



Monetary Authority of Singapore

# **International Seminar on Financial Stability: Financial Stability through Effective Crisis Management and Inter-Agency Coordination**

## **Financial Stability Risk Assessment and Monitoring**

6 December 2012

# Micro- vs Macroprudential?

	<b>Microprudential</b>	<b>Macroprudential</b>
Ultimate objective	Consumer (investor/depositor) protection by ensuring soundness of individual FIs	Minimising output costs (by limiting financial system distress)
Proximate objective	Limit distress of individual institutions	Limit financial system wide distress
Risk focus	Impact of environment (real economy, external sector, & rest of financial sector) on FIs	Impact of FIs on environment and vice versa

Source: Adapted from Borio (2003)

# Characteristics of Singapore

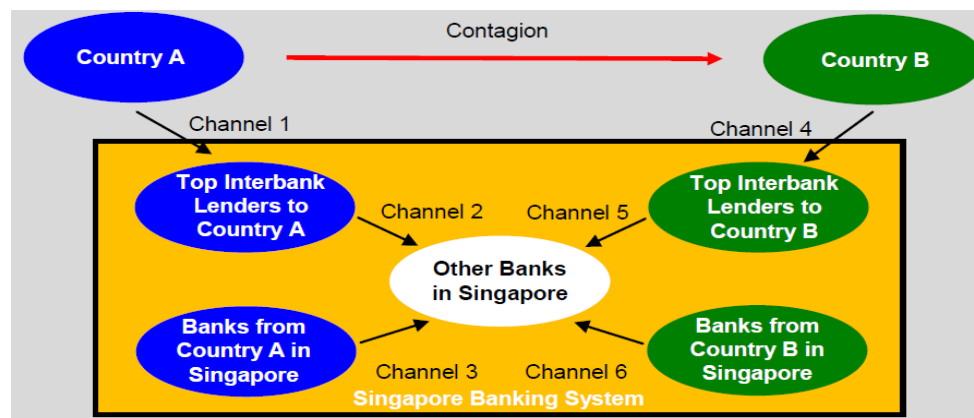
- Small and open economy, and a significant host financial centre
  - Connected to international financial system and global economy
  - Vulnerable to external shocks
- Systemic importance of local banks and Qualifying Full Banks (QFBs) to domestic economy.
- Significant exposure of Singapore banking system to particular sectors, eg. Property sector

# Singapore's Approach to Macroprudential Surveillance

- 1) Financial linkages
- 2) Macro-financial linkages
- 3) Procyclicality of the financial system
- 4) Risk concentrations and common exposures  
(Case study: Property sector)

# 1) Financial Linkages

- Surveillance framework for cross-border interbank transactions – Analyse potential cross border contagion from Eurozone and key interbank markets



Note: See MAS FSR 2011

- Network Analysis – Too “big” to fail, too “connected” to fail, too “close” to fail, too “central” to fail, too “influential” to fail.

## 2) Macro-Financial Linkages

- **Real economy to financial sector – Stress testing**
  - GDP growth slows => unemployment rate rises => household income falls => repayment capability falls => impact on banks' asset quality
  - GDP growth slows => property price falls => lower recovery value for defaulted loans
- **Financial sector to real economy – economic impact assessment of higher capital requirements.**
  - Higher capital => Banks pass on increased costs to corporates => Higher lending spreads => Lower consumption & investment => Reduced economic growth
- **Assessment of systemic importance to broader financial system and/or real economy underlies higher capital requirements for Singapore incorporated banks and requirement for Qualifying Full Banks (QFBs) to locally incorporate retail operations.**

### 3) Procyclicality of Financial System - Counter-cyclical Capital Buffer (CCB)

- MAS will put in place a CCB framework to address procyclicality
- Challenges
  - Few historical crisis experiences;
  - Determining start and end of financial crisis;
  - Ability to separate financial from economic cycle - GDP cycle is a mixed financial and economic cycle, while macroprudential policy should address financial cycles.
- Recognising these challenges, Singapore's approach would be to rely on a suite of indicators apart from the credit-to-GDP gap, for policy calibration.

