Resilience and reform — towards a financial stability framework for New Zealand

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Motivation

- New government that is open to central bank reform
- New Governor of central bank to be appointed in 2018
- IMF FSAP released in 2017
- Revised MOU for macro-prudential policy in 2018

➡ *an opportunity to reflect on the financial stability framework in New Zealand.*

What should a financial stability framework look like?

- Need to articulate three key design features:
  - Objectives
  - Instruments
  - Governance and Accountability
- At root, politicians must own financial stability policy.
- Just as society chooses an inflation target for a central bank to pursue, politicians must own/select the standard of resilience that the central bank pursues [**the probability/impact of systemic crisis**].

Memorandum of understanding (1)

The **objective** of the Bank's macro-prudential policy is to **increase the resilience of the domestic financial system** and counter instability in the domestic financial system arising from credit, asset price or liquidity shocks.

The instruments of macro-prudential policy are designed to provide additional buffers to the financial system (e.g. through changes in capital, lending and liquidity requirements) that **vary with the macro-credit cycle**. They may also help dampen extremes in the credit cycle and capital market flows.

As such, **these instruments can play a useful secondary role in stabilising the macro economy**. As a result, the Reserve Bank will consider any interaction with monetary policy settings when implementing macro-prudential policy and will explain the implications, if any, for monetary policy.

Instruments - counter-cyclical capital buffer, sectoral capital requirements, LVRs, core funding ratio

Memorandum of understanding (2)

The Bank will assess financial system developments, and monitor risks to the system. The Bank will publish information on its risk assessment framework, including the macro-prudential indicators that are used to guide its macro-prudential policy settings.

Macro-prudential instruments do not replace conventional prudential regulation but may be used from time to time to help manage the risks associated with the credit cycle. The selection of macro-prudential instrument(s) will depend on the type of risk being addressed.

The decision on macro-prudential intervention will be taken by the Governor.

The Bank shall be fully accountable to the Board, Minister and Parliament for its advice and actions in implementing macro-prudential policy, under the normal conventions outlined by the Reserve Bank Act.

The appropriateness and effectiveness of macro-prudential policy decisions will be reviewed on a regular basis. This will include an assessment of the key judgements that led to decisions on whether or not to adjust macro-prudential policy. **The Bank will report the results of its assessment in its Financial Stability Report.**

Outline

- What do we mean by macro-prudential policy?
- Why regulate?
- Micro- versus macro-supervision
- Objectives and instruments
- Stress-testing as a key feature of the framework
- Institutional arrangements
- Some Implications

Some definitions

- **Financial instability**: a disruption to the supply of core financial services that has serious consequences for expected path of real output.

- **The risk of financial instability (systemic risk)**: individual financial agents do not account for the effects that their **risk management practices** have on the balance sheets of others.

- **Macro-prudential policy** tempers systemic risk, changing the process of financial intermediation by

  (a) adjusting margins (LTVs, capital ratios);

  (b) altering the structure of the financial system (e.g. ring-fencing);

  (c) altering the composition of central bank's claims on the private sector (liquidity/market interventions)

IMF FSAP 2017

"Overall, the lack of first-hand independent verification of prudential returns and assessment of banks' risk management practices prevents the RBNZ from having a thorough understanding of the banks." (page 62)

Why regulate?

THE SEVERE AND PERSISTENT REAL COSTS OF FINANCIAL CRISES

CHART 1

The case for macro-pru

- The costs of financial crises far exceed the private costs to the stakeholders of the failing entitites.
- The (risk management) actions of a financial firm directly influence the choices of other firms
- And these actions affect the constraints facing other firms via their effect on prices. Such *"pecuniary externalities"* matter a lot in a second-best world.

