Ravi Menon: Macroeconomic stability and financial stability – uncomfortable bedfellows?

Speech by Mr Ravi Menon, Managing Director of the Monetary Authority of Singapore, at the 39th Federal Reserve Bank of New York Central Banking Seminar, New York City, 8 October 2015.

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Mr William Dudley, President of the Federal Reserve Bank of New York, ladies and gentlemen. It is an honour to be here and I thank the Federal Reserve Bank of New York for the opportunity.

The good 'ole days

Central banking has become interesting again.

For a time, it was almost getting boring.

- The Great Moderation, beginning in the mid-1980s and spanning two decades, marked the triumph of central banking over the menace of inflation.
- The formula was simple: an independent central bank, a single target (price stability), and a single instrument (the interest rate).
- It worked brilliantly: Many economies enjoyed what Mervyn King called the NICE equilibrium.

  N I C E – a "non-inflationary, consistently expansionary" economy.

Of course, not all of it was due to enlightened central bankers.

- The deregulation of industry, the liberalisation of trade, and the entry of China into the global economy augmented productive capacity and kept a lid on prices.
- But central bankers were wise not to muck it up and remembered to take away the punch bowl whenever the party got too wild.

Monetary policy was unencumbered by financial stability considerations.

- Central banks no doubt cared about financial stability.
- Many of them were also banking supervisors. They saw financial stability as the preserve of prudential regulation and supervision.

Those were the good 'ole days.

- Keep monetary policy focused on macroeconomic stability and regulatory policy on financial stability and all will be well.
- In short, consistency between instrument and objective: Tinbergen would have been proud.

Financial stability: what we know, what we don't

The Global Financial Crisis of 2008 changed all that.

- Its devastation and virulence, but most of all, its suddenness, shook conventional macroeconomic thinking.
- HM Queen Elizabeth II asked: "Why did no one see it coming?"

- That question illustrated vividly how little we knew about financial stability, let alone the interactions between the financial sector and the macroeconomy, between monetary policy and financial stability.

But there are two things we did learn from the crisis about financial stability.

First, macroeconomic stability does not guarantee financial stability.

- Beneath the still waters of macroeconomic stability during the 2000s, deadly whirlpools of financial imbalances were forming.
- The "Goldilocks" or "NICE" economy sharply reduced risk premiums, stoked a credit boom alongside speculative activities that ultimately undermined financial stability.

Second, effective regulation of individual institutions does not deliver stability of the financial system as a whole.

- Risks may be reasonably well managed in individual institutions but the system as a whole could be pro-cyclical and hence more risky.
- The interconnectedness among institutions propagates and magnifies shocks across the system.
- The stability of the parts does not equate the stability of the whole.

But eight years after the outbreak of the crisis, as the latest BIS annual report points out "macroeconomic stability and financial stability remain uncomfortable bedfellows."[1]

- The interactions between macroeconomic stability and financial stability are not well understood.
- Monetary policy and regulatory policy have tended to be conducted independently.

We need to get a better handle on financial instability: what causes it and how can it be avoided? There are a few emerging propositions.

First, credit cycles have strong implications for financial stability.

- Moritz Schularick and Alan Taylor describe financial crises as "credit booms gone wrong."[2] Both the level and growth of credit matter for financial stability.
- Claudio Borio and Piti Disyatat argue that both the amplitude and duration of credit cycles exceed those of business cycles due to what they call "excess financial elasticity."[3] Debt and financial imbalances build up over successive business cycles until they reach a breaking point.
- Frederic Mishkin points to how excessive credit can fuel asset price bubbles, whose eventual bursting can lead to damaging episodes of financial instability.

Second, monetary policy has an influence on the credit cycle and hence on financial stability.

- Claudio Borio and Zhu Haibin describe the "risk-taking channel" of monetary policy whereby low interest rates boost asset and collateral values, which provides a larger

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[1] BIS 85th Annual Report (2015)

[2] Schularick, M and Taylor, A (2012), "Credit Booms Gone Bust: Monetary Policy, Leverage Cycles, and Financial Crises, 1870–2008," American Economic Review, 102(2): 1029–61.

[3] Borio, C and Disyatat, P (2011), "Global Imbalances and the Financial Crisis: Link or No Link?" BIS Working Papers, No. 346, Bank for International Settlements, May.

incentive for both borrowers and lenders to take more risk. The consequent build-up in leverage leads to financial instability.[4]

- Jeremy Stein puts it succinctly: "monetary policy is fundamentally in the business of altering risk premiums".

