

Macroprudential Policy - The View from the IMF

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Erlend Nier
International Monetary Fund

Plan of the presentation

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1. Definition and rationale
2. Challenges to the effective pursuit of macroprudential policy
3. The need for strong institutional foundations
4. Operational considerations

Definition and rationale

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- **Macroprudential policy is defined as the use of primarily prudential tools to limit systemic risk (IMF, 2011).**
 - the risk of disruptions to the provision of financial services that is caused by an impairment of all or parts of the financial system, and can cause serious negative consequences for the real economy (IMF, FSB and BIS, 2009).
 - By mitigating systemic risks, macroprudential policy aims ultimately to reduce the frequency and severity of financial crises.

Definition and rationale

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- **The case for macroprudential policy intervention stems from three sets of systemic externalities (IMF, 2013).** These are:
 - (i) the tendency of the financial system to **amplify** adverse **aggregate shocks**, e.g., adverse effects on output from a credit crunch;
 - (ii) macro-financial **feedback** mechanisms that can **increase exposure** to adverse aggregate shocks, e.g., the build-up of leverage and erosion of lending standards in response to increases in asset prices;
 - (iii) **linkages** within the financial system that increase the vulnerability of the system to idiosyncratic or aggregate shocks, and can render individual institutions “**too important to fail**”.

Challenges

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- **First challenge:** Macroprudential policy is subject to biases that favor inaction or insufficiently forceful and timely action (**Inaction Bias**) (IMF 2011, Nier 2011)
- Flows from the nature of the policy problem: macroprudential policy manages a tail risk
 - The benefits of action accrue in the future and are difficult to measure
 - The costs of actions are more visible and felt immediately, by financial firms and borrowers.
- Biases are compounded when macroprudential policy is subject to
 - lobbying by the financial industry
 - political pressures

Challenges

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- **Second challenge:** The financial system evolves dynamically;
 - the level, source, and distribution of systemic risk are subject to change.
- The financial system will evolve to seek profitable opportunities. Can evolve in response to
 - financial innovations (technological innovations)
 - regulatory constraints (leakage problem)
 - distortions caused by other policies (e.g., fiscal distortions that favor debt)
- Dynamic evolution can open up “**policy gaps**” and requires the **coordination** across policy fields.
 - Need for coordination can reinforce inaction bias.

Institutional foundations

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- **Strong institutional arrangements are essential for macroprudential policy to be effective.** These arrangements should assure (IMF 2011, 2013):
 - Willingness to act:
 - clear assignment of the mandate to *someone* (a body or committee),
 - strong role for the central bank
 - objectives and accountability mechanisms established in law
 - Ability to act:
 - sufficient powers
 - information collection, calibration and designation
 - Mechanisms to ensure cooperation in risk assessment and mitigation
 - (e.g., financial stability objectives for microprudential agencies and securities regulators)

Institutional foundations

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- **Effective macroprudential policy requires powers** (IMF 2011, 2013). When the financial sector evolves dynamically, powers are needed to
 - obtain information; wield policy tools; expand the range of action
 - beyond established prudential tools,
 - beyond the existing regulatory perimeter.
- **Useful to combine:**
 - *hard* powers over specific macroprudential tools,
 - powers to *recommend*, coupled with *comply or explain*,
 - *soft* powers, e.g. to initiate legislative changes and to influence other policy settings.
 - But soft powers alone are unlikely to be sufficient.

Institutional foundations

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- **A well-designed communication strategy can help address biases in favor of inaction.**
- Important communications tools are
 - a **policy strategy**,
 - **regular assessments** of risk and effectiveness of measures taken,
 - **records** of the meetings of macroprudential policymakers.
- **Communication can**
 - establish and maintain a **commitment** to take action
 - create a political **constituency** for macroprudential action
 - create a **narrative** that prepares for additional action

Operational considerations

Rules versus discretion

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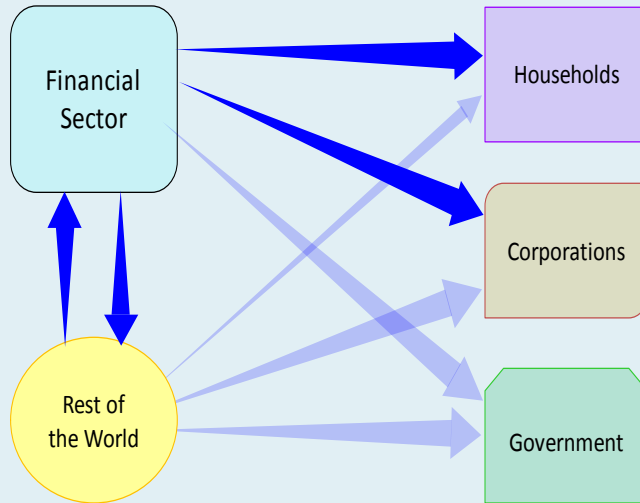
- A policy strategy based on “**rules**” can help overcome political economy challenges, and create predictability and political acceptance. However,
 - A **static** policy setting may need to be calibrated very tightly, creating efficiency costs for borrowers and encouraging leakages.
 - The policymaker needs to retain discretion to respond **flexibly** to changing financial conditions.
 - Macroprudential policy requires judgment **based on all information**.
 - including market intelligence and soft information.
- Macroprudential policy is therefore best supported by “**guided discretion**,” based on indicators, but complemented by judgment.

Operational considerations

Activating macroprudential policies

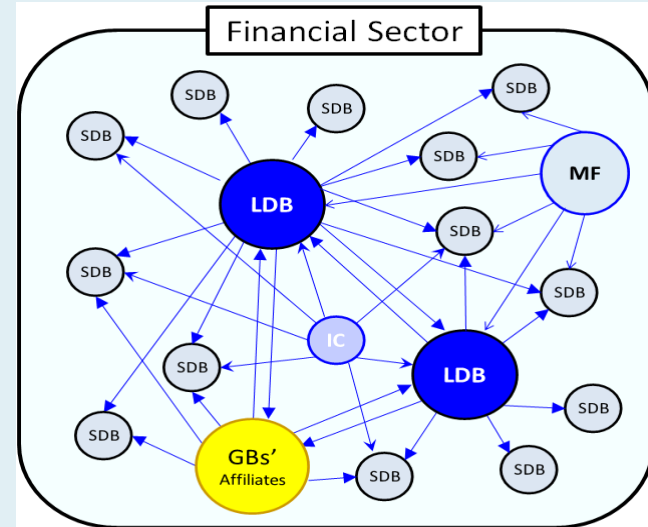
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Time dimension



Note: Arrows denote size of exposures .

Structural dimension



Note: Large Domestic Bank (LDB), Small Domestic Bank (SDB), Mutual Fund (MF), Insurance Company (IC), Global Bank (GB).