# 4) Risk Concentration & Common Exposures - Property

- Property sector is key source of systemic risks in Singapore

Property holdings as share of household assets:

50 %

Housing-related liabilities as share of household liabilities:

73.4%

Households

-Owner Occupiers

-Investors

-Speculative Buyers

Real

Economy

Housing Market

Construction sector's share of total employment:

12.8%

Building and construction loans as share of total non-bank loans:

15.7%

Housing loans as share of total non-bank Loans:

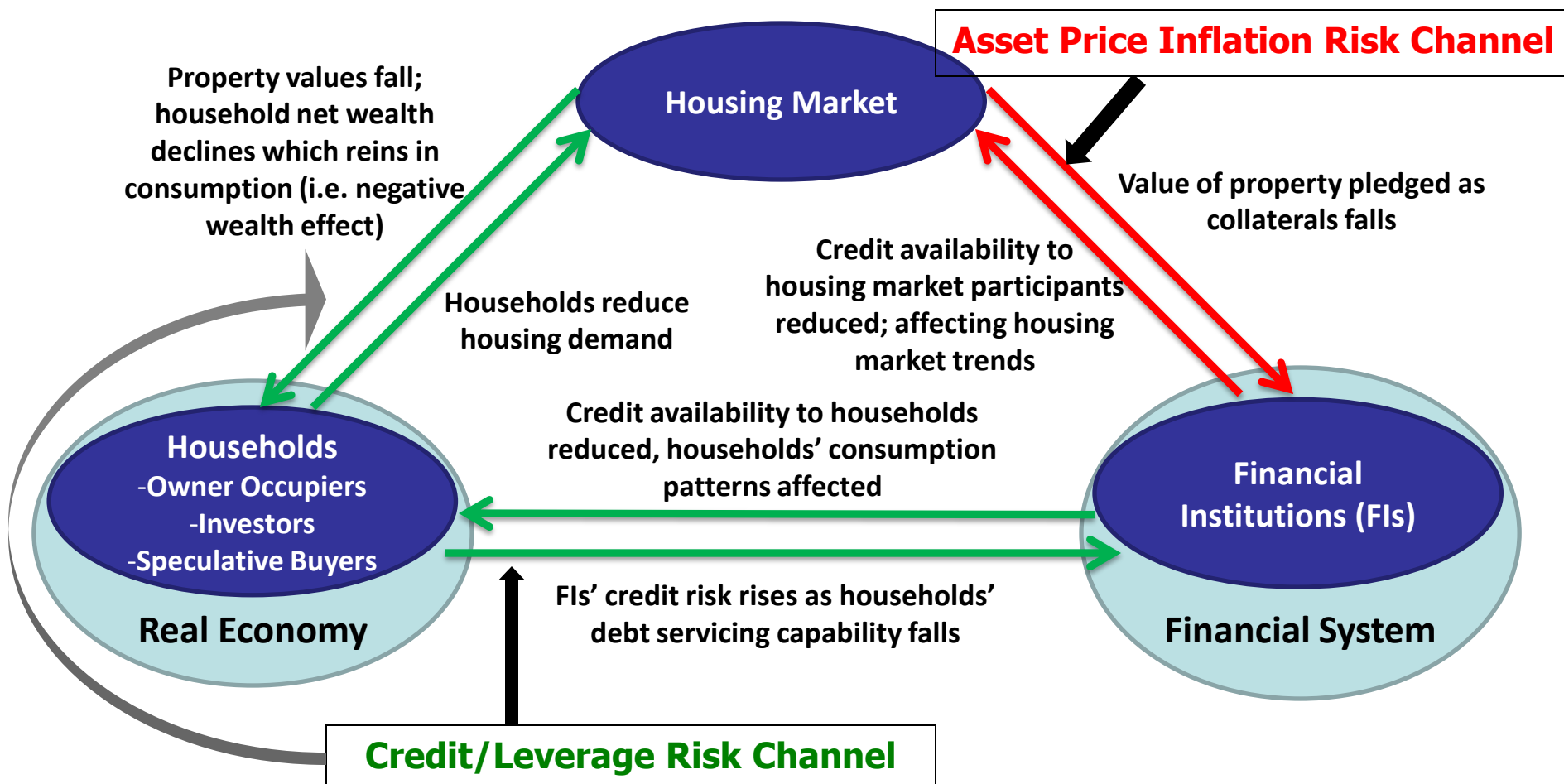
30.7%

Financial Institutions (FIs)

Financial System



# Systemic Linkages between Housing Market, Financial System and Real Economy



# Policy Measures Undertaken

## Demand Measures

- LTV Cap/ Loan Tenure
- Minimum Cash Requirement
- “Innovative Loan Schemes”
- Transaction Taxes
- Consumer Education