Key externalities

Table 2: Key externalities and episodes of financial instability

Externality	Examples
Coordination failure	Bank runs on Northern Rock (2007), Lehman Brothers (2008), Continental Illinois (1984); Currency crises in the UK (1992) and parts of Asia (1997); racing for returns ('keeping up with the Goldmans') behaviour in the run-up to the GFC;
Firesales	LTCM rescue by the New York Fed (1998) prevented a disorderly unwinding spilling over to other institutions; Losses by UK life insurers following the Dotcom bubble led UK regulators to relax solvency rules to prevent firesales.
Interconnectedness	Liquidity hoarding that followed the 2008 crisis triggered market freezes in interbank markets;
Incentive problems	Compensation structures in financial firms pre-crisis rewarding unduly risky practices; the Greenspan "put".

Micro- vs macro-prudential policy

	Macroprudential	Microprudential
Ultimate objective	Avoid output costs	Depositor protection
Proximate objective	Limit system-wide distress	Limit distress of individual firm
Characterisation of risk	Endogenous; depends on collective behaviour	Exogenous; independent of individual firms' behaviour
Correlation and common exposures across institutions	Important	Less important
Risk management techniques	Top-down credit and liquidity risk review	Bottom-up credit/liquidity risk review

Micro- vs macro-prudential policy

- Aggregate financial system risk is endogenous.
- System resilience requires heterogeneity of balance sheets.
- While a financial system may start off as heterogeneous, its dynamic characteristics tend to promote homogeneity as firms step around static regulatory constraints and adapt to changing states of the world.
- Regulation needs to be state-varying, not time-varying.

Objectives (1)

- Unlike price stability, there is less consensus around the objectives, instruments, and analytical framework for financial stability.
- Unlike a numerical target (inflation), the **process of policy formulation** becomes crucial for gauging success of the framework.
- Dual or single mandate for FS??

Objectives (2)

Table 4: Interpretation of the financial stability objective

Country	FS Objective	Emphasis
Australia (CB; Supervisor)	Reduce realistically the risk of a financial system disruption so that the real economy is not harmed; low incidence of FI failure	Building resilience
Canada (CB; supervisor; MoF)	No explicit overall mandate, but FS considerations present in agency mandates	Building resilience
Netherlands (CB; Supervisor)	Enhance overall resilience of financial system and counteract financial excesses to reduce probability and impact of crises.	Building resilience
Switzerland	The preservation of financial system stability	Building resilience/leaning against the cycle
Sweden (Supervisor)	To ensure that the financial system is stable and meets the need for key financial services. To counteract financial imbalances with a view to stabilising credit markets	Building resilience/leaning against the cycle
UK (CB; supervisor)	To protect and enhance financial stability	Building resilience (primary); leaning against wind (secondary)
US (CB; other agencies)	Reduce risk of financial disruptions that damage the broader economy	Building resilience/leaning against the cycle

Objectives (3)

Table 6: Intermediate FS objectives in small open economies

	Intermediate objectives	How Achieved	Review Process
Australia	Robust lending standards in the mortgage market	Set of indicators, including growth in share of investor housing loans and interest rate buffers when assessing ability to service debt	None specified; review of regulatory architecture taken once in 15 years or so.
Sweden	Key vulnerabilities correspond to identified market failures (these include interconnectedness, household debt, bank reliance on wholesale funds)	Set of indicators indicating development of vulnerabilities; expert judgement	Semi-annual; in connection with FSR
UK	For LTI: limit risks to financial and economic stability from household indebtedness; For CCB: ensure ability of banking system to withstand disruption without breakdown of core services	Achievement to be measured by suite of guiding indicators; expert judgement	Periodic; via FSR
Switzerland	For CCB: strengthen resilience of banking system from excessive credit and lean against excesses.	Not specified	None specified

Objectives (4)

- Operationalising FS objectives does require some identification of intermediate policy objectives and instruments ex ante.
- One option is to link the intermediate objective (e.g. excessive maturity mismatch) to the relevant externality.
- While this overcomes "inaction bias", the relationship between intermediate and ultimate objective can break down.
- Some countries prefer an ex post approach — i.e. first decide to deploy an instrument, then state "success criteria" and a review process for evaluating achievement.