- **Policy need to be based on analysis of vulnerabilities**
 - Time dimension:
 - Broad-based vulnerabilities from an **excessive growth in total credit**
 - Vulnerabilities from exposures to the **household** and **corporate sector**
 - Vulnerabilities for the financial system from **maturity and FX mismatches**.
 - Structural dimension:
 - vulnerabilities from **interlinkages** within the financial system

Operational Advice

Mapping assessment to choice of policy tools

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- **The analysis needs map an analysis of vulnerabilities into potential policy responses.**
 - Risks from **broad-based credit booms** can be addressed by broad-based (capital) tools (e.g., CCB).
 - **Household sector** vulnerabilities can be addressed by sectoral tools (e.g., risk weights, LTV and DSTI).
 - **Corporate sector** vulnerabilities can be addressed by sectoral tools (e.g., risk weights).
 - **Funding (maturity mismatch) and FX risks** in the financial sector can be addressed by liquidity tools (e.g. stable funding ratios, liquid asset ratios).
 - **Structural risks** from interconnectedness in the financial sector can be addressed by structural tools (e.g., capital surcharges)

Operational considerations

Indicators for activation can differ across tools

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	Broad-based (Capital) Tools	Sectoral Tools (Households, Housing sector)	Sectoral Tools (Corporate)	Liquidity Tools
Core indicators	•Credit/GDP gap	<ul style="list-style-type: none">• Increase in the share of mortgage loans to total credit• Mortgage loan growth• House price/income and rent	<ul style="list-style-type: none">• Increase in the share of corporate loans to total credit• Corporate loan growth	<ul style="list-style-type: none">• Increase in loan-to-deposit ratio• Increase in non-core-to-core funding ratio
Additional indicators

Example: Indicators for Activation of CCB



Core and Additional Indicators

Core indicators

- Credit-to-GDP gap

Additional indicators

- Credit growth (m-o-m and y-o-y change)
- Debt levels and debt service ratios of households and corporates
- Asset price growth, house prices-to-income and rent
- Leverage on individual loans or at the asset level (e.g. loan-to-value (LTV) - on average and the distribution across new loans
- Decomposition between core and non-core liabilities and the wholesale funding ratio
- Current account deficits

Operational considerations

Using multiple indicators for activation

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- Evaluation of **core indicators** should be complemented by **additional indicators** to support a **judgment** on the need for policy action.
 - When **multiple** indicators are flashing “**red**”, there is a strong case for activating measures, even if this decision should be based on judgment.
 - When **some** indicators are flashing “**red**,” and **others** “**green**,” consideration can also be given to **alternative policy actions**.
 - E.g., when house prices rise, but mortgage lending is subdued, this can point to supply constraints and the need for structural measures
 - When **most** indicators are **yellow**, this points to a gradual approach to the activation of measures, e.g., initial non-binding guidance or partial tightening of tools.
 - Where information to construct indicators is missing (“no light”), the emphasis is on the **collection** of the relevant **data**.

Operational considerations

Implementing and tightening

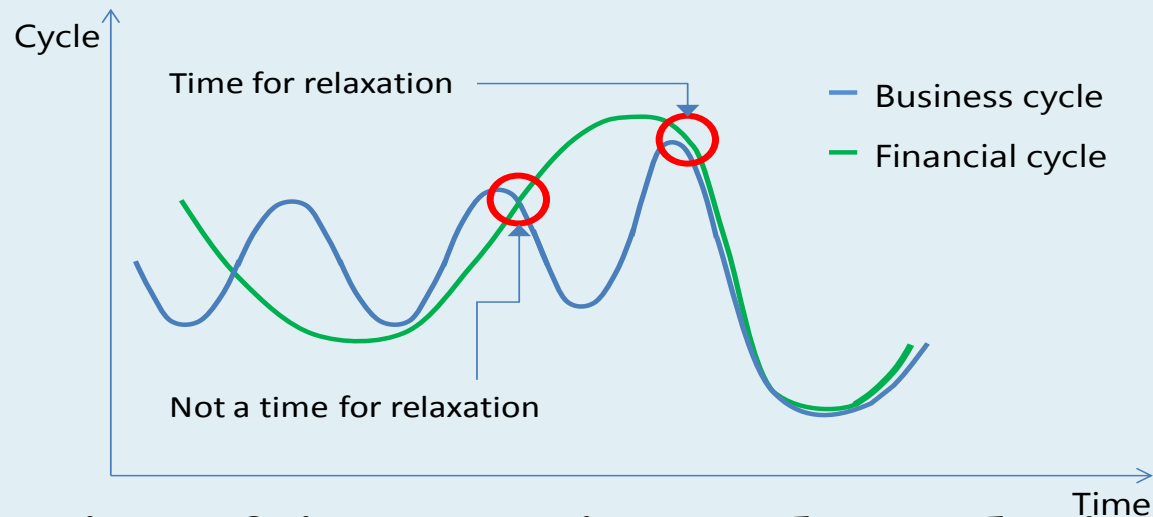
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- The **implementation** of tools should aim to ensure the effective and **efficient use** of macroprudential policy.
- The aim is for benefits to be realized in a manner that considers
 - **adjustment costs** to the financial industry;
 - the potential for **leakages** (circumvention);
 - **efficiency costs** for borrowers from a reduction in the provision of financial services;
 - potential **costs to output growth**;
- **Well-tailored design** and a **gradual approach** to the tightening of tools can help achieve benefits while avoiding costs.
- Use of **multiple tools** can increase **effectiveness**.
 - The marginal benefit of tightening any one tool will eventually decrease due to increased distortions and incentives for circumvention.
 - The use of complementary tools can mitigate such effects costs, increasing the desired impact of macroprudential action.

Operational considerations

Relaxing macroprudential tools

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- **A relaxation of time-varying tools can be justified when the financial cycle turns.**
 - To help avoid a vicious feedback between deteriorating economic and financial conditions that depresses economic activity
 - especially when macroprudential constraints are binding on the supply of credit.
 - A relaxation needs to respect prudential minima that can ensure an appropriate degree of resilience against future shocks.

Operational considerations

Relaxing macroprudential tools

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- **Indicators that can guide a decision to relax macroprudential constraints can differ from those used for activation. They also differ across tools.**
 - **Broad-based and sector-specific capital tools:**
 - Early signs of an incipient credit crunch:
 - slowing credit growth, market indicators, incipient increases in NPLs.
 - **Tools specific to the residential property market (such as LTV and DSTI):**
 - Early signs of a vicious cycle between falling house prices, falling credit and rising defaults:
 - falling prices, sharply slowing credit, and deteriorating borrower balance sheets
 - **Liquidity tools:**
 - Early signs of liquidity stress within the system that may lead to fire-sales:
 - increases in the price of wholesale funding, increased access to central bank lending facilities
- Gauging the time for relaxation requires **judgment**.

Operational considerations

Country-characteristics

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- **Country-characteristics can shape the approach to macroprudential policy:**
 1. Availability of data and strength of supervisory capacity
 2. A country's economic structure, such as its degree of diversification
 3. Need for financial deepening and level of debt to GDP
 4. The degree of capital account openness
 5. A country's financial structure (size, interconnectedness, concentration)

Thank you

References

- IMF, FSB and BIS, 2009, “Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations”
- IMF, 2011, “Macroprudential Policy: An Organizing Framework”
- Nier, Erlend, 2011, “Macroprudential Policy - taxonomy and challenges”
- IMF, 2013, “Key Aspects of Macroprudential Policy”

Household Indebtedness and the Canadian Macroprudential Responses

IMF- Riksbank Conference on Macroprudential Policy—Implementation and Interaction
with other Policies, Riksbank, Stockholm, 13-14 November 2014