Third, since monetary policy affects risk-taking and the credit cycle, which in turn affect financial stability, monetary policy should therefore take account of financial stability.

- Jeremy Stein argues that since economic agents will find ways to circumvent regulatory measures to control risk-taking, it is better to use monetary policy to "get in all of the cracks".
- Conceptually, this amounts to augmenting the Taylor Rule with an additional term to capture deviations in financial variables from their equilibrium values.
- Monetary policy has a role in "leaning against the wind" of financial stability risks.

While the first two propositions are gaining credence and traction among policymakers, the third proposition is heavily contested.

- The fact that monetary policy has an impact on financial stability does not necessarily mean that it should directly seek to achieve it.

Monetary policy and financial stability: uncomfortable bedfellows?

Let me offer two reasons why operationalising a financial stability role for monetary policy may be difficult.

Leaning against winds from opposite directions?

First, conflicts could arise between the price stability and financial stability objectives.

- Financial cycles are typically longer than business cycles, and the two cycles may diverge.
- The interest rate appropriate for price stability may not be consistent with financial stability.
- How does one lean at the same time against two winds blowing from opposite directions?

One reason why the winds might blow from opposite directions, especially for emerging economies, is the role played by international liquidity and capital flows.

- Philip Lane has detailed the strong inter-linkages between global liquidity conditions, international debt flows, and domestic credit conditions.
- Maurice Obstfeld argues that because of the impact of financial globalisation, monetary policy carries a big burden trying to achieve both financial stability and macroeconomic stability.

The experience of Emerging Asia during 2010–2013 is illustrative.

- Asian economies were broadly in full employment with low inflation and some downside risks to growth from the Eurozone crisis.

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[4] Borio, C and Zhu, H (2008), "Capital regulation, risk-taking and monetary policy: a missing link in the transmission mechanism?" BIS Working Papers, No. 268, Bank for International Settlements, December.

- At the same time, the global search for yield in a zero interest rate environment led to strong capital flows into the region, inducing increases in credit and asset prices.
- The business cycle and financial cycle began to diverge: raising interest rates to quell financial imbalances could potentially put the real economy at risk.

Getting in all the cracks but not filling them

A second reason why monetary policy may be ill-suited to address financial stability risks is that it is a blunt instrument. It may get into all of the cracks but some cracks may be just too big to fill.

Financial vulnerabilities are often not evenly spread across the economy. They tend to be concentrated in specific sectors, such as in real estate. Monetary policy may be too blunt to address such specific risks and can cause significant collateral damage on the rest of the economy if it is calibrated to mitigate sector-specific risks.

There is some empirical evidence that the cost-benefit trade-off in using monetary policy to lean against financial stability risks does not look promising.

- Kenneth Kuttner and Illhyock Shim estimate that a 100 basis point increase in the short-term interest rate would reduce real housing price growth by only 1 percentage point in the following quarter.
- Lars Svensson, drawing from the Swedish experience, finds that the cost of leaning against financial stability risks is high – with inflation too low and unemployment too high.[5] At the same time, the effect of policy rate changes on household indebtedness is very small.
- The IMF estimates that hiking interest rates by 100 basis points for a year reduces the probability of financial crises by 0.04 to 0.3 percentage point at most.

Back to Tinbergen: an enhanced role for regulatory policy

So, we are back to where we started: if monetary policy has at best a limited role, what do we do with financial stability?

- As Stefan Ingves put it recently: "We deal with inflation, we keep an eye on the exchange rate, we do our best to reach our inflation target. But that means that somebody else has to deal with the problem we have in our housing market."[6]

And that someone else could well be regulatory policy. And that includes both the old-fashioned microprudential variety as well as the "new kid on the block" – macroprudential policy.

Old is gold: microprudential regulation

The lesson of the Global Financial Crisis is not that microprudential policy was ineffective in achieving financial stability and therefore we need to look elsewhere.

- The more pertinent lesson was that microprudential regulation – and might I add, supervision – was inadequate and had to be strengthened.

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[5] Svensson, L (2014), "Inflation Targeting and 'Leaning against the Wind'," International Journal of Central Banking, Vol. 10, No. 2, June.

[6] "Riksbank Stefan Ingves sees flaws in crisis-busting tools," Financial Times, 13 September 2015.