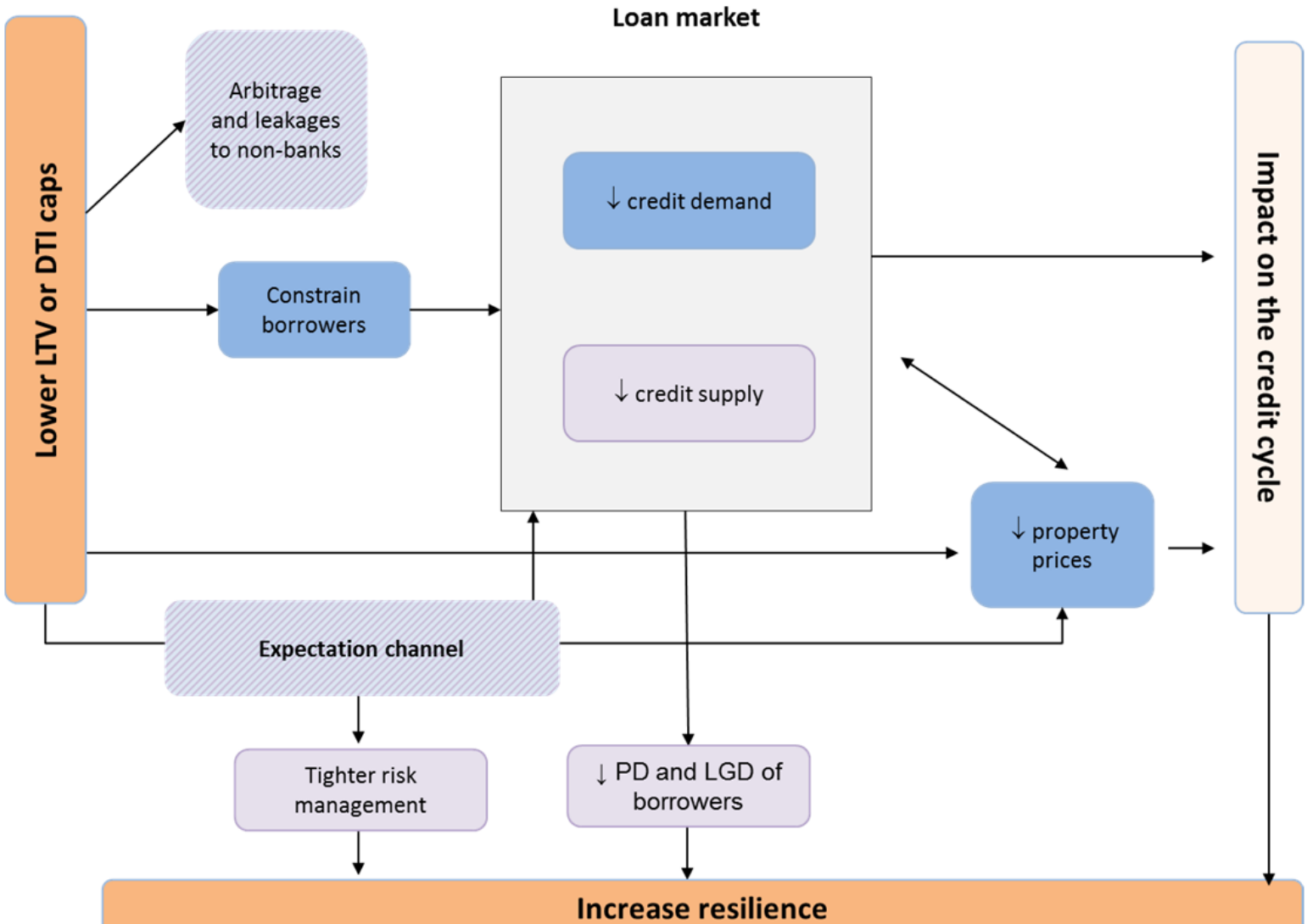
Instruments

"I want to stress that this is an experiment. We know absolutely nothing about how these instruments are going to work."