Cesaire Meh
Deputy Chief, Financial Stability Department
Bank of Canada

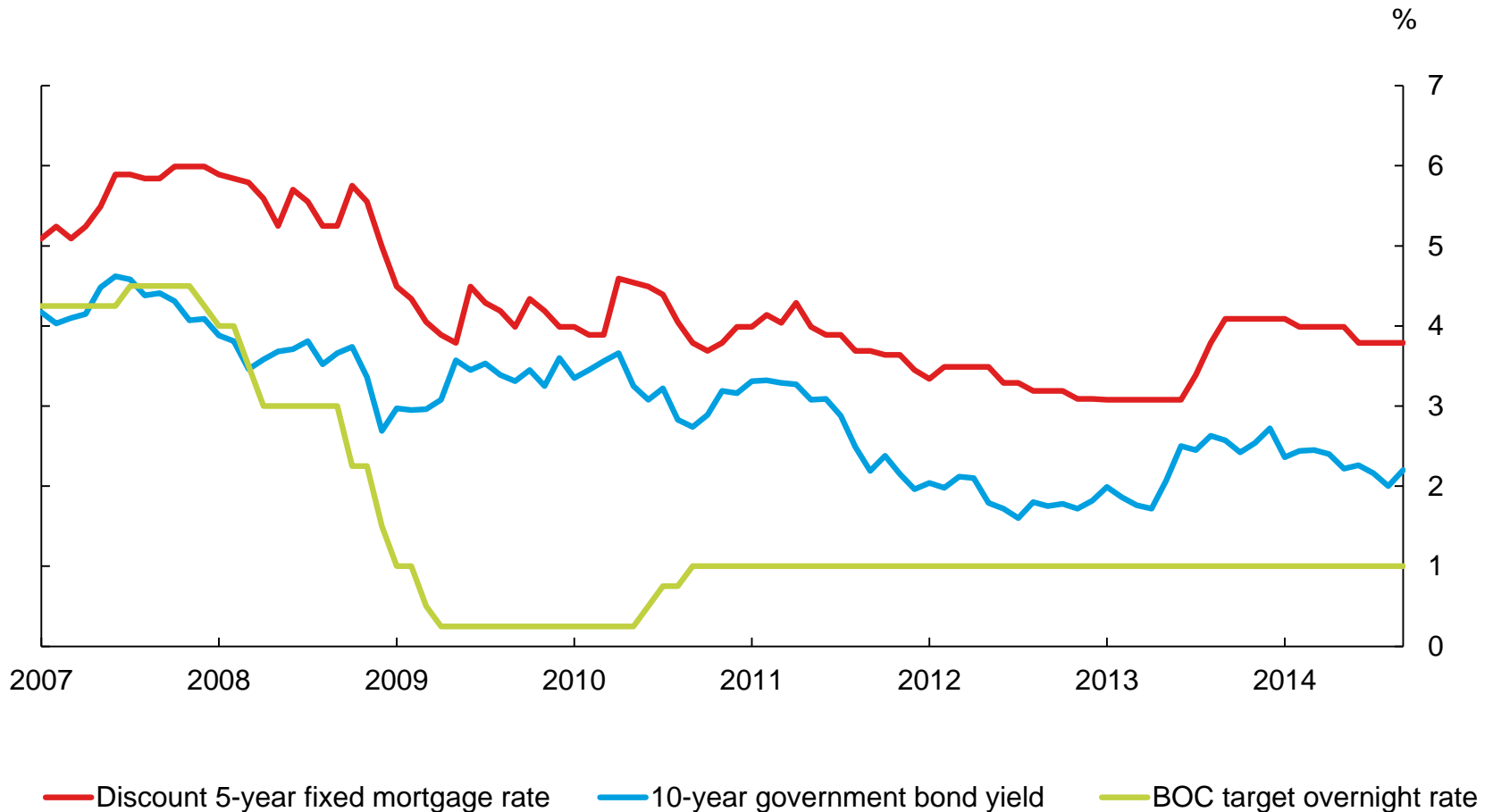
Outline

- Housing and household imbalances
- Public policy responses
- Effectiveness of policies
- Conclusion

Housing and Household Imbalances



To offset the weak global demand during the crisis, the Bank of Canada lowered the bank rate to ZLB

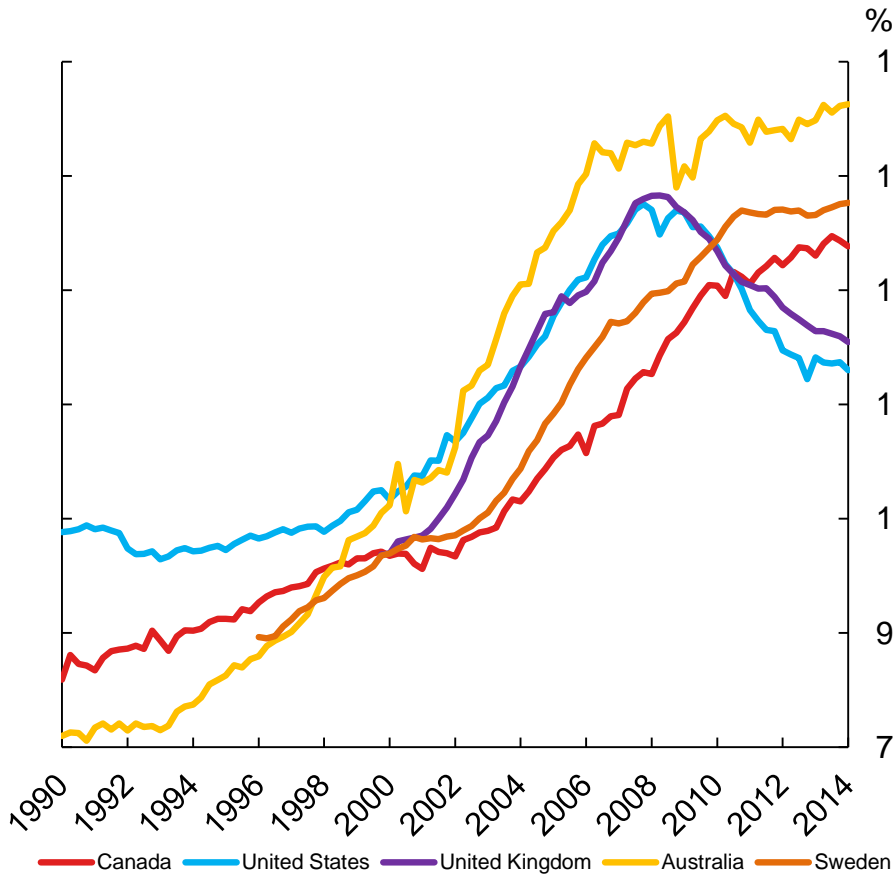


Source: Bank of Canada and ING Direct

Last observation: September 2014

Low rates stimulate domestic demand and lead to higher household debt and house prices

