDS' rules governing its CCP services include 'buy-in' rules to enforce the settlement. This allows a purchaser, at its discretion, to require the purchase of securities in the market for delivery. Once CDS purchases the securities, any costs of arranging the buy-in are charged to the defaulting participant.[44] The authorities

[44] In addition to these rules that help reduce settlement failures, there are a number of securities regulations and industry standards that comprise the settlement discipline regime in Canada. Moreover, since the 2008 FSAP, the SRO requires dealers to report a marketplace trade (an Extended Failed Trade) that has failed to settle on the settlement date if the trade remains unresolved ten trading days following the settlement date (i.e., after T+13). The report must give the reason for the settlement failure.

believe that the introduction of real-time processing on a T+3 basis and an extended settlement window for equities would further reduce settlement failure levels. In January 2011, the failure rate was approximately 2% by value; the rate has fallen continuously since June 2011 to a mid-October level of approximately 1.2%.

*Separation of CCP functions from custody and settlement function*s: The Canadian authorities are of the view that the present arrangement - under which the CCP functions are combined with the settlement and custody functions - is acceptable given the controls in place to mitigate the risks faced by CDS as a CCP. The authorities therefore do not see a need to change the current CDS corporate structure, which does not legally separate the CCP activities from the depository and settlement activities.

Concentration of settlement cash for USD transactions: The CDS uses the services of a settlement bank for settling USD-denominated transactions in the United States since it is not able to settle these transactions in central bank money. The use of a settlement bank results in a concentration of settlement and credit risks for any deposits that CDS may have with the settlement bank. To mitigate these risks, CDS is currently completing the process of reassessing its banking arrangements and soliciting the services of a number of service providers that are able to settle with DTC. CDS has set a minimum credit rating threshold of 'A' (Standard & Poor's rating) for suitability of a settlement bank. If the credit rating of the settlement bank falls below the threshold rating, the CDS would be able to switch its services to another settlement bank. Contracts for the secondary settlement bank were put in place at the end of 2011.

Immobilisation/dematerialisation of physical securities: In order to reduce the custody risk arising from the circulation of physical securities, CDS has received regulatory approval to destroy physical certificates of non-transferable issues. Accordingly, CDS has dematerialised about 150,000 of the 162,000 such certificates (about 75% of the total) that it holds. The remaining certificates will be retained until they have been in non-transferable issue status for the mandatory seven year period. The authorities expect that 95% of non-transferable certificates will be dematerialized by 2014. Moreover, in November 2011, CDS introduced changes to its rules that will lead to: (1) a significant reduction in the withdrawal of physical certificates for eligible securities; and (2) a requirement that most entitlement payments to be made electronically.

Message interface: CDS has standardized the message formats used in communication with the US Depository Trust & Clearing Corporation and CDCC. The entitlement messages and international deliveries to other CSDs are also based on the International Organization for Standardization's 15022 compliant formats.

Cooperation: The Heads of Agencies Committee meets regularly to discuss issues of mutual concern, including clearing and settlement systems. In addition, the OSC, AMF and BOC routinely discuss matters relating to the regulation and oversight of CDSX and intend to coordinate policy development so as to reduce overlaps and gaps and, to the extent possible, promote consistency. They are currently developing a Letter of Intent to solidify the cooperative working arrangements between their respective staffs.

To strengthen the regulation and oversight framework for cross-border activities between Canada and the U.S., the OSC and AMF have entered into an MOU in June 2010 with the U.S. Securities and Exchange Commission. The Alberta Securities Commission and the

British Columbia Securities Commission also became signatories to the MOU in September 2011. The MOU covers consultation, cooperation and information sharing related to the supervision of cross-border regulated entities. The broad scope of the MOU is based on IOSCO's framework and includes the clearing agencies.

Transparency: CDS regularly reviews its governance structure, the results of which are published in its annual reports. Individual directors have membership on one of the three committees (Audit/Risk, Finance and Governance/Human Resources). CDS' internal processes rely on recommendations by committees with broad user representation. The FSAP suggested that the workings of these committees could be made more transparent by taking greater account of the interests of non-bank participants. The authorities have examined this issue and are of the view that existing committee arrangements – such as the distribution of minutes of the meeting and opportunities to raise issues at meetings – allow participants to provide a sufficient level of input into the decision-making process. Moreover, CDS' rules, procedures, fees and major decisions are all published on its public website.[45]

Lessons and issues going forward

Canada has further strengthened its securities settlement systems in response to the relevant FSAP recommendations. In particular, CDS has enhanced both of its existing CCP services for fixed income securities and equities; adopted procedures that will reduce the concentration risk on a single settlement bank from settling USD-denominated transactions; reduced custody risk by dematerialising a large proportion of physical securities; adopted a modern messages interface; and initiated a range of other enhancements designed to improve overall efficiency and operational risk management.[46] The Alberta, British Columbia, Ontario and Québec securities regulators have also signed an MOU on supervisory cooperation with the U.S. Securities and Exchange Commission.