(Mervyn King, 2012)

Asset-side tools

Transmission map of tighter asset-side MPIs

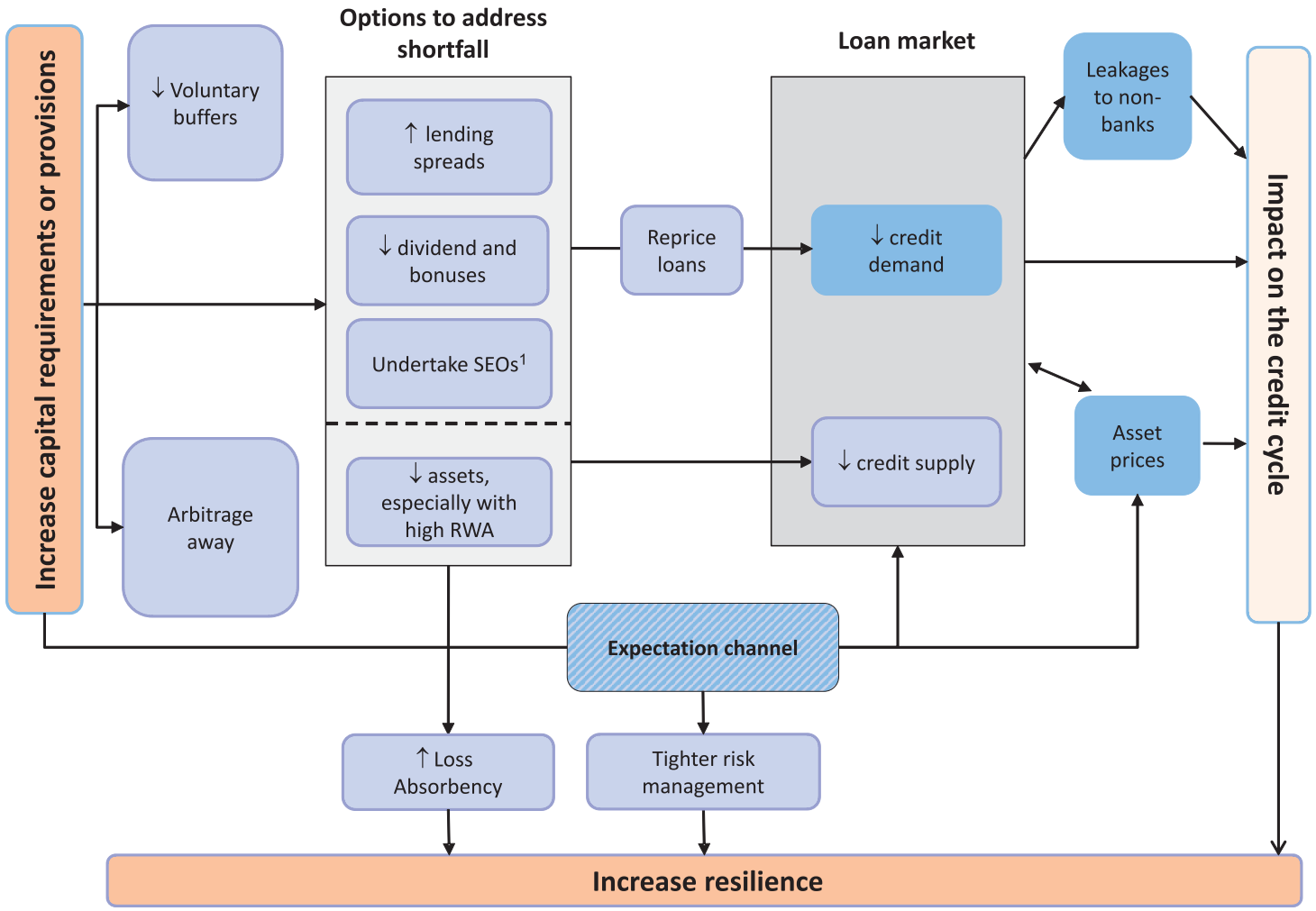


- The state of knowledge remains limited. The best studies suggest that asset-side tools do influence credit growth and asset prices.
- But are the underlying externalities and blind-spots in risk management practices addressed by these tools?
- These tools are overtly distributional in their impact (and very granular) — they come at a significant political economy costs.
- Consumption impact on highly leveraged households with a large share of housing in net worth likely to be most significant (medium-income housholds).