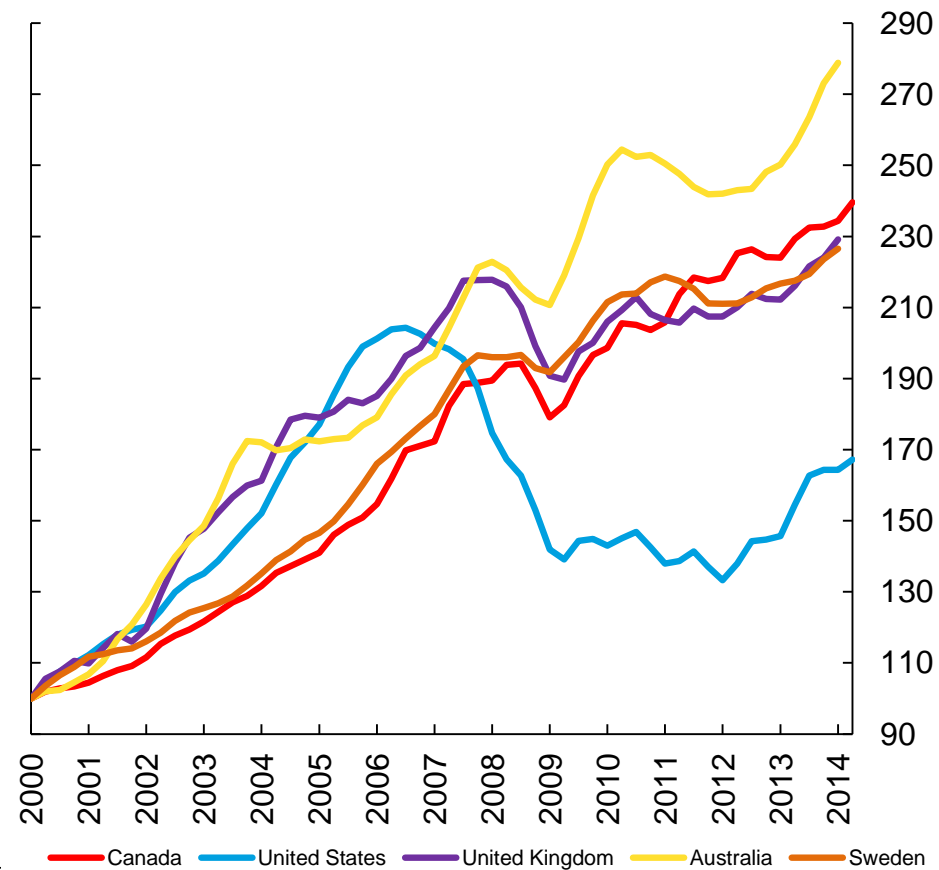
Household debt-to-income ratio



For international comparability, data for Canada are for households plus non-profit institutions serving households (NPISH). Sources: Statistics Canada, Haver Analytics, U.K. Office for National Statistics and U.S. Federal Reserve

Last observation: 2014Q1

House price indexes (2000Q1 = 100)



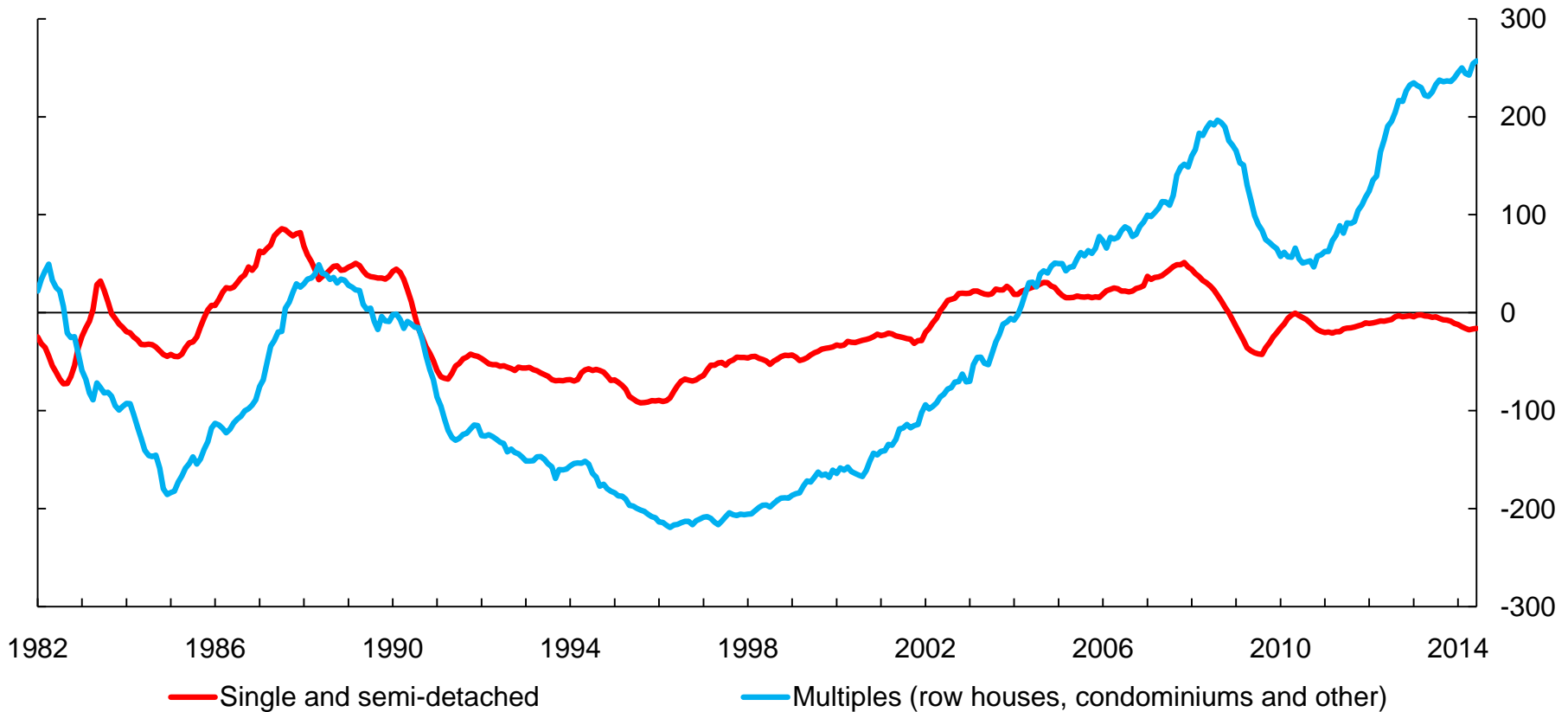
Sources: Teranet-National Bank, Case-Shiller and Federal Reserve Bank of Dallas

Last observation: Canada and United States, 2014Q2; other countries, 2014Q1

Supply of multiple-unit dwellings under construction continues to rise

Supply of multiple-unit dwellings under construction

Deviation from historical average, per 100,000 people (aged 25+ years), major metropolitan areas



Public Policy Responses








Challenges and considerations when taking policy actions to address these imbalances

- Low rates lead to financial but not enough economic risk taking
 - rotate growth from credit financed household spending to exports and investment
- Balance financial and macroeconomic stability objectives
 - correct imbalances but keep inflation expectations anchored and growth momentum alive
- Set macroprudential policy to be consistent with long-run goal

Actions taken by authorities:

- Tightened rules for government-backed mortgage insurance
- Tightened supervisory guidelines for mortgage and mortgage insurance underwriting
- Communication of risk: Minister of Finance and Bank of Canada
- Strengthened oversight of public and private mortgage insurers
- Bank of Canada pointed to household imbalances in its interest rate decisions, consistent with its flexible inflation targeting framework
 - Risk management approach

Successive rule tightening over 4 years: 2008-2012

Maximum amortization period	40 years 	25 years
LTV limit for new mortgages	100% 	95%
LTV limit for mortgage refinancing	95% 	80%
LTV limit for investment properties	95% 	80%
Debt-service criteria	Total debt-service ratio (TDS) capped at 45% 	Gross-debt-service ratio (GDS) capped at 39% and TDS ratio at 44%

