USE OF **LOAN-TO-VALUE RATIO** AS A MACROPRUDENTIAL TOOL IN THE MITIGATON OF RESIDENTIAL PROPERTY PRICE VOLATILITY

Authors:

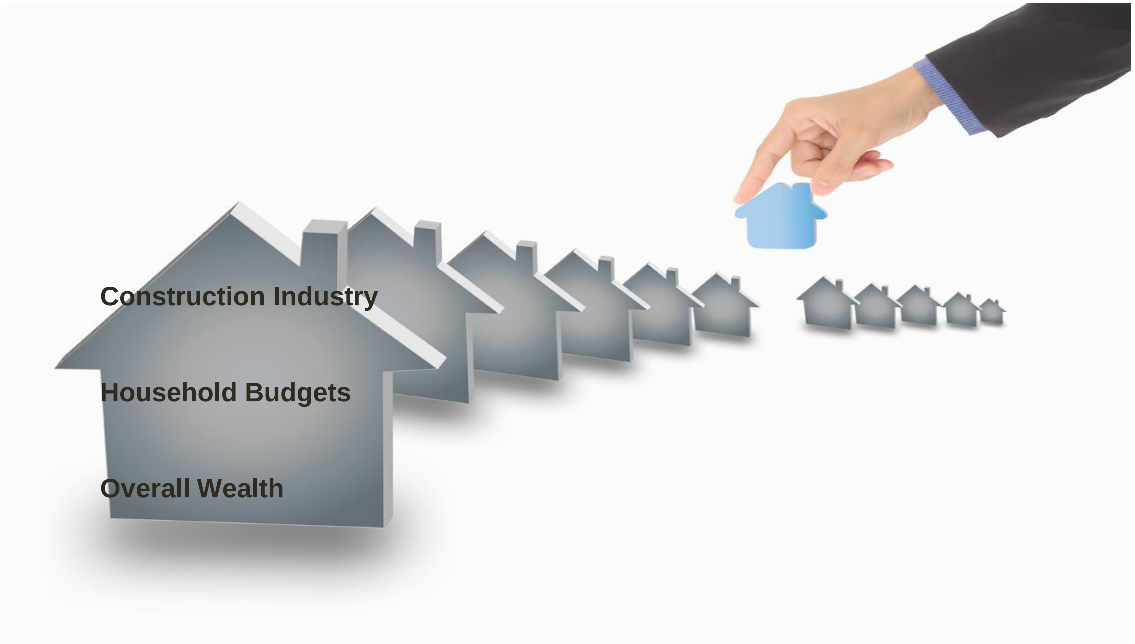
Michelle Majid, Charissa Mooteeram, Darcelle Bowrin, Janelle Awai

Outline

- The Housing Market and Financial Stability
- Use of Monetary & Fiscal policies
- Macroprudential policy & the use of LTV ratio
- Summary of country experiences
- Snapshot of T&T residential housing market
- Recommendations

The Housing Market and Financial Stability

Emerging trends indicate that central banks and financial regulators across the world have placed much more emphasis on housing market development given its far reaching implications for financial stability.



The Link between Bank Lending, Property Price Appreciation and Financial Crises

- Japanese Banking Crisis 1990
- Asian Crisis 1997-1998
- Global Financial Crisis 2007-2009

" IT TURNS OUT POOR PEOPLE WITH BAD CREDIT CAN'T AFFORD TO BUY A HOME. WHO KNEW ? "

