



Macroprudential tools, their limits and their connection with monetary policy

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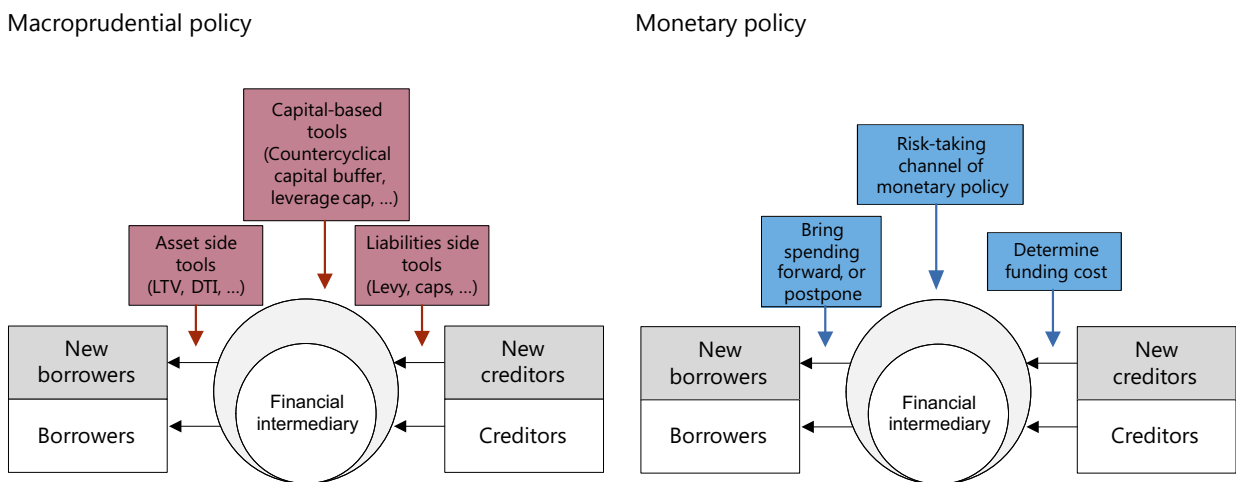
Panel remarks at IMF Spring Meeting event: "Rethinking macro policy III: progress or confusion?"
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It is a pleasure to be back at this event. In keeping with the title of this session, "macroprudential tools: gathering evidence", I will say something about the evidence, but I will also offer some broader reflections on the limits of macroprudential tools and their relationship with monetary policy.

A key aim of macroprudential policy is to moderate the procyclicality of the financial system and it does so by influencing the financial intermediation process; it operates on the assets, liabilities and leverage of intermediaries (Graph 1). In this respect, macroprudential policy and monetary policy share some similarities.

Comparison of macroprudential policy with monetary policy

Graph 1



For instance, both policies affect the *demand for credit* by reallocating spending over time, by either postponing spending (ie by inducing consumers and firms to borrow less) or bringing forward spending (ie by inducing them to borrow more). Both policies affect the *supply of credit* by influencing the leverage decision of the intermediary, and both influence the funding cost of the intermediary.

However, there are two important differences between monetary policy and macroprudential policy.

The first difference is that macroprudential policy is aimed at specific sectors or practices. In some respects, macroprudential policy harks back to the directed credit policies used by many advanced economies up to the 1970s, although these were used to channel credit to favoured sectors, as well as to constrain credit. The name is different, but the policies are similar. In many cases, it is old wine in new bottles. In contrast, monetary policy influences risk-taking more broadly, both within the domestic financial system but also across borders, and is harder to circumvent.