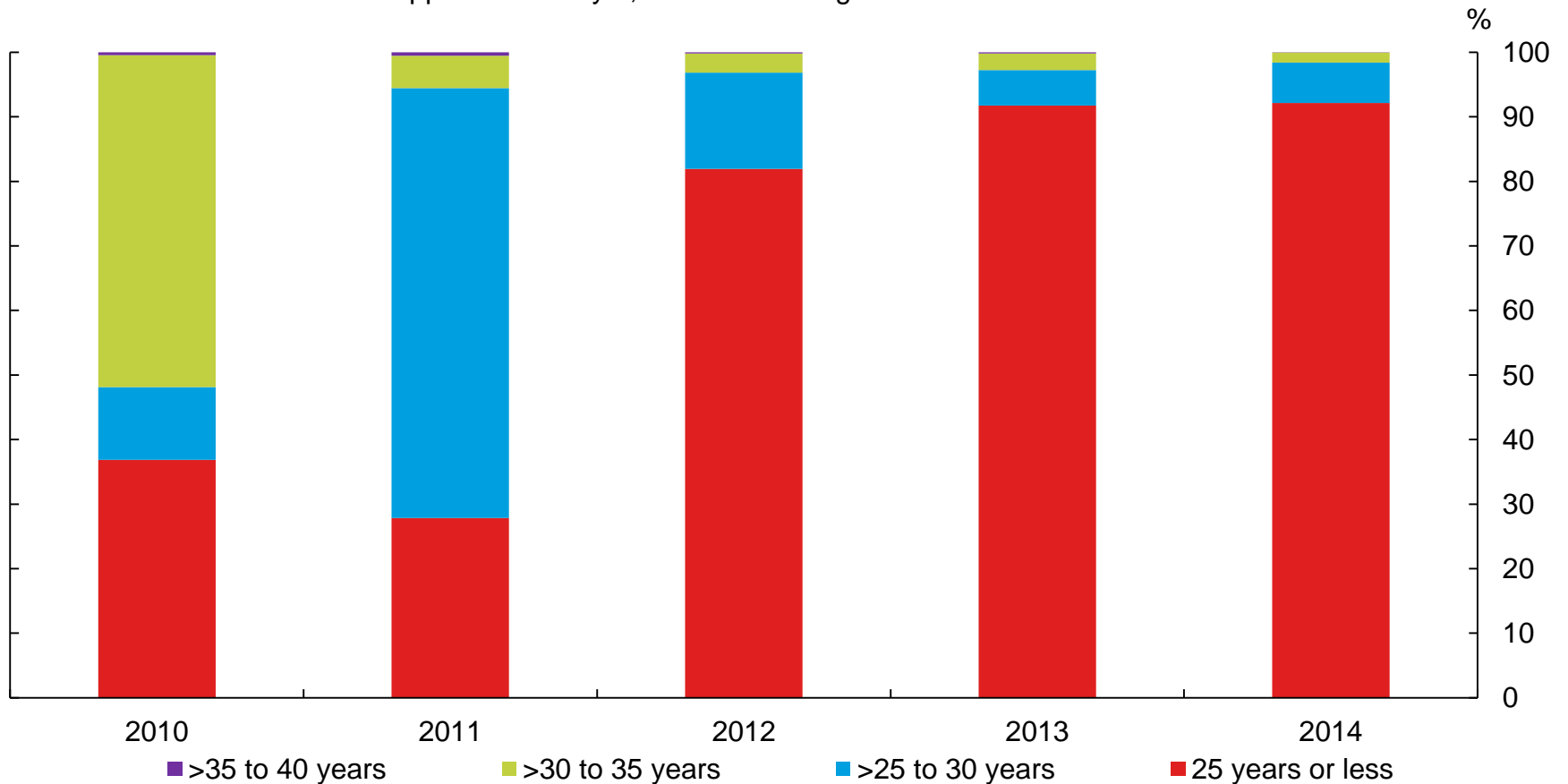
Effectiveness of Policy Responses



Reduced amortization periods on new mortgages

Insured mortgage originations by amortization period, as a share of total

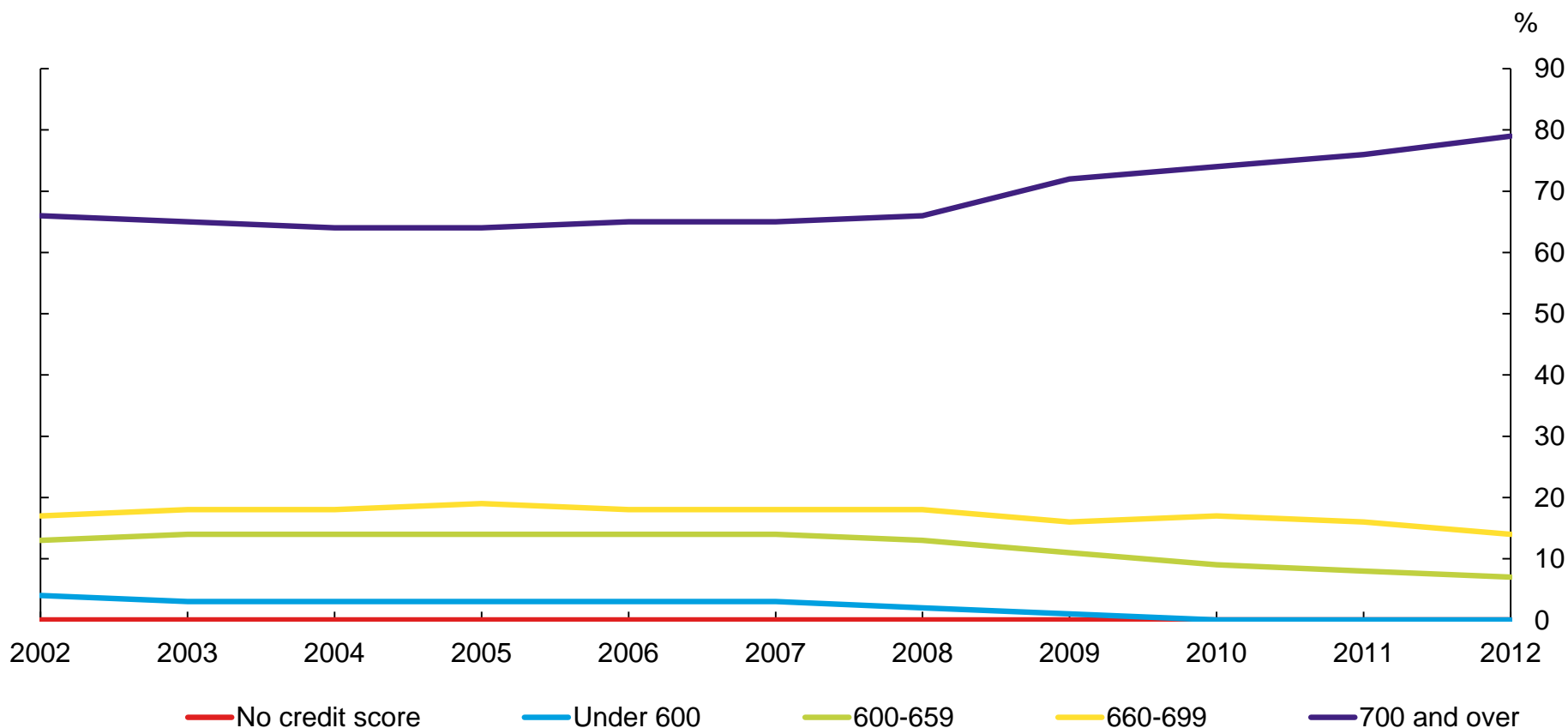
Extended amortizations start to disappear after July 9, 2012 rule change



Note: New originations include purchases from 3rd parties, switches from other FIs, refis, and pre-approvals.
Source: Regulatory filings of Canadian banks