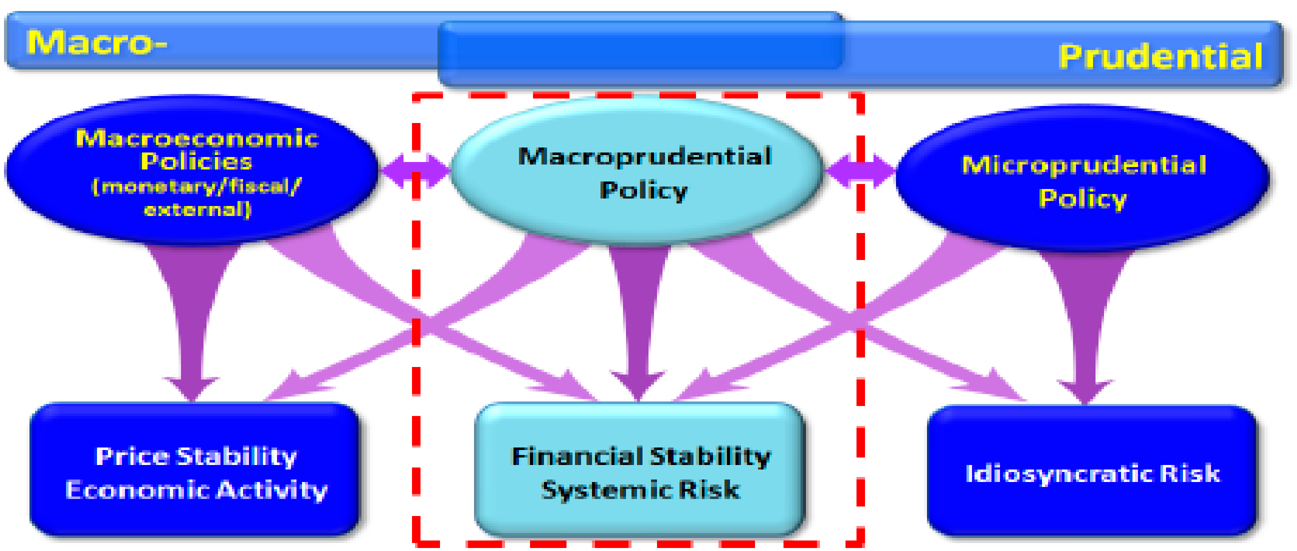
Monetary Policy and Fiscal Tools

- *Can monetary policy tightening stop or contain a real estate boom?* History attests to monetary policy not always effective in tempering the boom-bust cycle in the real estate market.

- *Can transaction or property taxes work to correct disequilibrium in the system?* While in theory may dampen house price volatility, technical and political problems can complicate implementation.

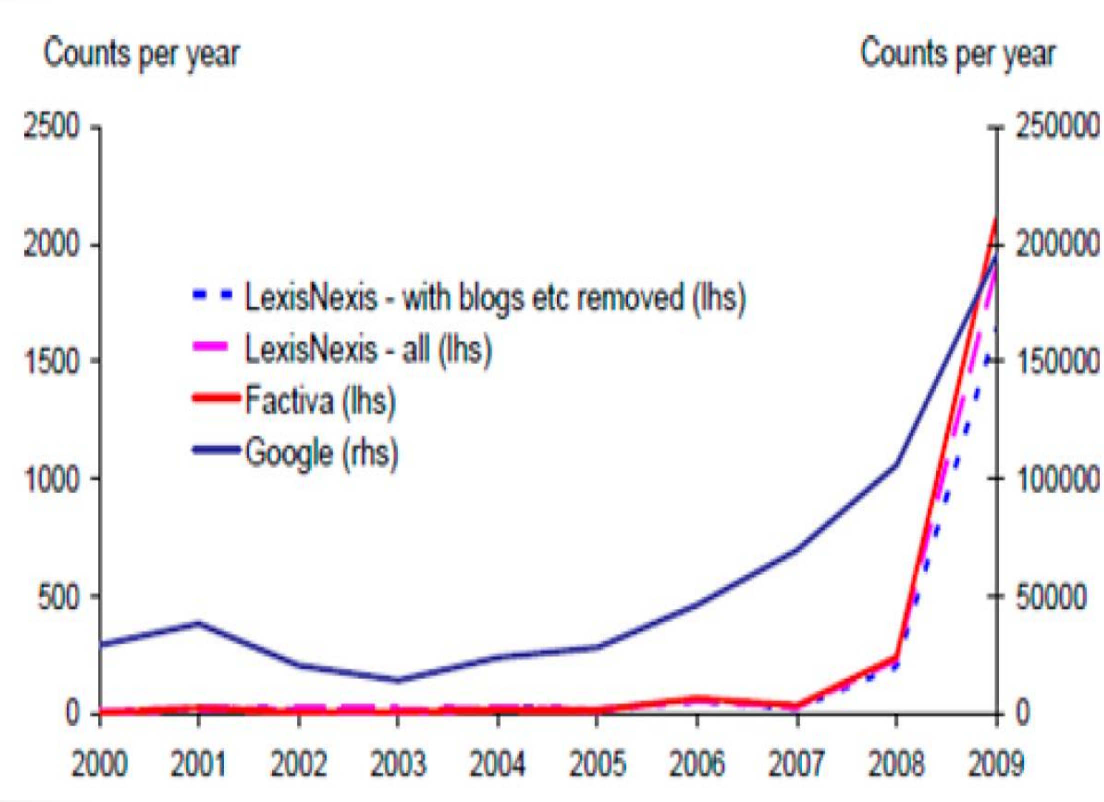
How we saw the world before the financial crisis