Capital tools

- Capital-based measures more obviously targeted at the key externalities.
- But prone to leakage and circumvention and their ability to lean against financial cycles seems limited.

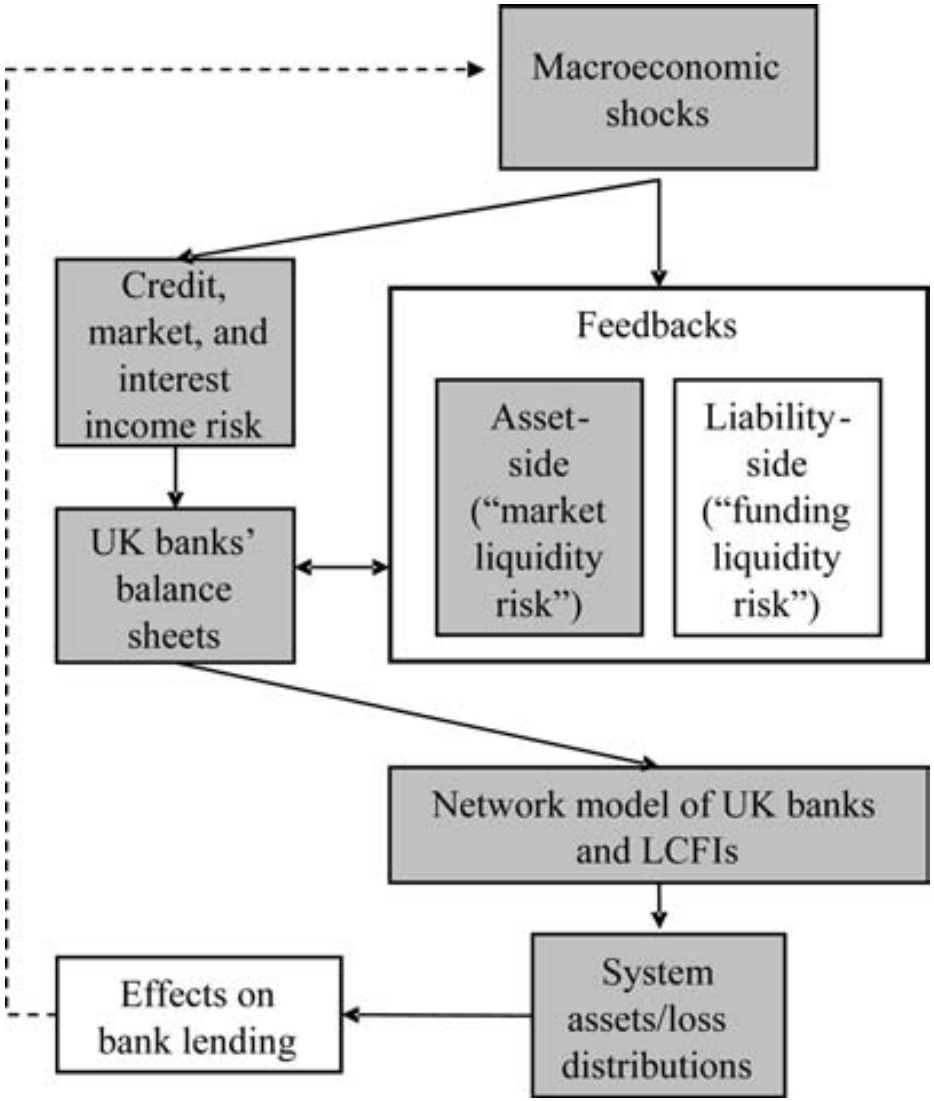
Transmission map of raising capital or provisioning requirements



Stress-testing

- Highly public, model-based, exercise with results that can be publicly debated. The standard of resilience - in time - can become apparent to all. Closest thing to present day monetary policy frameworks.
- A simpler way of implementing a counter-cyclical capital buffer.
- Inside v outside information and regulatory capture.

