
Re-developing a Financial System Framework

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Outline

- Restructuring the Bank
- Outline of the Financial Stability Dept.
- The Financial system framework
 - Identification
 - Evaluation
 - Communication
- Going forward – implementing the macro-prudential approach

Restructuring the Bank of Canada

- Announced in March 2008 and implemented in October 2008.
- Financial Stability Department was created from the ashes of the Monetary Financial Analysis Department.
- Result is that responsibility for financial stability is now concentrated in 2 rather than all 5 economic departments

Restructuring the Bank of Canada

- Re-alignment transcended all the way to the top.
- Bank of Canada is now organised along functions
- Half of the Deputy Governors were given responsibility for financial stability, while other half concentrates on monetary policy
- Many benefits to re-alignment, but also some points of caution

Financial Stability Responsibilities

- Financial stability analysis conducted primarily in two departments
 - Financial markets department
 - Financial stability department

Financial Markets Department

- Analytically focused on capital markets
- Benefits from role as fiscal agent of the Government – interaction with market
- Active in market – reinforce overnight rate
- Regional representation in areas with significant market presence

Financial Stability Department Organization

- Split into four teams:
 1. Financial Institution Division
 2. Financial Studies Division
 3. Infrastructure and Policy Division
 4. Stability Assessment Division
 - FSR is joint responsibility but formally belongs to SAD

Financial system analytical framework

- Key lesson from the crisis is that our collective (CBs, IMF, BIS etc.) frameworks were insufficient
- We have put the emphasis on three steps:
 - Identification
 - Evaluation
 - Communication
- Very much a work in progress

Identification

- Monitoring packages
 1. Financial weekly – FMD
 2. Quarterly Bank Outlook – FID
 3. Quarterly Household Note – SAD
 4. Quarterly non-financial firm note – SAD
- Next Steps – incorporate more forward looking components
- Better links to banking system stress tests

Identification – outside contacts

- The BoC conducts regular visits with domestic Financial Institutions
- Senior Loan officer survey also provides a window into bank operations
- Have also begun to expand our contacts with markets – Toronto, NYC, London
- BoC is an active participant in many international forums: FSB, IMF, BIS, G-7, G-20, WP3, OECD.
- Americas Call

Identification - synthesis

Risks and Vulnerabilities note

- Synthesis note –brings together all identification tools into one document
- Kick-starts the front section FSR process
- Presented to Governing Council -staffs input into the Risk Assessment section of FSR
- Provides reassessment of identified risks and suggests new ones for consideration

Identification - synthesis

RVN – focus on 6 key areas:

- Financial Institutions
- Non-financial Corporate Sector
- Households
- Capital Markets
- Market Infrastructure
- The Macro Outlook

Evaluation

- Most significant area of weakness
- Current tool kit is limited
- Reliant on stress tests of banking sector and household debt service ratio model

Evaluation – Stress Tests

- Canada has been working on stress tests for some time
- Canada underwent a FSAP in 2007
- Our experience is highlighted in June 2008 FSR
- Coordinated effort between banks, prudential regulator and the Central Bank
- Useful information sharing exercise

Evaluation – Stress Tests

- Crisis has motivated research into a number of improvements – including modelling of contagion and asset fire sales
- Original model was very macro – based
- Need to incorporate markets and feedback loops

Communication

- If we can improve identification and evaluation – communication will also be improved
- Prior to the crisis- financial system publications argued that imbalances had developed – but nothing was done
- In part, reflects the lack of credible and quantifiable evaluation tools
- The importance of many of the linkages were not well understood

Communication

- FSR remains our main communication tool - has taken on a larger role
- FSR presented to FISC
 - Group that brings together the largest domestic stakeholders in the financial system
- Helps inform our positions in international forums

The way forward

- Most profound impact of the crisis has been to emphasize how much needs to be done
- Our priorities can be divided into two streams:
 1. Developing a suite of empirical vulnerability assessment models
 2. Developing a set of policy analysis models

Vulnerability Assessment Work Stream

- Top-down stress-testing model to complement existing macro-stress test
- Empirical models of liquidity and contagion
- Model of Inter-linkages and network effects
- Sectoral probability of default estimation models
- Early warning indicators of macro-financial imbalances

Why this is important

- Stress testing models are expected to take central role in assessing the likelihood and impact of vulnerabilities to the financial system.
- Monitoring will become more focused— inputs into models
- Analytical rigour should improve

Policy analysis modeling work stream

- Important to draw upon analytical and qualitative analysis
- Need eclectic collection of theoretical work to formulate policy stances

Policy analysis modeling work stream

- Developing credit default models
- Developing models of procyclical credit/leverage – impacts on loan-to-value ratios and other tools
- Characterising market liquidity dynamics

Data needs

- Implementing our new framework will require new data needs
- Part of the realignment was to centralize our data in one department –work in progress
- Bank of Canada also participated in IMF-FSB data need project
- Data collection requires substantial new resources

Macro-prudential coordination committee

- New committee is in the works
- Concept is to bring together FISC members on a regular basis to discuss macro-prudential concerns

Macro-prudential coordination committee

- Likely that the Bank will provide secretariat for the new committee
- Bank's role in regulatory developments has expanded
- Requires additional resources – proposed prudential policy team



Concluding remarks



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Priorities for a More Resilient Financial System

Five Imperatives

- Continuously open funding markets
- Sustainable securitization
- A new bank capital regime
- Macroprudential approach to regulation
- A system that can withstand failure

Continuously Open Funding Markets

- Crisis clearly exacerbated by seizure of interbank and repo markets
- Core funding markets should be made more efficient and less susceptible to extreme price movements
- Robust and efficient financial system needs interbank, commercial paper, and repo markets that are continuously open, even under stress
- Needs robust infrastructure, transparency, central bank liquidity

Sustainable Securitization

- Transparency should be increased so risk can be identified more effectively and priced more efficiently
- Models and data underlying securities should be published
- Standardization of terms
- Skin in the game (retain similar products or first loss)

New Bank Capital Requirements

- **Higher:** Overall capitalization in regulated financial system will rise, once economy recovers
- **Better quality:** Greater focus on loss-absorption capacity
- **Simpler:** Use of leverage caps
- **More dynamic:** Countercyclical capital buffers
- **Less procyclical:** Through-the-cycle approaches

Macroprudential Approach to Regulation

- Not enough for prudential regulators to adopt new measures within their current frameworks
- Need for oversight of the system as a whole— including both systemically important institutions and systemically important markets
- **Macroprudential surveillance:** Identify buildup of risks to financial system
- **Macroprudential regulation:** Strengthen resilience of financial system

Building a System that can Withstand Failure

- Robust systemic markets that are independent of core counterparties
- Staged intervention regimes
- Bank capital requirements consistent with business risk
- Deeper international coordination