How we see the world now



Source: IMF

Macroprudential Policy



Source: Galati and Mossner 2011

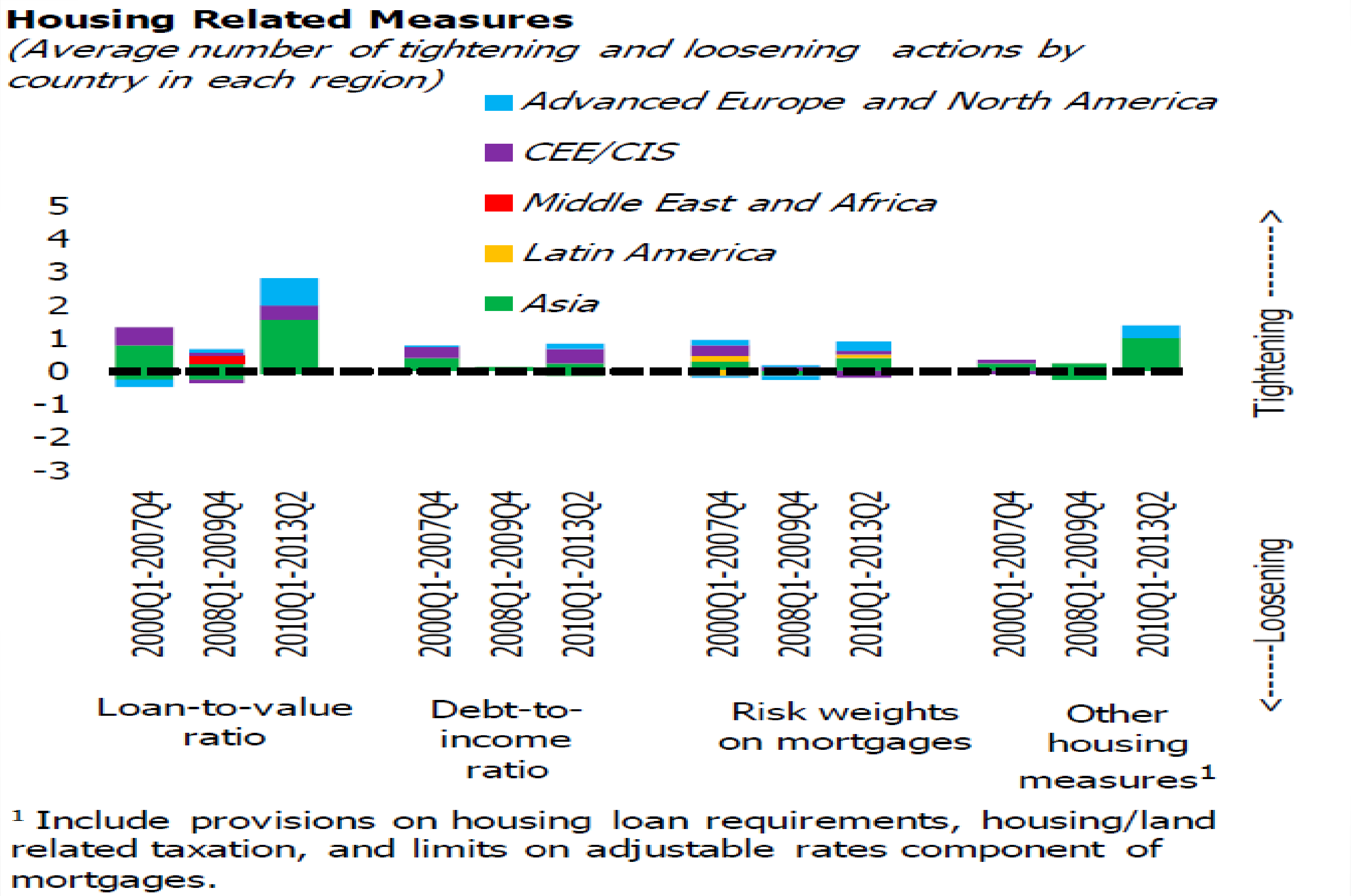
Macroprudential policy *has been defined as the use of primarily prudential tools to limit systemic risk – the risk of disruptions to the provision of financial services that is caused by an impairment of all or parts of the financial system, and can cause serious negative consequences for the real economy (IMF, 2013).*

Micro vs. Macro?

