Using household balance sheet and housing data for systemic risk assessment and policy formulation – Malaysia’s experience

Chin Ching Lau, Central Bank of Malaysia

---

1 This presentation was prepared for the meeting. The views expressed are those of the author and do not necessarily reflect the views of the BIS or the central banks and other institutions represented at the meeting.
IFC Satellite Seminar
“Is the household sector in Asia overleveraged: what do the data say?”

Session 5: Using household balance sheet and housing data for systemic risk assessment and policy formulation – Malaysia’s experience

Chin Ching Lau, Bank Negara Malaysia
15 November 2014
“If you can’t explain it simply, you don’t understand it well enough.”

Albert Einstein, Physicist
Systemic risk assessment and mitigation measures in Malaysia – case study

Mutually reinforcing roles and applications of macro- and microprudential assessments and policy measures to safeguard systemic stability

Rising household indebtedness and house prices in Malaysia

Macroprudential (systemic risk) surveillance and policy framework

Microprudential - Risk based supervisory framework

1. Intelligence and monitoring
2. Assessment and policy recommendation
3. Policy decision, implementation and communication
4. Monitoring effectiveness, spillovers and circumvention
5. Policy calibration and/or upliftment
“Those who do not remember the past are condemned to repeat it.”

George Santayana, Philosopher and Writer
In the 1990s, excessive asset price build-up coincided with surges in capital inflows.
“I never guess. It is a capital mistake to theorize before one has data. Insensibly one begins to twist facts to suit theories, instead of theories to suit facts.”

Sir Arthur Conan Doyle, Author of Sherlock Holmes stories

“The temptation to form premature theories upon insufficient data is the bane of our profession.”

Sherlock Holmes, Fictional detective
Intelligence and monitoring

Growth in household (HH) debt reached 15.1% in 2010, amid rapid expansion by non-bank lenders

HH debt CAGR 2007-09: +9%

High leverage of lower income group (~7 times)

Source: BNM estimates
Intelligence and monitoring

Expansion in HH debt driven by housing loans by banks and personal financing by non-bank lenders

Banks: 47.5% of HH lending for housing (2009: 46.7%)

Non-banks: 50.6% of HH lending for personal finance (2009: 42.1%)

Source: BNM estimates
Intelligence and monitoring

Growth in Malaysian House Price Index (MHPI) above long-term trend, partly due to credit-fuelled speculative purchases.

Malaysian House Price Index

- 4Q'13 & 1Q'14: 9.6%
- 2Q'14: 6.6% (prelim)
- Average MHPI 2001-10: 3.6%

No. of borrowers with one and more outstanding housing loans

- 1 HL
- 2 HLs
- ≥3 HLs

Source: National Property Information Centre (NAPIC)

*DIBS = Developer Interest Bearing Scheme
Source: BNM estimates
“Not everything that can be counted counts, and not everything that counts can be counted” – Albert Einstein

Lending practices also provide telling signs of potential risk build-up

- High housing loan-to-value (LTV) ratio of up to 95-100%
- Long financing tenures
  - Non-banks – Personal Financing up to 25 years
  - Banks – Housing loans up to 45 years
- Highly competitive financing rates, particularly for housing loans
- Differences in definition of debt coverage and income source for computation of debt service ratio (DSR) across banks and non-banks
  - Similar DSR threshold for different income groups
- Bundling of overdraft and/or PF facilities with housing loans
- Growing housing and property development projects with interest capitalisation scheme (ICS) including developer interest bearing schemes (DIBS) and permutations thereof
“War is ninety percent information.”

Napoleon Bonaparte, French Military and Political Leader
Assessment and policy recommendation
Higher delinquencies associated with borrowers with multiple housing loans and higher LTV ratio

Source: BNM estimates
Assessment and policy recommendation

Data shows no immediate risks to domestic financial stability

But, need to:

• Enhance responsible financing practices and risk pricing by lenders
• Curb growth in credit-fuelled speculative house purchases
• Reduce excessive increase in house prices not supported by fundamentals
• Promote financial education particularly among new borrowers

Source: BNM estimates

Assessment and policy recommendation
Considerations for policy design based on domestic context

• Targeted, but need to minimise unintended cross-sectional spillovers
  • Sustain access to financing by first time house buyers
  • Applicable to all key lenders (banks, DFIs, selected NBFIs)

• Discretionary
  • Timing and quantum of measures not rule-based
  • Prevent sudden build-up in systemic risk particularly right before implementation – prior engagement with stakeholders need to be managed carefully

• Progressive
  • Allows calibration and avoid “overshooting” or over-correction

• Complemented with other policies (monetary, fiscal, structural and supervisory)

• Enforceable
### Assessment and policy recommendation

Combination of policies in place to address HH indebtedness and rising house prices