Stress testing



Stress testing

- When feedback effects are taken into account, we do not need “large” shocks to topple the financial system. Small or moderate shocks are sufficient.
- Many financial systems may therefore be under-capitalised.
- And the comfort drawn from contingent-capital may be illusory.

The dirty roots of central banking

- The modern day social contract between an independent central bank and society is relatively new.
- There is a centuries-long relationship between the bankers, the central bank, and the sovereign.
- The price stability/full-employment objective of the modern central bank is far-removed from "central bank business" at the heart of the financial system.

How should we treat both monetary and financial objectives?

Table 7: Three views

	Modified Consensus	Leaning Against the Wind	Inseparable
Monetary policy	Framework largely unchanged; Limited effects on risk-taking and credit; Blunt instrument to deal with financial imbalances	Financial stability is a secondary objective; Impact on risk-taking and credit; "gets in all the cracks"	Twin objectives on an equal footing; unblocks balance sheet impairment; avoids financial imbalances in upturns
Macroprudential policy	Granular and effective	Cannot fully address financial cycles; vulnerable to regulatory arbitrage	Inseparable from monetary policy
Interaction	Easy to separate objectives and instruments	Financial conditions affect monetary transmission and price stability	Financial stability and price stability are intimately connected
Issues	Coordination of policy	Coordination of policy; over-burdening of monetary policy	Time inconsistency problems
Main (Academic) Proponents	Svensson	Woodford	Brunnermeier

Institutional models

Table 8: Organisational models for macroprudential policy

	Model 1	Model 2	Model 3	Model 4	Model 5
Integration of CB and supervisor	Full	Full	No	No	No
Ownership of mandate	CB	Independent committee of experts, individually accountable to parliament	Independent committee of regulators and independent experts accountable to parliament, chaired by Minister of Finance	Multiple agencies	Supervisor
Role of MoF and Politicians	Passive	Passive	Active	Passive	Passive
Separate body coordinating across policies	Yes	No		Yes	Yes (check)
Example	New Zealand	United Kingdom	France	Australia	Sweden

A macro-pru committee?

- Given first-order distributional effects and need for politicians to own the standard of resilience, there is a case for Ministers (Treasury) to be involved in any macro-prudential committee (e.g. Canada/France).
- Paradoxically, the more independence the central bank seeks in order to pursue financial stability, the more politicised it risks becoming.
- Wider participation in decision-making could better preserve the central bank's (monetary policy) reputation.

A macro-pru committee?

- External membership of committees also brings technical expertise and greater legitimacy to decision-making. A committee structure also guards against the over-emphasis of the job that is more salient and visible.
- Committee members individually accountable to parliament for their voting record; not representative of vested interests
- Lack of any internal and/or external "churn" at the RBNZ compared with similar institutions elsewhere limits scope to challenge the "house" view.

Summing up (1)

"The final challenge for macro-prudential policy is a longer term one, going beyond the immediate issues of setting up the apparatus. That is to maintain, over long periods of time, the independence and legitimacy that macro-prudential policy needs to do its job effectively. That means winning the battle of hearts and minds."

Mervyn King

Summing up (2)

- Financial stability deserves to be on an equal footing with monetary policy. The social contract with the central bank (e.g. PTA) should reflect this.
- A regime for financial stability should emphasise the resilience of the system, rather than being distracted by fine-tuning the credit cycle and trying to temper the misallocation of resources that arise during booms.
- Politicians should own the standard of financial resilience and be engaged in the decision-making process more overtly. Stress-testing provides an important process to facilitate public discourse and evaluate the quality of (macro) supervision.
- The fuzzy nature of financial stability means that the process of policy formulation and issues of governance and accountability take on extra importance.

Thank you!