Macroprudential Tools

caps on the debt-to-income (DTI) ratio
financial stability
credit growth
systemic risk
real estate booms
financial stability
caps on the loan-to-value (LTV) ratio
caps on the loan-to-value (LTV) ratio
mandatory insurance for riskier loans
housing price volatility
systemic risk
dynamic or time-varying capital requirements
real estate booms
caps on the loan-to-value (LTV) ratio
bank leverage
financial stability
real estate booms
caps on the loan-to-value (LTV) ratio
prudential stability levies/taxes
credit growth
caps on the debt-to-income (DTI) ratio
financial stability
housing price volatility
systemic risk
systemic risk
core funding requirements
caps on the debt-to-income (DTI) ratio
limits on foreign currency lending
bank leverage
financial stability
caps on the debt-to-income (DTI) ratio
systemic risk
credit growth
caps on the loan-to-value (LTV) ratio
limits on funding gaps
housing price volatility
caps on the debt-to-income (DTI) ratio
real estate booms
caps on the loan-to-value (LTV) ratio
systemic risk
real estate booms
caps on the loan-to-value (LTV) ratio
financial stability
bank leverage
housing price volatility
systemic risk
caps on the loan-to-value (LTV) ratio
over-leveraging
credit growth
financial stability
credit growth
housing price volatility
credit growth
financial stability
systemic risk
systemic risk
housing price volatility
bank leverage
financial stability
bank leverage
real estate booms
countercyclical or time-varying capital requirements
systemic risk
financial stability

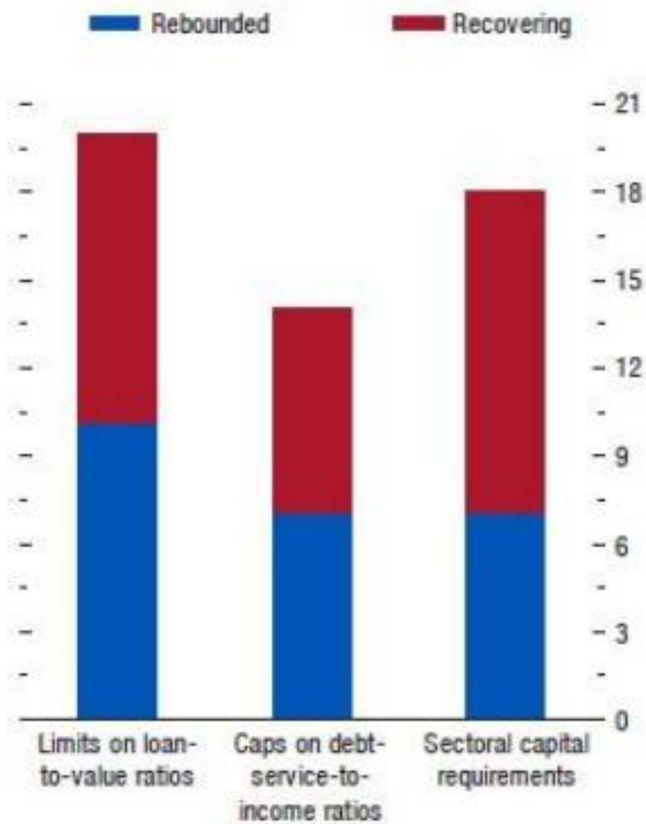
The Macroprudential Toolkit: Housing



Source: Zhang and Zoli, 2014

The most popular: LTV

The LTV ratio introduces a **cap** on the size of a mortgage loan **relative to the value** of a property, thereby imposing a **minimum downpayment** (IMF, 2013).



Source: IMF staff calculations.
Note: Rebounded = Australia, Austria, Brazil, Canada, China, Colombia, Hong Kong SAR, Israel, Malaysia, New Zealand, Norway, Singapore, Sweden, Switzerland. Recovering = Bulgaria, Croatia, Estonia, Finland, Hungary, India, Indonesia, Ireland, Korea, Latvia, Mexico, Netherlands, Poland, Russia, Slovak Republic, Spain, Thailand, United Kingdom, United States.

Literature Review on Use of LTV caps

- Crowe et al. (2011) – positive correlation between LTV at origination and house price appreciation

- Wong et al. (2011) – low LTVs have the potential to reduce delinquencies from economic downturns and real estate busts.

- Ahuja and Nabar (2011) – found that LTV limits slowed property price growth.

- Kuttner and Shim (2014) – showed that housing credit growth is significantly affected by changes to housing related measures, inter alia LTV caps.