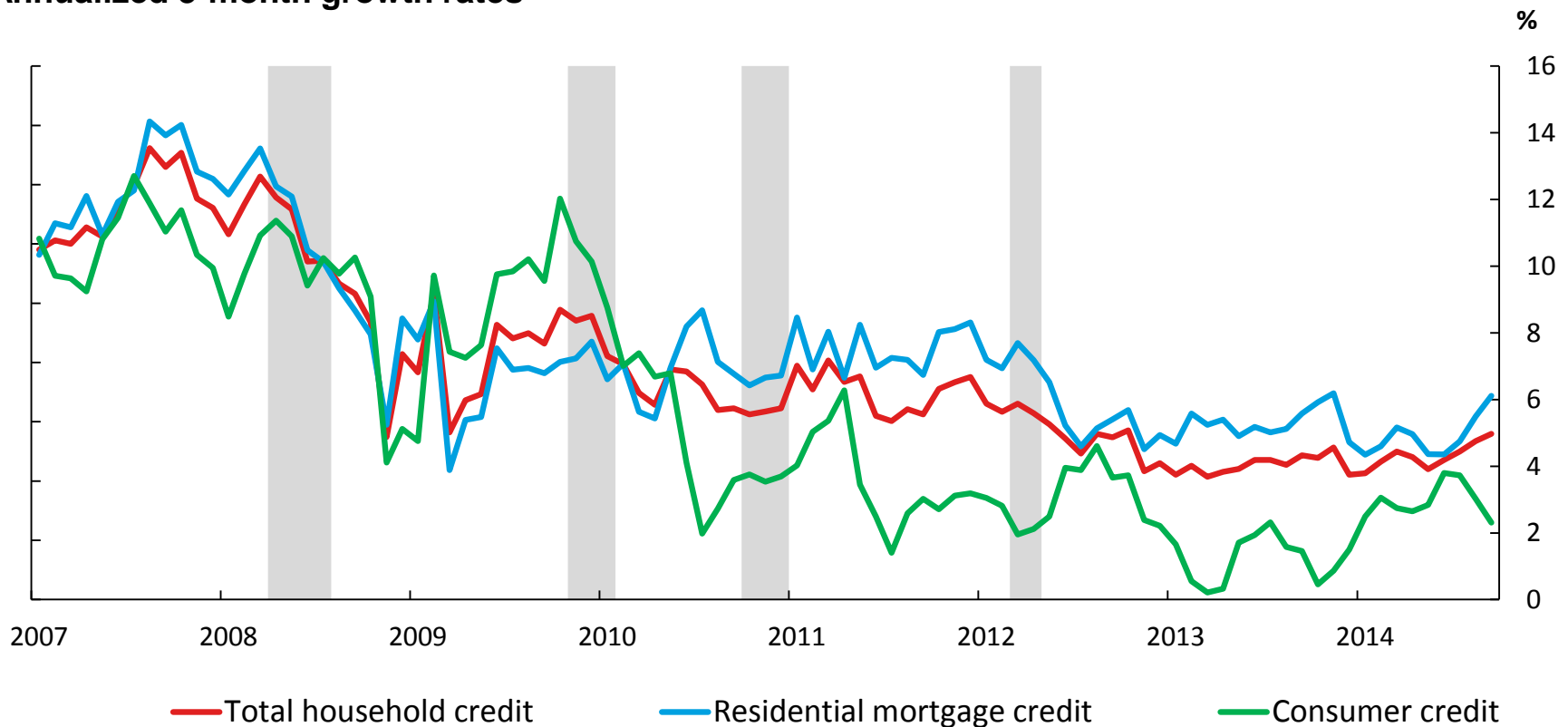
Raised credit scores and mortgage quality

Distribution of credit scores at origination (CMHC high-ratio mortgages)



Mortgage rule changes contributed to trend decline of household credit growth

Annualized 3-month growth rates



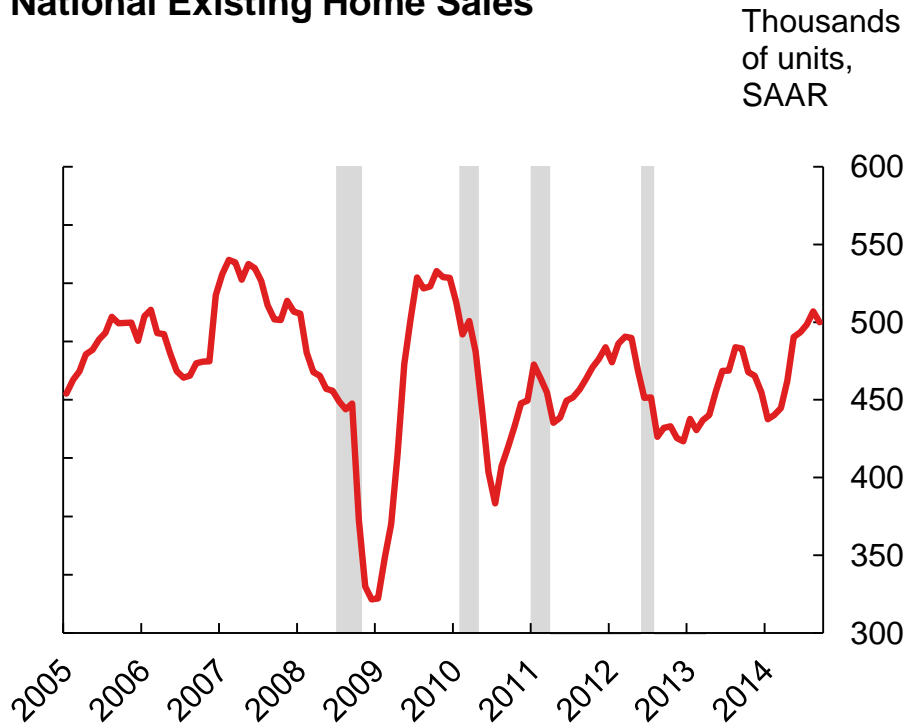
Note: Shaded area represents periods of changes o government-backed mortgage insurance

Source: Bank of Canada

Last observation: September 2014

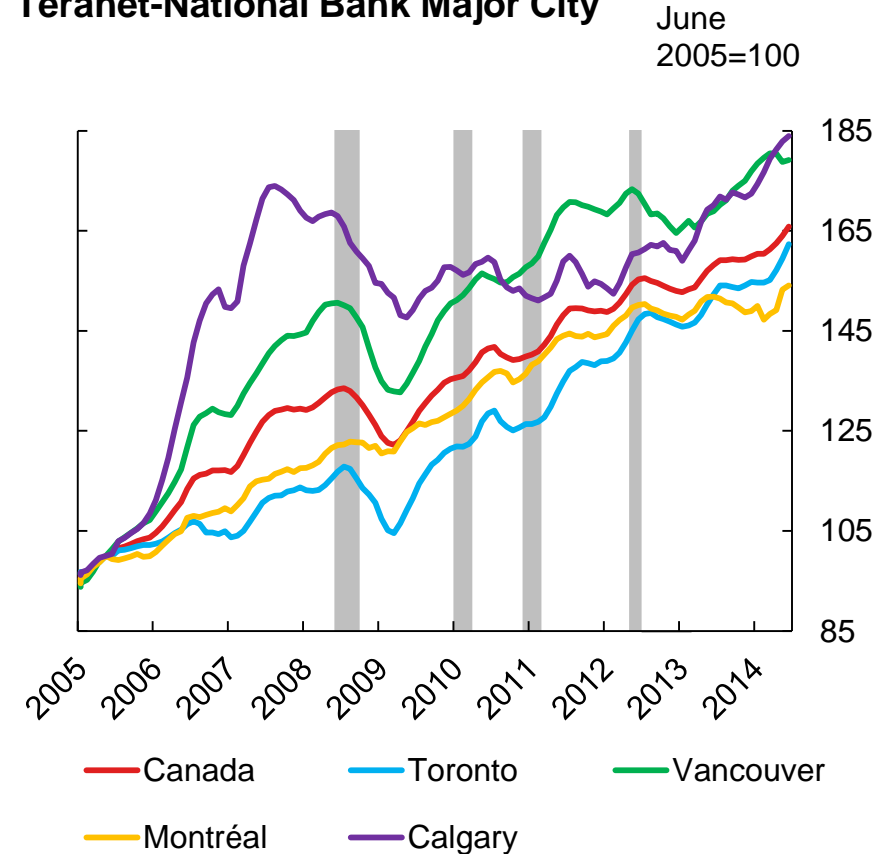
Housing activity appears to respond to mortgage rule changes over short horizons, but less evident in prices