And the microprudential framework has indeed been strengthened post-Crisis. The Basel III reforms will go quite some way to make banks more resilient and financial systems safer.

- The quantity and quality of capital have been increased.
- There is for the first time, a global liquidity standard.
- There will soon be a direct cap on bank leverage.
- Systemically important banks will be subject to higher loss absorbency and more intrusive supervision.

Besides these reforms, I would add that traditional microprudential limits that apply "through the cycle" are just as important in helping to maintain financial stability. If volatility in the real estate sector has repeatedly been shown to contribute to financial imbalances and distress:

- does it not make sense to put limits on financial institutions' exposures to real estate?
- does it not make sense to require that loan-to-value ratios for property loans be less than 100%?
- does it not make sense to require the loan underwriting process to incorporate an assessment of the debt service ratio?

I do not know if the Global Financial Crisis could have been avoided if interest rates in the US had been higher in the preceding years as some have argued.

- I do suspect though that if there had been prescribed loan-to-value ratios and debt-service ratios, the sub-prime problem may not have grown to such proportions.
- But there are many others in this room who are better placed to judge that.

Old wine in new but bigger bottles: macroprudential regulation

Even as we re-discover the virtues of microprudential policies, we realise they may not be sufficient in the face of overwhelming exuberance and risk-taking.

- This is where macroprudential policy comes in.
- Macroprudential policy can be more effective than monetary policy in "targeting the cracks" where specific vulnerabilities are concentrated.

Macroprudential policy is related to but distinct from microprudential policy.

- Some have called macroprudential policy "old wine in new bottles". Yes and no.
- Many of the tools are indeed the same: loan-to-value ratios, debt-to-income ratios, debt service ratios, and so on.

But there is a difference. When these limits are used for macroprudential purposes, the scope and calibration are much larger. For example:

- A loan-to-value ratio of 80% for property loans, applied through the cycles, as we have in Singapore, is a microprudential tool.
- But when we tightened the loan-to-value ratio to as low as 20% for a third property loan, as we did a couple of years ago, it became a macroprudential tool.
- Macroprudential policy may well be old wine, but it is in much bigger bottles!

Macroprudential policy can also come in several different bottles.

- Instead of relying on a single tool (e.g. the interest rate for monetary policy), macroprudential policy is often multi-pronged.

For example, to cool Singapore's property market, we imposed multiple measures to target different aspects of systemic risk.

- Tighter LTV ratios on borrowers with multiple housing loans served to moderate credit-fuelled investor demand.
- Caps on housing loan tenures served to curtail the phenomenon of those who stretched out their loans in order to meet the tighter LTV ratios.
- Transaction taxes in the form of stamp duties served to constrain demand from investors who did not take loans to buy properties
    a. Stamp duties on sellers helped to deter speculators who resell their properties shortly after purchase.
    b. Stamp duties on buyers helped to curb investor demand by raising the hurdle rate.
- Such a multi-dimensional approach required close co-ordination among the Monetary Authority of Singapore, the Ministry of Finance, and the Ministry of National Development.

So, where does all this leave monetary policy?

- To the extent that strengthened microprudential policies coupled with the newly developed macroprudential policies can adequately address the problem of financial stability, monetary policy is freed to focus on price stability.
- We are back in the Tinbergen world.
- Or are we?

Monetary and macroprudential policies: working hand-in-hand?

If only our job were that simple. Macroprudential policies are still in the experimental stage:

- Its transmission mechanisms are not well understood.
- Its collateral effects and potential distortions have not been studied in depth.
- And we do not know yet how to exit successfully from these policies.

Can monetary policy contribute towards financial stability?

And there is a further problem. Macroprudential policies may not be equally effective in all countries – which brings us back to the United States.

- As Stanley Fischer put it recently: "The US macroprudential toolkit is not large and not yet battle tested."
- There is a significant shadow banking sector in the US that extends credit but is not regulated like banks.
- This will blunt the effectiveness of any macroprudential tools applied to regulated entities.

If macroprudential policy is not able to secure financial stability on its own, could monetary policy lend a helping hand?

- As Stan Fischer goes on to say: "The limited macroprudential toolkit in the United States leads me to conclude that there may be times when adjustments in monetary policy should be discussed as a means to curb risks to financial stability."

The question then arises: under what circumstances should monetary policy consider financial stability?