Case Studies

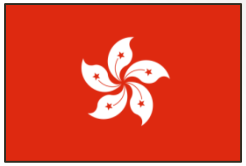
Country Experiences…

- Korea
- Hong Kong
- Singapore
- Sweden
- Canada
- New Zealand
- England

Korea

Date	Specification
September 2002	Introduction of the LTV Ratio cap of 60 per cent but a differentiated cap depending upon the maturity of the loan, housing price and location.
June 2003	The LTV ratio was lowered from 60 per cent to 50 per cent for loans with a maturity of 3 years or less and backed by real properties located in speculated areas
October 2003	LTV Ratio further reduced from 50 per cent to 40 per cent for loans with maturity of 10 years or less and backed by apartment units in speculative areas
March 2004	The LTV Ratio was raised from 60 per cent to 70 per cent for mortgage loans not generally used for speculative purposes: those with a maturity of 10 years or more and less than one year of interest only payments
June 2005	LTV Ratio for apartment units priced just about US$600,000 in speculative areas was lowered from 60 to 40 per cent
September 2006	LTV ratio for all mortgage borrower seeking an apartment unit priced more than USD$600,000 was set at 40 per cent
July 2009	LTV Ratio was lowered from 60 to 50 per cent for: (i) Apartment units with mortgage maturities of less than 10 years. (ii) Apartment units with mortgage maturities of more than 10 years but with a collateral value over USD$600,000. (iii) Non-apartment, detached units with mortgage maturities of less than 3 years. In the Seoul Metropolitan area
October 2009	LTV Regulations were expanded to all financial institutions for the metropolitan area

Hong Kong

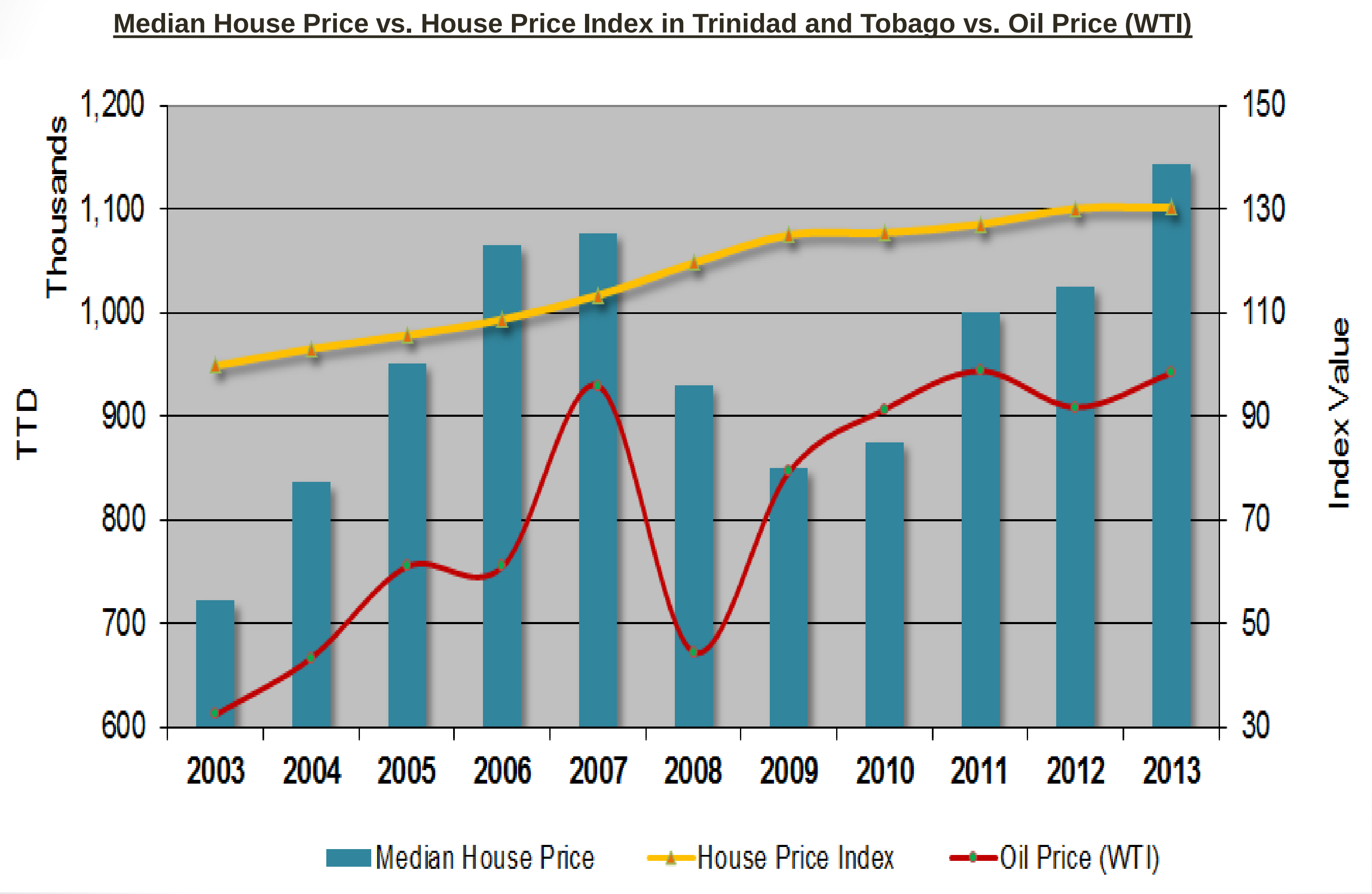


- Hong Kong has made use of the LTV ratio for almost 20 years.
- In 1995 – implemented a 70 percent LTV ratio
- Since then tighter caps have been placed on:
  - Luxury properties
  - Investment properties
- Changes in the LTV ratio saw a reduction in transaction volumes and slowed house price inflation.