<table>
<thead>
<tr>
<th>Sound and sustainable household sector</th>
<th>Responsible behaviour by borrowers and financial institutions</th>
<th>Sound and sustainable housing market</th>
<th>Increase supply of affordable housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stricter credit card requirements (particularly for cardholders earning &lt;RM36k per annum)</td>
<td>LTV ratio limit 70% on 3rd outstanding housing loan by individuals (Nov 2010)</td>
<td></td>
<td>Prohibition of housing development projects and housing loans with ICS and/or DIBS</td>
</tr>
<tr>
<td>Prohibition on offering of pre-approved products</td>
<td>LTV ratio limit 60% on housing loan by non-individual (Dec 2011)</td>
<td></td>
<td>- Tighter real property gains tax (RPGT)</td>
</tr>
<tr>
<td>Guidelines on Responsible Financing, including guidance on debt service ratio and reporting requirements</td>
<td></td>
<td></td>
<td>- National Housing Council</td>
</tr>
<tr>
<td>Capped tenure of personal use and property financing</td>
<td></td>
<td></td>
<td>- Increase supply of affordable housing</td>
</tr>
<tr>
<td>Intensified financial education outreach</td>
<td></td>
<td></td>
<td>- Ban on ICS and/or DIBS</td>
</tr>
<tr>
<td>Financial and debt management services provided by Credit Counselling and Debt Management Agency</td>
<td></td>
<td></td>
<td>- House price transparency</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Price floor for purchase of homes by foreigners</td>
</tr>
</tbody>
</table>

Consistent application on all major credit providers, in coordination with relevant authorities
“...it is people that bring the art and the insight to the science of (data) analysis...”

Source: http://makingdatameaningful.com/2012/12/12/data-driven-decision-making/

“Statistics are no substitute for judgment.”

Henry Clay, Former US senator
**Policy decision, implementation and communication**

Enhanced legislative framework to address systemic risks and institutional vulnerability, incl. non BNM-regulated entities

<table>
<thead>
<tr>
<th>Central Bank of Malaysia Act 2009</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Ex-ante surveillance powers for timely risk identification</th>
<th>Power to enter into arrangements, advise and make recommendations to other supervisory authorities</th>
<th>Pre-emptive powers to avert or mitigate systemic risks</th>
<th>Ex-post powers to minimise impact of instability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to information either directly or indirectly via relevant authorities</td>
<td>Co-operate and coordinate financial stability measures</td>
<td>Macroprudential measures</td>
<td>Order for compulsory transfers (part or whole of business, shares, assets and liabilities)</td>
</tr>
<tr>
<td></td>
<td>Promote laws &amp; policies that are consistent with financial stability</td>
<td>Order for financial stability</td>
<td>Bridge institution</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Liquidity assistance</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capital support</td>
<td></td>
</tr>
</tbody>
</table>

- **Power to prescribe financial institutions for purposes of ongoing regulation & supervision under Financial Services Act 2013 and Islamic Financial Services Act 2013**
  - If such entity poses or is likely to pose a risk to financial stability arising from its
    - **Financial intermediation activities** *(e.g. maturity/liquidity transformation, imperfect credit risk transfers, facilitate excessive leverage or raise regulatory arbitrage concerns)*
    - Nature, scope, size, concentration or interconnectedness of its activities
Strengthened BNM institutional and governance arrangements

Joint Policy Committee (JPC)
- Responsible for deliberations & decisions on appropriate macroprudential policy response(s) to address risks concerning build-up of systemic risk & financial imbalances, *which may or are likely to have wider implications on macroeconomy*
- Consist of members from both FSC & MPC

Identification of systemic risks or financial imbalances that require financial stability response(s) may originate from FSC or MPC, and referred to FSC

Financial Stability Committee (FSC)

Microprudential/supervisory responses

Financial Stability Executive Committee
- Macroprudential responses *extended to entities other than those regulated by the Bank*
- Macroprudential responses *without wider implications on macroeconomy*
Policy decision, implementation and communication

Ensuring robust policy deliberation, effective coordination and independence of decision making

Financial Stability Executive Committee

- Ensure comprehensive policy consideration & effective coordination across relevant authorities
- Clear majority of non-executives reinforce the element of independent external oversight
- Supported by Assessor Committee for appeals on transacted price arising from compulsory transfer

Governor, & named Deputy Governor

- Lead authority for macroprudential policy & overall financial stability

Secretary-General to the Treasury

- Implications on public funds
- Interactions with fiscal policy

CEO of Malaysian Deposit Insurance Corporation

- Resolution expertise for non-viable member institutions

Chairman of the Securities Commission

- Role in averting reducing systemic risk in the capital markets

Private sector experts in legal, accounting or financial matters

- Implication on property rights
- Contribute to independent oversight

Heads of other relevant supervisory authorities

- For measures affecting persons/entities under their purview
Policy decision, implementation and communication

Example: July 2013 measures on lending to HHs

- Effective collaboration across authorities to minimise regulatory arbitrage or shifts to informal sectors
- Effective communication strategy, including engagements with relevant stakeholders (players, borrowers, agencies, etc)
- Improvements in data collection and management for analyses

Policy formulation stage

- **Consumer & industry associations** – to reinforce policy clarity & objectives, secure support & seek feedback
- **Focus group sessions with selected institutions** – to identify & address specific concerns & implementation issues
- **Cooperatives Commission Malaysia (SKM)** – early engagement to coordinate implementation of similar requirements on responsible practices for credit cooperatives

Issuance stage

- **Coordinated press release by BNM & SKM** – consistent implementation ensures level playing field
- **Media & briefing sessions** – to create public awareness & promote understanding of policy rationale
“Statistics are like bikinis. What they reveal is suggestive, but what they conceal is vital.”