- One way to look at it could be as follows.
- If the market interest rate is clearly below reasonable estimates of the neutral rate, there could be a case for monetary policy to step in on both price stability and financial stability objectives.

Can regulatory policy help contribute towards macroeconomic stability?

The focus of discussion to-date has been on whether and how monetary policy can be used alongside regulatory policy to address financial stability risks.

- An interesting question is: can regulatory policy be used alongside monetary policy to help achieve macroeconomic stability?

Macroprudential tools aimed at stabilising asset markets could have positive spillovers in moderating inflation.

- In fact, in Singapore, we employed macroprudential measures quite deliberately to help address inflation concerns as well, not just financial stability.

During 2010–2012, Singapore's inflation rate averaged about 4%, more than twice as high as our historical average. About half of this inflation was attributable to rapidly rising housing costs and car prices.

- Housing costs, represented by actual rentals and imputed rentals on owner-occupied housing, makes up a significant share of Singapore's consumer price index.
- Car prices, while making for a much smaller share of the CPI, rose by double digits as exuberant buyers auctioned for the fixed number of permits that the government issues for buying cars.
- Low interest rates and abundant liquidity – reflecting easy monetary conditions globally – helped to fuel strong demand for both houses and cars.

Monetary policy – in the form of an appreciating exchange rate – reduced imported inflation to close to zero but was not as effective in curbing price pressures in the two asset markets: houses and cars.

- Financing restrictions – in the form of LTVs and caps on loan tenures – were imposed on housing loans and car loans to moderate demand and reduce price pressures.
- Over 2013–2014, inflation came down steadily as housing and car prices declined.

So, monetary policy and macroprudential policy can potentially be complementary to help achieve both macroeconomic stability and financial stability. They can do this sometimes by acting in the same direction; sometimes in opposite directions.

- Charles Bean[7] gives a useful pedagogical exposition of how a restoration of price and financial stability could be achieved by a combination of instrument tightening and loosening, similar to employing an optimal mix of fiscal and monetary policies to influence the composition of aggregate demand.

[7] Bean, C. (2015), Comment on Applying an Inflation-targeting Lens to Macroprudential Policy Institutions, International Journal of Central Banking, Vol 11, Supplement 1

- But we need to deepen our understanding of when to use monetary policy and when to use macroprudential policy and when to combine the two, if at all.

Does tighter regulation weaken the efficacy of monetary policy?

There is one other aspect of the interaction between monetary and regulatory policy that I would like to touch on.

- Just as monetary policy that is set to achieve macroeconomic stability can sometimes be inappropriate for financial stability, could there be a situation where regulatory policy weakens the transmission mechanism of monetary policy?
- Do regulatory policies – either the microprudential or macroprudential variety – have an impact on market liquidity or short-term interest rates?

The BIS recently convened a working group to assess the impact of microprudential policy on the efficacy of monetary policy. The report concluded that it was difficult to draw firm conclusions. But there were some interesting observations.

- The lending activity of less well-capitalised, higher risk-taking or less liquid banks appears more responsive to a tightening of monetary policy.
- This would seem to suggest that more stringent regulations tend to weaken the transmission of monetary impulses.
- And the transmission of policy rate changes to other interest rates and asset prices may be altered if debt markets become less liquid as a result of regulatory changes.

Conclusion

Let me conclude by drawing together the main points.

- Microprudential policies are critically important for financial stability and we must get them right.
- But the ability of microprudential policies to achieve financial stability may be dampened by credit cycles that have their roots in broader macro forces.
- Monetary policy matters for financial stability because it affects the credit cycle. To what extent monetary policy should therefore take account of financial stability remains an unresolved matter.
- Macroprudential policy potentially offers a way out by targeting the macro sources of financial instability, leaving monetary policy to focus on price stability.
- But macroprudential policy is neither a panacea nor without cost or distortion.
- And we need to better understand the interactions of monetary, microprudential and macroprudential policies, and how they influence price and financial stability.

Henry Kissinger once asked Zhou Enlai – the late Premier of China – what he thought of the implications of the French Revolution. Zhou replied, “It is too early to tell.”

We are living in interesting times.

- It has been a period of bold experimentation in both monetary and regulatory policies.
- It is too early to tell what the implications of these experiments are.
- We need much more research, experience, and the passage of time before we can draw firm conclusions on some of the issues that I have raised.
- In the meantime, let us pray for the wisdom to do the best we can. And be humble.

Thank you.