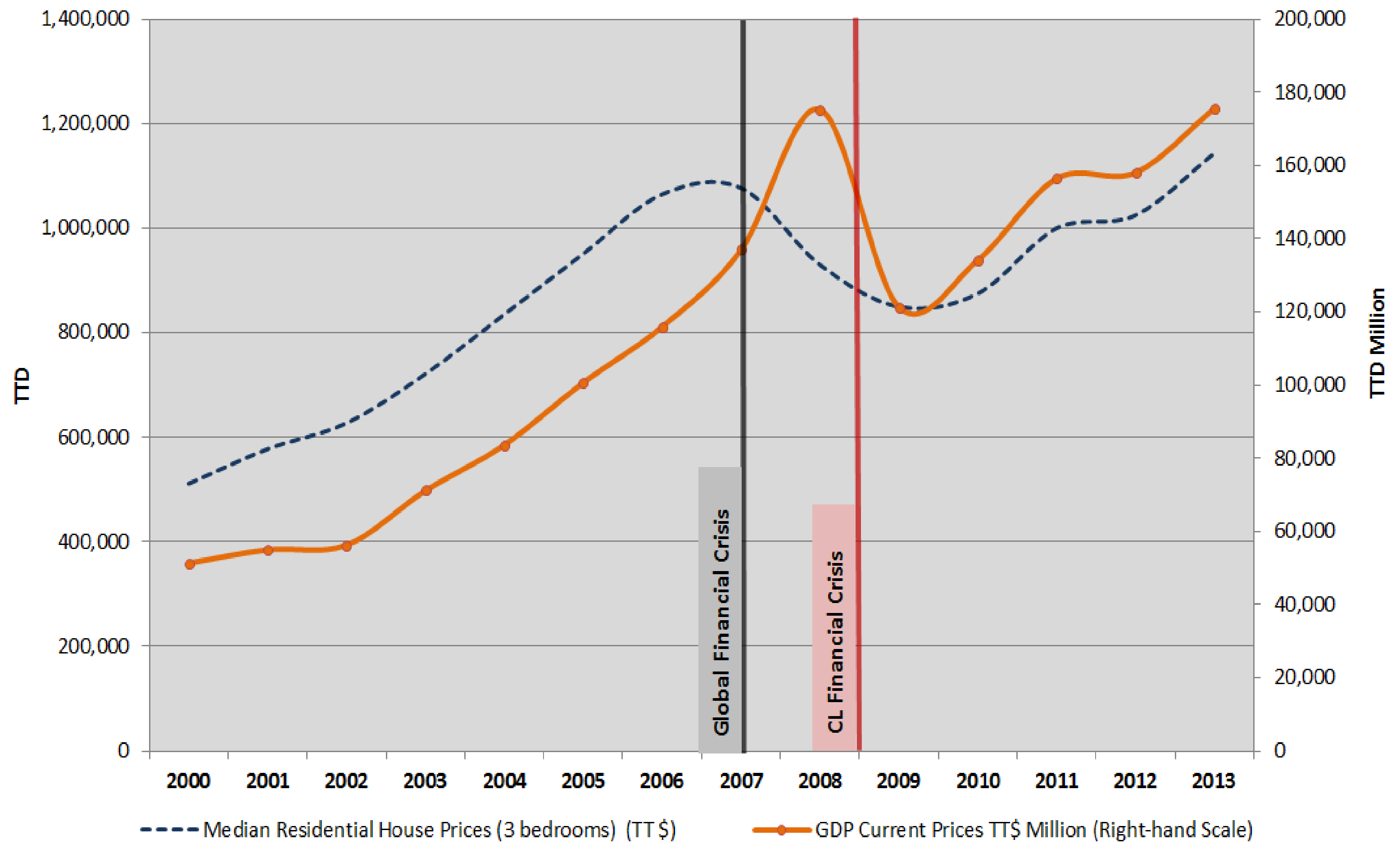
Singapore

- The use of macroprudential policies has been centered around the housing market and its use has been increased significantly especially after 2009.
- Evidence suggest that the LTV ratio ‘cooled’ the overheated housing market.
- In 2010, LTV caps were reduced from 90 per cent to 80 per cent for all borrowers and reduced to 70 per cent and later to 60 per cent for borrowers with one or more outstanding housing loans.
- Results indicated that the share of borrowers with single mortgages increased and speculative transactions decreased.