Aaron Levenstein, former Business Professor at Baruch College New York
Monitoring effectiveness, spillovers and circumvention

Policy calibration and/or upliftment

- **Circumvention**
  - Post implementation of LTV limit of 70% on 3rd outstanding housing loan per individual (Nov 2010), BNM observed rising trend of housing loans obtained by non-individuals
  - In Dec 2011, BNM introduced LTV limit of 60% on all housing loans by non-individuals

- **Spillovers**
  - On-going monitoring of potential shift towards lending by other non-banks such as moneylenders, pawnbrokers, etc
    - Collection of data and information on borrowings by these entities to fund lending, growth in lending portfolio and lending practices of these entities

- **Monitor compliance**
  - Joint on-site supervision on non-bank lenders with regulator
- Monitoring effectiveness, spillovers and circumvention
- Policy calibration and/or upliftment

**Slower pace of growth in HH debt**

- Annual growth in HH debt moderated for 6\(^{th}\) consecutive quarters since end-2012
  - HH debt-to-GDP remained stable at 86.7% since end-2013
  - Annual growth in non-bank lending to HHs more than halved to 4.7% as at end-Aug 2014 (2013: +9.7%; 2012: +22.1%)
    - Driven by substantial decline in annual growth of personal financing to 5% (2013: +13.9%; 2012: +30.6%)

**Sustained debt repayment capacity of HHs**

- HH financial assets grew in tandem and remained stable at 2.2 times of HH debt
  - Stable HH liquid financial assets to debt at 1.6 times, with about 58% comprising deposits and deposit-like instruments
  - Low and stable impaired bank loans to HHs ratio: 1.2%
  - HH balance sheet supported by growth in income and low unemployment
- Monitoring effectiveness, spillovers and circumvention
- Policy calibration and/or upliftment

**Further strengthening of lending practices, particularly to vulnerable borrowers**
- Proportion of borrowers with monthly earnings of <=RM3,000 accounted for a lower share of 27% of total HH debt (2012: 33%)
- Improved loan affordability assessment by lenders, where close to half of new loans were to borrowers with DSR of 40% and below since 2H 2013

**Reduced credit-fuelled speculative purchases of residential properties**
- Annual growth in no. of borrowers with 3 or more outstanding housing loans declined substantially to <4% (2010: >15%) to account for only 3% of housing loan borrowers

**Slower growth in house prices, new launches and transactions in major states**
- Annual growth in MHPI (prelim) slowed to 6.6% in 2Q 2014 (4Q 2013 & 1Q 2014: +9.6%)

<table>
<thead>
<tr>
<th>Annual growth (%) (nominal)</th>
<th>2Q 2014</th>
<th>1Q 2014</th>
<th>4Q 2013</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHPI</td>
<td>6.6p</td>
<td>9.6</td>
<td>9.6</td>
<td>11.6</td>
<td>11.8</td>
<td>9.9</td>
</tr>
<tr>
<td>Consumer price index</td>
<td>3.3</td>
<td>3.5</td>
<td>3.2</td>
<td>2.1</td>
<td>1.6</td>
<td>3.2</td>
</tr>
</tbody>
</table>
On-going BNM study on effectiveness of LTV ratio limits

LTV ratio limit dampened demand for credit-fuelled speculative housing loans as intended
• However, effects of the measure on house prices, transactions and growth in housing loans were only temporary

Average house price
• Slight increase in MHPI, both before the announcement was made – buyers could have brought forward purchases, encouraged by marketing by developers and banks
• Negative impact on house price was only transitory

Growth in housing loans
• Slower growth leading up to the announcement was short-lived, as time dummy recorded positive values thereafter

Number of transactions in the housing market
• Seems immune to the measure, as impact seems transitory
• Sustained demand likely from first-time buyers due to demographic and structural factors

Findings highlighted importance of:
• Other policy interventions (particularly fiscal measures) to provide holistic and long-term solution to address house price increases
• Timely and willingness to calibrate and/or uplift policies are critical

Main authors: Mr Muhamad Shukri Abdul Rani & Ms Chin Ching Lau (BNM, 2014)
Lessons learnt

• Granular data is important to enable targeted policies
  • “What gets measured, gets managed.” – Peter Drucker, Management consultant and author

• Non-quantifiable data is similarly important
  • Industry practices, supervisory assessment, risk appetite

• Timely data for pre-emptive actions
  • Lagged data is better than none – but, overly late data may serve better for a post-mortem, rather than prevention or cure

• Expert judgment is just as important as reliable data
  • “If you do not know how to ask the right question, you discover nothing.” – W. Edward Deming, Engineer and statistician

• Exercise caution in data usage
  • “Torture the data, and it will confess anything.” – Ronald Coase, Economics Nobel Prize Laureate
Thank You

Chin Ching Lau
Financial Surveillance Department
(Lau@bnm.gov.my)