Going forward, the authorities are encouraged to continue their efforts to bring more safety and efficiency in securities settlement systems by considering the following measures:

- assessing the risk management process of the new CDCC CCP service for cash fixed income securities and repo markets, including by ensuring that it observes the applicable CPSS/IOSCO standards once they become operational in 2012[47];
- formalising the OSC's coordination with the AMF and BOC in order to strengthen the regulation and oversight of the CDSX[48];

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45 See http://www.cds.ca/cdsclearinghome.nsf/Pages/-EN-Profile?Open.

46 The CDS commissioned an independent review of its enterprise risk management function. Its supervisor (BOC) reported that the review provided a generally positive overall assessment with some areas for improvement relating to, for example, risk management roles and responsibilities and internal controls. See the BOC report on "Oversight activities during 2010 under the Payment Clearing and Settlement Act" (http://www.bankofcanada.ca/financial-system/payments/oversight-activities-during-2010) for details.

47 The impact of the financial crisis on Canadian funding markets was limited owing to the fact that a large proportion of repo transactions was secured by government and government-guaranteed securities. However, the repo market also experienced period of illiquidity with increasing concerns about counterparty credit risk. To address these concerns, the CDCC was selected by the industry to develop a CCP service for the cash fixed income and repo markets.

48 The OSC plans to circulate a draft cooperative letter of intent to the AMF and BOC for their review in 2012.

- reconsidering the FSAP recommendation to separate CCP functions in a distinct legal entity, as part of a review of the CDS system that they intend to undertake once the new CPSS-IOSCO principles for financial market infrastructures are finalised;
- re-examining whether the existing 'buy-in' rules improve the overall efficiency of the system when compared to securities lending facility, particularly when the CCDC CCP service (for cash, fixed income and repo) becomes operational;
- including the risks arising from settlement bank arrangements in CDS' regular risk/audit reviews to complement the reviews triggered by any credit downgrades; and
- setting up a CDS user group to obtain more feedback from all participants, including those not represented in the committees.

Annex: Canada peer review – Selected FSAP recommendations

a. Banking supervision, stress testing and early intervention regime

Relevant FSAP Recommendations	• Given the need to assess risk in a complex and evolving financial services environment, OSFI may wish to consider allocating additional resources for cross-checking of the submissions provided by financial institutions, including in on-site inspections. • The Bank of Canada (BOC) may wish to regularly conduct stress tests, as an input for its Financial System Review. There is already close cooperation on financial stability analysis between OSFI and BOC, and it would be desirable to build on this in developing a system-wide approach. • Transparency would be buttressed by reducing the room for discretion and forbearance in bank intervention and resolution. Currently, the "structured early intervention" regime provides for, but does not mandate, specific supervisory actions as certain capital thresholds are breached. Similarly, the Minister may not approve certain CDIC interventions for public interest reasons.

b. Asset-Backed Commercial Paper (ABCP) and structured finance markets

Relevant FSAP Recommendations	• Careful monitoring and management is needed of the fallout from turmoil in the global money and credit markets, which has led to problems in the Canadian non-bank sponsored ABCP market. Given the significant risk of spillovers to the banking system, all of the relevant authorities need to regularly review possible measures in view of emerging information. • Market participants should be encouraged to take steps to ensure that conduits and other structured finance products are sufficiently transparent, supported by reliable ratings, and the authorities should ensure that market participants continue to move in this direction.

c. Securities regulation

Relevant FSAP Recommendations	• There would be advantages in moving beyond a passport system towards a single securities regulator. A single regulator would allow policy development to be streamlined, would likely further reduce costs, and improve enforcement. • OSFI and the provinces should ensure that the regulatory framework for pension funds focuses increasingly on the adequacy of risk management practices and resources, in addition to the traditional solvency approach.

Relevant IOSCO Assessment Recommendations	*Principles Relating to the Regulator* • The provincial regulators should continue to improve coordination. *(IOSCO Principle 1)* • The provincial regulators should impose a registration system for mutual fund operators. Approval of the proposed National Instrument 31–103 Registration Requirements and related statutory amendments would achieve this goal. *(IOSCO Principle 3)* *Principles for Self-Regulation (IOSCO Principle 7)* • The provincial authorities should further streamline coordination of regulation and supervision of SROs, including the approval process for regulations. • The AMF should conduct an on-site inspection of CSF. • The provincial regulators should explore a shorter cycle of on-site inspections for SROs, in particular the IDA and the MFDA. • The provincial regulators should explore requesting from RS an annual self-assessment of the performance of its regulatory function. *Principles for the Enforcement of Securities Regulation (IOSCO Principle10)* • The provincial regulators should give priority to the discussion of the report from the task force appointed by the federal government. • The provincial regulators along with the federal government should work towards the adoption of a coordinated strategy for enforcement, with clear lines of accountability and benchmarks. A formal MOU is encouraged. • The OSC and the AMF should continue to commit to reducing the time necessary to conduct an investigation and have the case ready for litigation. • The CSA could explore compilation of additional statistics for enforcement activity, including timeliness of procedures. *Principles for Cooperation in Regulation (IOSCO Principle 12)* • The AMF and the Government of Quebec should work together on defining an efficient procedure for the approval of MOUs. *Principles for Issuers (IOSCO Principle 14)* • The assessor encourages the Government of Quebec to give prompt approval to the new framework for derivatives markets. • The assessor encourages all provincial regulators to expand liability to continuous disclosure obligations.