Trinidad and Tobago's Housing Market

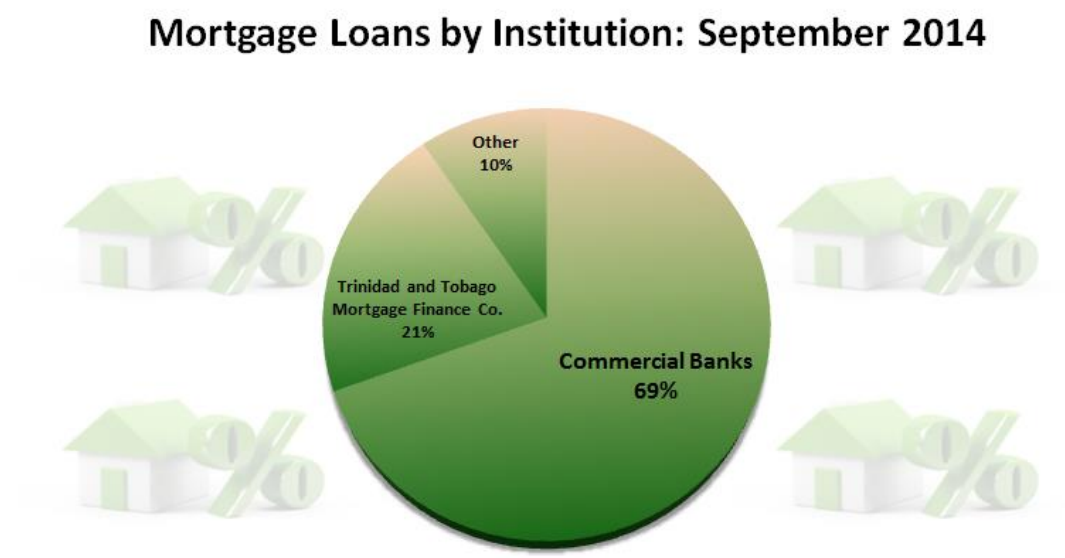


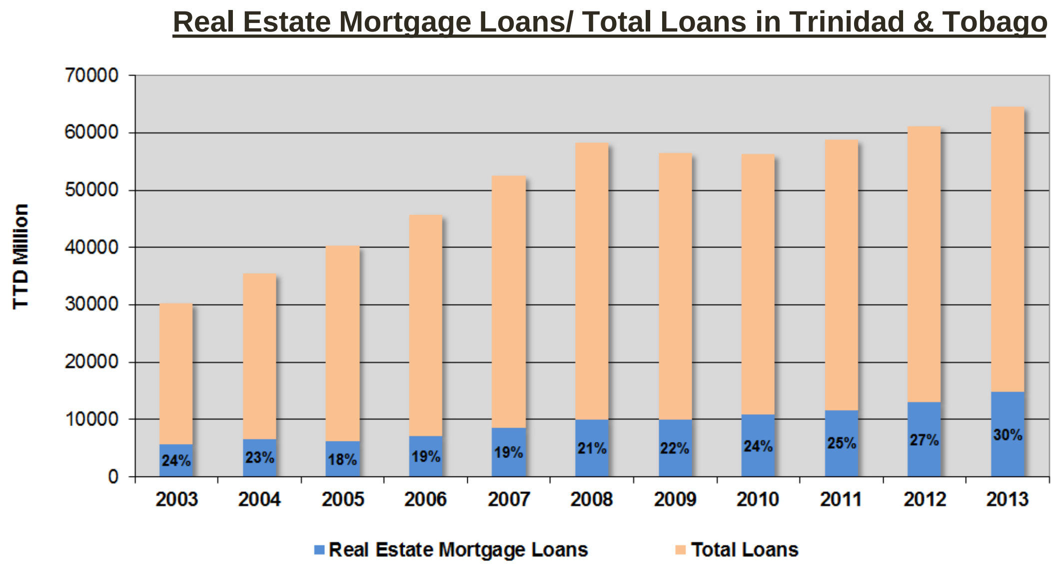
Housing Prices vs GDP



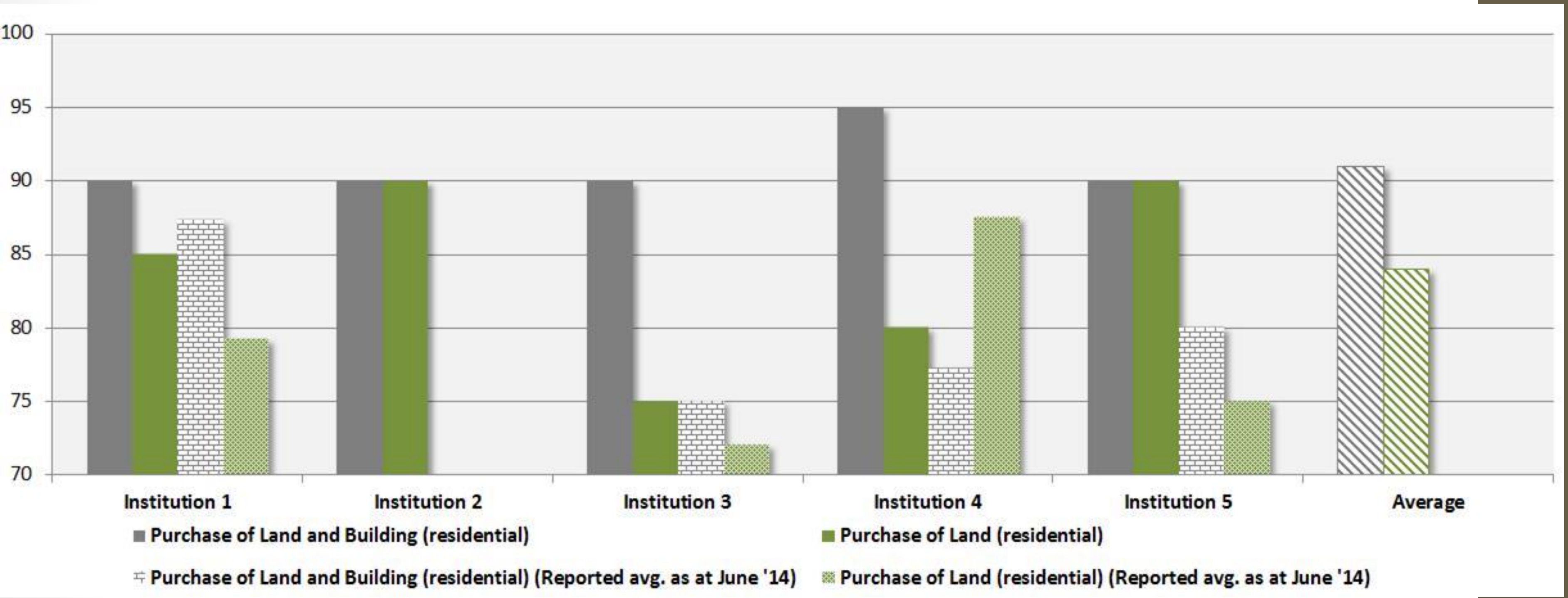
Source: Central Bank of Trinidad and Tobago

Mortgage Loans in Trinidad and Tobago





LTV Ratio applied on Residential Property by Institution in Trinidad & Tobago



Steps in adopting any MP tool

1. Systemic Risk Assessment
2. Macroprudential Intervention Assessment
3. Selection of Instruments
4. Implementation

Considerations for the use of the LTV

Stand-alone tool or as a set of instruments

- Phased (Korea, Norway)
- Combination (New Zealand)

Static or dynamic

- Adjusting across housing cycle? (Hong Kong)

Transparency & Accountability

- Calibration can be a challenge
- Changes should be well articulated

Considerations for the use of the LTV

Issue of Effectiveness	• Popularity soared post crisis
Issue of Efficiency	• May screen out ‘good borrowers’
Gaming of the System	• Real estate appraisers
Broad based or targeted	• Broad based cap or targeted based on borrower and property type

Closing Remarks

Main Risks from real estate cycles:

- Increased leverage in the real sector (particularly, households)
- Build up of risks in the financial system with respect to residential mortgages

Main Policy Objectives:

- Prevention of the overheating in the housing market, increased leverage by households
- Increased resilience of the financial system in the event of a real estate bust

Closing Remarks

- Local real estate residential exposures are on the rise.
- Major lending institutions are adhering to their respective credit policies for residential mortgages and are also stringent in the underwriting of new mortgages.
- There may not be an immediate need to implement an LTV cap as a mandatory policy tool at this time.
- Central Bank is on the verge of rolling out revised prudential rules (Basel II & III) – therefore focus can be placed (in the first instance)on appropriate risk weights to reflect mortgage risks.

Thank you!