National Existing Home Sales



Sources: Canadian Real Estate Association (CREA), Bank of Canada calculations and Teranet-National Bank
Last observation: September 2014

Teranet-National Bank Major City



Source: Teranet-National Bank
Last observation: July 2014

Conclusion

- Timely changes to insured mortgage rules
 - have contributed to credit growth moderation
 - imbalances expected to unwind gradually to achieve a “soft landing”
- Challenges involve balancing financial stability and fragile economic recovery
- Ongoing concerns:
 - Pockets of vulnerability in segments of housing market
- Public Canadian authorities continue to remain vigilant and monitor the imbalances



Macro-prudential policy: When and how to take action? The Banque de France's approach

Anne Le Lorier

Premier Sous-Gouverneur
Banque de France

Outline

- 1. A tentative guide for conducting macro-prudential policy**
- 2. Case study : risks related to the French real estate sector**

1. A tentative guide for conducting macroprudential policy

- a) Identifying and measuring risks to financial stability**
- b) Choosing the appropriate instrument**
- c) Setting up triggers for the activation of instruments**
- d) Taking account of specificities and interactions**

1.a) Identifying and measuring risks to financial stability

- **The 2007-09 financial crisis showed the need to consider financial risk not only at the individual level, but at the level of the entire financial system**
- **The lack of stability in the financial system may severely affect the functioning of the economy.**
- **In practice, need to monitor a large number of indicators of different nature: macroeconomic aggregates, credit risk variables, financial soundness ratios, measures of concentration risks and models of contagion**

1.b) Choosing the appropriate instrument

Objective	Instruments
Mitigate and prevent excessive credit growth and leverage	Countercyclical capital buffer [CCB], sectoral capital requirements, leverage ratio, Loan-to-value cap, debt-to-income cap
Mitigate and prevent excessive maturity mismatch and market illiquidity	Liquidity Coverage ratio [LCR], Net stable funding ratio [NSFR]
Limit bilateral exposure concentration	Large exposure restrictions, CCP clearing requirement
Limit the systemic impact of misaligned incentives with a view to reducing moral hazard	Systemically Important Financial Institutions capital surcharges
Strengthen the resilience of financial infrastructures	Margin & haircut requirements on CCP clearing, systemic risk buffer

1.c) Setting up triggers for the activation of instruments

- **Need to quantify systemic risk thresholds triggering instrument activation/calibration**
- **Overcoming the “inaction bias” may require binding indicators and thresholds.**
- **But there is a danger to miss the build-up of risk if pre-defined indicators and thresholds fail to capture actual risks.**
- **A certain amount of discretion is needed.**

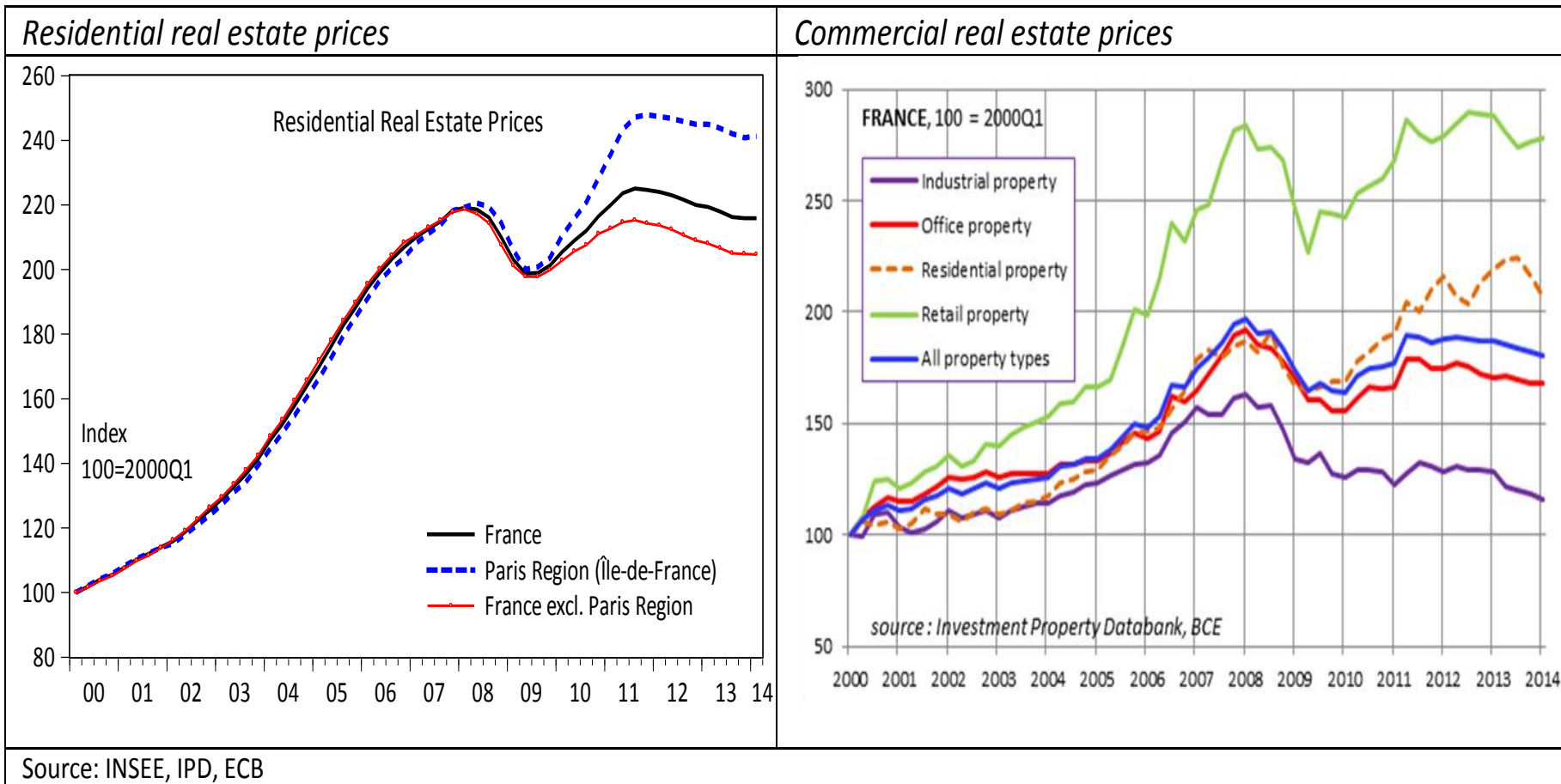
1.d) Taking account of interactions

- **Complementarity and substitutability between macro-prudential instruments**
- **Importance to coordinate macro-prudential policy and other economic policies (monetary policy, fiscal policy, micro-prudential supervision)**
- **Cross-country dimension**