Relevant IOSCO Assessment Recommendations	<u>*Principles for Collective Investment Schemes*</u> • The provincial regulators should establish a registration regime for CIS operators. Approval of the proposed National Instrument 31–103 Registration Requirements would achieve this goal. *(IOSCO Principle 17)* • The AMF should include on-site inspection as a regular part of its supervision of CIS. *(IOSCO Principle17)* • The provincial regulators should continue to enhance the continuous disclosure review system for CIS, if necessary with the development of a more defined risk based approach. *(IOSCO Principle17)* • The provincial regulators should require all CIS to have a custodian. Approval of the proposed National Instrument 41–101 would achieve this goal. *(IOSCO Principle 18)* <u>*Principles for Market Intermediaries*</u> *(IOSCO Principle 21)* • The provincial regulators should harmonize regulations for market intermediaries. Approval of the proposed NI 31–103 Registration Requirements would achieve this goal. • The Government of Quebec should explore bringing mutual fund dealers under the Securities Act. <u>*Principles for the Secondary Market*</u> • The MOU between RS and MX should be finalized. *(IOSCO Principle 26)* • The provincial regulators should explore whether additional transparency is needed in the government debt market. *(IOSCO Principle 27)*

d. Securities settlement systems

Relevant FSAP Recommendations	• Clearing and Depository Services (CDS) could assess the benefits and costs of acting as a central counterparty (CCP) for trade-for-trade (TFT) transactions. • A securities lending facility could be introduced to reduce settlement failure; CCP functions should be separated from the CDS functions; and the concentration of settlement cash for U.S. dollar denominated securities in a single settlement bank should be reduced.
Relevant CPSS-IOSCO Assessment Recommendations	<u>PRE-SETTLEMENT RISK</u> <u>*Central counterparties*</u> *(CPSS Recommendation 4)* • In order to fully observe this recommendation, the CDS should explicitly assess the benefits and costs of acting as a CCP for TFT transactions. <u>*Securities lending*</u> *(CPSS Recommendation 5)* • The CDS might reconsider introducing a securities lending facility in order to reduce settlement failure. <u>SETTLEMENT RISK</u> <u>*CSD risk controls*</u> *(CPSS Recommendation 9)* • In order to further protect the CDSX from the credit and liquidity risks inherited in the CCP services and, as international best practice, the CCP functions should be separated from the settlement and custody functions, with the CCP services being

	provided by a distinct legal entity. *Cash settlement* (*CPSS Recommendation 10*) • For the full observance of this recommendation, the CDS needs to reduce the current concentration of settlement cash for U.S. dollar-dominated securities on a single settlement bank. The CDS might explore the possibility of becoming a direct member of Fedwire or having access to U.S. dollar central bank money through the Bank of Canada. • The CDS practice of taking on credit exposure as a CCP should be more transparent. CUSTODY RISK *Protection of customers' securities* (*CPSS Recommendation 12*) • In order to reduce custody risk, the CDS should eliminate the circulation of physical securities through its regional offices by immobilizing or, preferably, dematerializing them. OTHER ISSUES *Governance* (*CPSS Recommendation 13*) • The workings of the committees set up by the CDS could be made more transparent, taking into account the interests of non-bank participants. *Communication procedures* (*CPSS Recommendation 16*) • The CDS may wish to adopt a modern messages interface that is more user-friendly. *Regulation and oversight* (*CPSS Recommendation 18*) • Cooperation between the BOC and the provincial securities regulators should be strengthened and formalized. The same recommendation applies to the cooperation between the Canadian authorities and the relevant United States authorities for the cross-border activities through the links between Canada and the United States. A key objective is to make the regulation and oversight of clearing and settlement activities more effective and transparent for both service providers and market participants. *Cross-border links* (*CPSS Recommendation 19*) • For the observance of this recommendation, the CDS should not allow the transfer of securities, delivered through the DTC links, to its participants until these securities reach settlement finality in the DTC system. Furthermore, the CDS needs to reduce the concentration on a single bank for the settlement of the cash leg in DTC.