## Supply Measures

# Policy Measures Undertaken

## Demand Measures

- LTV Cap/ Loan Tenure
- Minimum Cash Requirement
- “Innovative Loan Schemes”
- Transaction Taxes
- Consumer Education

## Supply Measures

19 Feb 2010

- LTV ratio limit lowered from 90% to 80% on housing loans provided by MAS-regulated FIs

30 Aug 2010

- LTV ratio limit lowered from 80% to 70% for buyers with one or more outstanding housing loans

13 Jan 2011

- LTV ratio limit lowered from 70% to 60% on housing loans for individual property purchases with one or more outstanding housing loans
- LTV ratio limit lowered to 50% for non-individual property purchases.

5 Oct 2012

- Loan tenure max 35 years
- LTV cap of 60% for borrower with no outstanding loan but (i) taking loan exceeding 30 years or (ii) loan period extends beyond retirement age (65 years); LTV cap of 40% for borrower with outstanding loan(s); LTV cap of 40% for non-individuals

# Policy Measures Undertaken

## Demand Measures

- LTV Cap/ Loan Tenure
- **Minimum Cash Requirement**
- “Innovative Loan Schemes”
- Transaction Taxes
- Consumer Education

## Supply Measures

30 Aug 2010

- Minimum cash payment raised from 5% to 10 %

# Policy Measures Undertaken

## Demand Measures

- LTV Cap/ Loan Tenure
- Minimum Cash Requirement
- “Innovative Loan Schemes”
- Transaction Taxes
- Consumer Education

## Supply Measures

14 Sep 2009

- Disallowed Interest Absorption Scheme (IAS) and interest-only loans (IOL)

# Policy Measures Undertaken

## Demand Measures

- LTV Cap/ Loan Tenure
- Minimum Cash Requirement
- “Innovative Loan Schemes”
- **Transaction Taxes**
- Consumer Education

## Supply Measures

19 Feb 2010

- Seller stamp duties (SSD) on residential properties and lands sold within 1 year of purchase

30 Aug 2010

- Holding period for SSD imposition increased from 1 to 3 years

13 Jan 2011

- Increased holding period for SSD imposition from 3 to 4 years
- Raised SSD rates to 16%, 12%, 8% and 4% for residential properties bought & sold in 1st, 2nd, 3rd and 4th year of purchase respectively

7 Dec 2011

- Additional Buyer Stamp Duty (ABSD) was imposed on Foreigners (10%), PRs (3% on 2<sup>nd</sup> and subsequent purchase), Singapore Citizens (3% on 3<sup>rd</sup> and subsequent purchase)

# Policy Measures Undertaken

## Demand Measures

- LTV Cap/ Loan Tenure
- Minimum Cash Requirement
- “Innovative Loan Schemes”
- Transaction Taxes
- Consumer Education

30 Nov 2011

- Banks to provide fact sheets that includes tenor of credit facility, amount of credit extended, repayment schedule of the credit facility and loan amortization tables under different interest rate scenarios to individuals interested in applying for a residential property loan

## Supply Measures

# Policy Measures Undertaken

## Demand Measures

- LTV Cap/ Loan Tenure
- Minimum Cash Requirement
- “Innovative Loan Schemes”
- Transaction Taxes
- Consumer Education

## Supply Measures

14 Sep 2009

- Reinstated the Government Land Sales (GLS) Confirmed list in H1 2010

- Non-renewal of assistance measures for property developers announced in the 2009 budget

19 Feb 2010

- Sites that could yield 10,550 private housing units released under GLS programme

30 Aug 2010

- More supply was injected, with sites that could yield 13,900 units being made available