2. A case study: addressing risks related to the French real estate sector

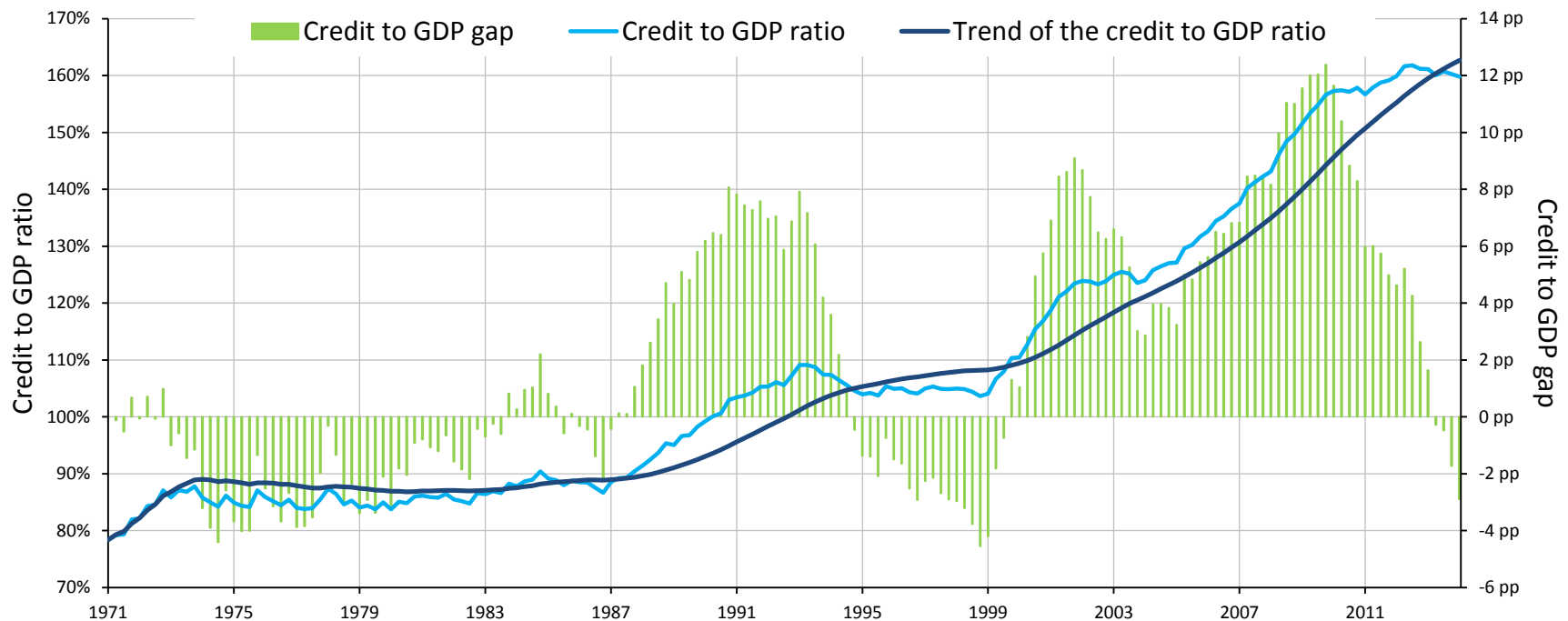
- a) Real estate prices developments have been particularly pronounced, hence a risk of re-pricing**
- b) There is no need to tighten lending-related prudential requirements at the current juncture**
- c) French banks have safeguards against a downturn in real estate markets**
- d) Data gaps remain in the area of commercial property and must be addressed**

2.a) Real estate prices developments have been particularly pronounced, hence a risk of re-pricing



2.b) There is no need to tighten lending-related prudential requirements at the current juncture

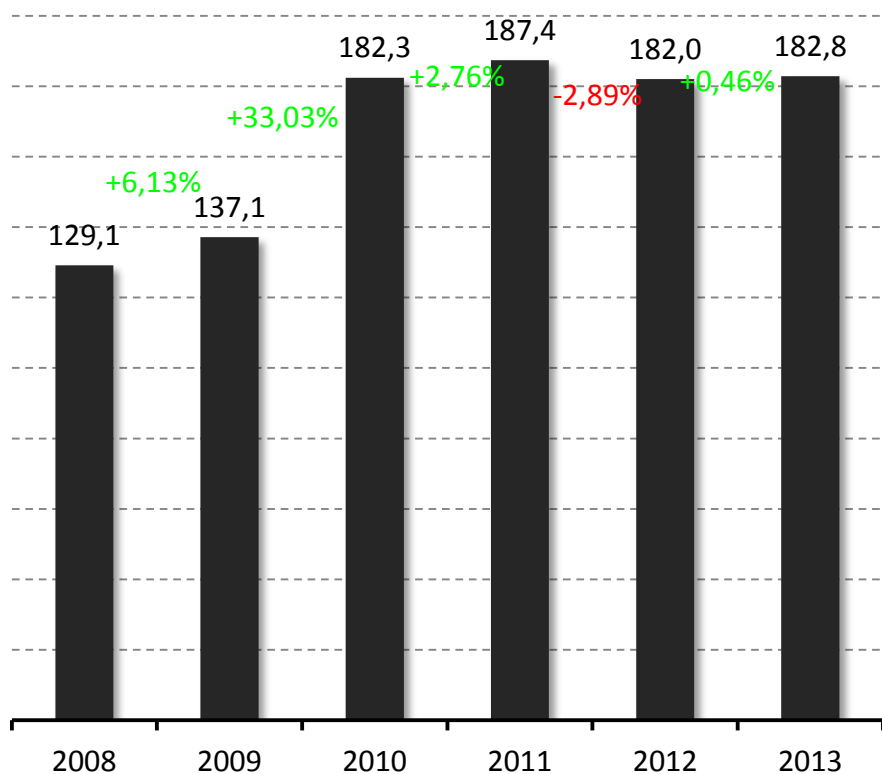
- Downward trend in the credit-to-GDP gap indicator for France over the recent months
- At the current level of the indicator, no CCB would be recommended.



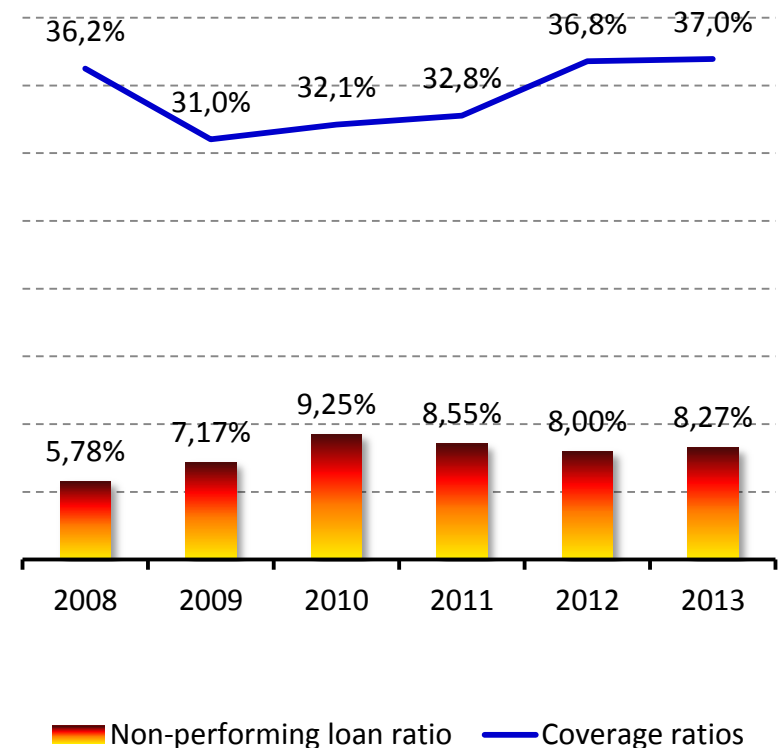
Source: BIS

2.c) French banks have safeguards against a downturn in real estate markets

Total gross exposures on the commercial property sector



Non-performing loans and coverage ratios



Source: ACPR

2.d) Data gaps remain in the area of commercial property and must be addressed

- Our knowledge of these markets is limited
- Available price indices are produced by a single data provider, with a coverage of around 40% of the market
- Several avenues for improving the situation

Concluding remarks

- **When and how to take action? Further work is still needed...**
- **Operationalising macro-prudential policy will remain an important challenge.**