13 Jan 2011

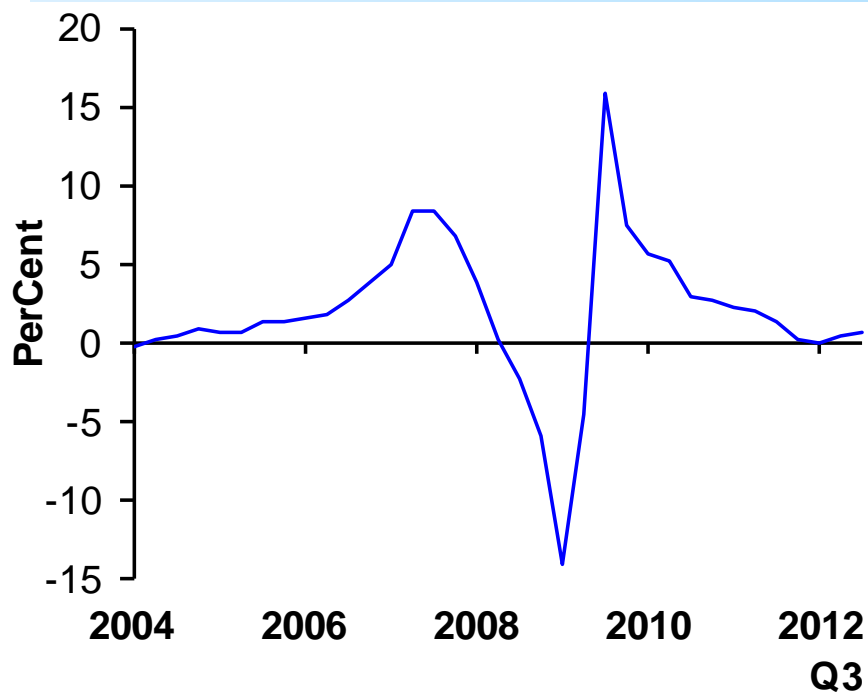
- GLS programme expanded for H2 2011, potentially yielding another 14,200 private residential units



# Have the Policy Measures Worked?

Property prices  
have moderated ...

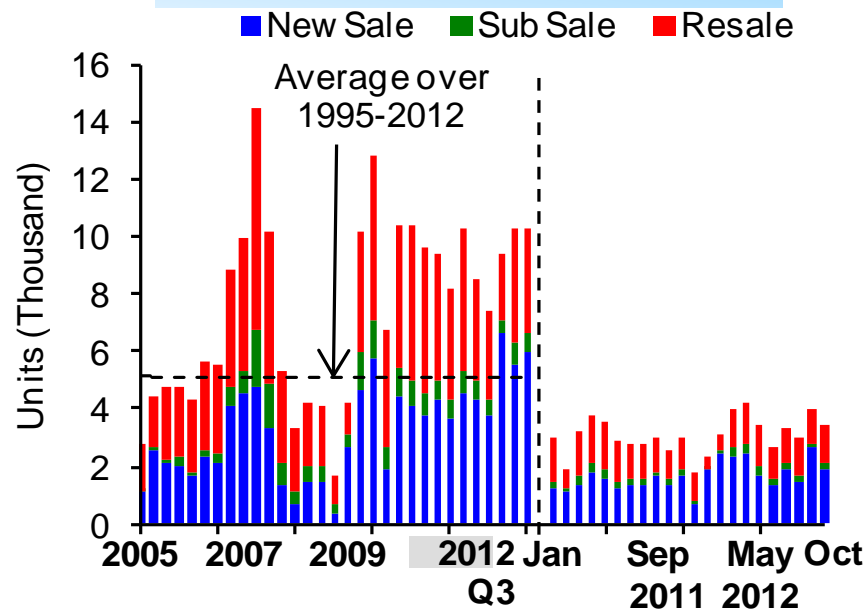
Private Property Price Index (Q-o-q growth)



Source: Urban Redevelopment Authority (URA)

Overall transaction  
activity has moderated

Private Property Transactions



# Multiple Tools, Targeted Purpose

- **Targeting segments/sectors causing systemic risks**
  - Choose tool likely to have more direct impact
  - Avoid unintended spillovers from use of broad measures
- **Considered calibration**
  - Targeted approached for different risks
  - “Different Strokes for Different Folks”  
(speculators/investors/homebuyers)
- **Coordinated use of multiple tools**
  - Signalling effect
  - Collaboration
    - Within MAS: Economic policy, Prudential policy, Bank supervisors
    - Across agencies

# Challenges

- **Calibration and timing of policy (overshoot/undershoot?)**
  - Appropriate trigger-level for policy action; pre-emptive approach; calibrated, incremental steps to implement and re-adjust measures to minimise policy errors
- **Quantifying targets & Measuring Success**
- **Preventing circumvention & ensuring enforceability**
  - LTV caps on non-individual corporate borrowers
  - LTV rules applied on individuals with one or more housing loans at time of application



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**Thank You**