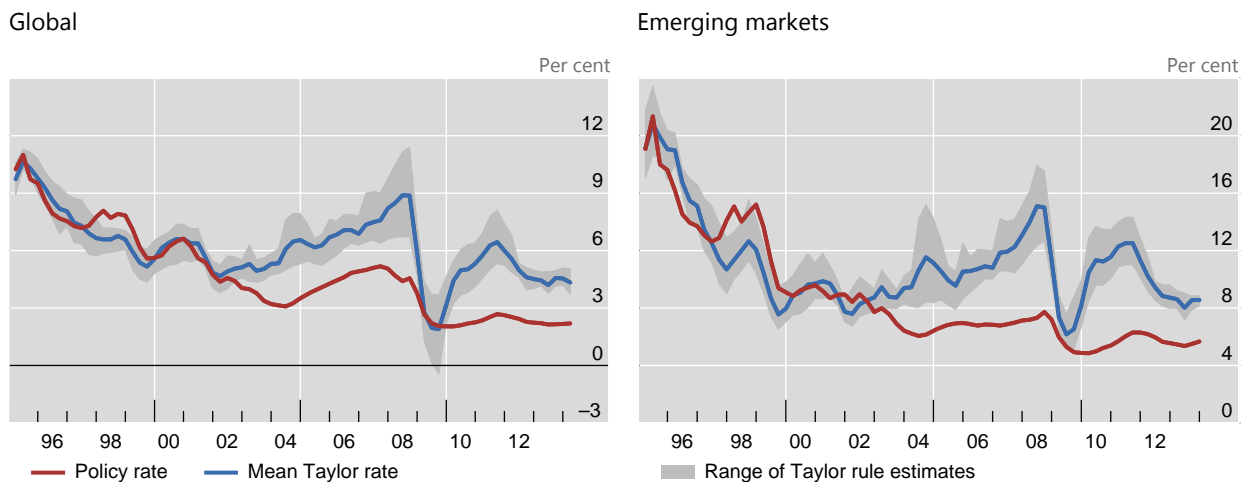


On the other hand, the broader impact of monetary policy cuts both ways; domestic monetary policy is constrained by global conditions. This is the second difference between monetary policy and macroprudential policy. In tomorrow morning's session on the international monetary system, my BIS colleague Jaime Caruana will expand on this point. In a nutshell, the point is this. Currencies are global, but monetary policy is territorial; or rather, the *mandated domain* of monetary policy is territorial.

A relevant and currently topical question is whether floating exchange rates are sufficient to insulate an open economy from global financial conditions. H el ene Rey's recent work has shed light on this question, and the initial evidence suggests that the answer is "no".

Policy rates compared to Taylor rules¹

Graph 2



¹ See B Hofmann and B Bogdanova, "Taylor rules and monetary policy: a global 'Great Deviation'?", *BIS Quarterly Review*, September 2012, pp 37–49.

Sources: IMF, *International Financial Statistics* and *World Economic Outlook*; Bloomberg; CEIC; Consensus Economics; Datastream; national data; authors' calculations.

In any event, actions speak louder than words, and judging from monetary policy actions actually pursued by central banks, the evidence is that central banks believe the answer to be no. The red line in Graph 2 plots the average realised policy rate while the blue line plots the mean Taylor rule path, with the grey band showing the upper and lower bounds depending on the particular version of the Taylor rule. The large gap between the red and blue lines suggests that these countries felt constrained to follow the monetary stance of the major central banks due to concerns about the exchange rate.

It is in this context – when external conditions constrain monetary policy – that macroprudential policy comes into its own. For the banking sector, policies aimed at constraining non-core liabilities may be one way to dampen procyclicality and lean against systemic risk.

Are monetary policy and macroprudential policy effective only when they tighten at the same time, or it is possible to tighten one but loosen the other? In other words, must the two policies pull in the same direction (be used as complements), or can they pull in opposite directions (be used as substitutes)?

Some recent discussions of macroprudential policies treat the two as being substitutes; monetary policy is loosened and macroprudential policy is invoked to deal with the financial stability implications of looser monetary policy. However, when they pull in opposite directions, households and firms are being told simultaneously to borrow more and borrow less. There is some tension between the two sets of policies, to say the least.



Initial research, including some conducted here at the IMF, suggests that both monetary and macroprudential policies have some effect in constraining credit growth, and that the two tend to be complements, not substitutes, although results vary by type of shock.¹

In my own study with Bruno and Shim on how macroprudential tools are actually deployed, we find that macroprudential policies and monetary policy often pull in the same direction. There is a modest positive correlation of around 0.2 between tightening macroprudential and monetary policy measures (Table 1).²

Correlation of policy changes in Asia-Pacific economies¹

Table 1

	Policy rate	Non-interest rate monetary policy measures	Prudential measures on housing credit	Prudential measures on banking inflows and FX exposures
Policy rate	1			
Non-interest rate monetary policy measures	0.2214	1		
Prudential measures on housing credit	0.1599	0.1896	1	
Prudential measures on banking inflows and FX exposures	0.2018	0.2997	0.0925	1

¹ Changes in the policy rate are actual policy rate changes. For changes in the other types of policy action, +1 is assigned for tightening actions, 0 for no change and -1 for loosening actions. Quarterly data from 2004 to 2013 for Australia, China, Hong Kong SAR, India, Indonesia, Japan, Korea, Malaysia, New Zealand, the Philippines, Singapore and Thailand.

Source: Adapted from Table 15 of Bruno, Shim and Shin (2015).

Having said all this, we should be mindful of the limits to what can be achieved through macroprudential policy. Most macroprudential tools are aimed at the banking sector, especially the regulated banking sector. Their design is influenced by the experience of past crises. Watchwords are credit growth, leverage, maturity mismatch, complexity and "too big to fail". While these factors are still relevant, it does not follow that all future bouts of financial disruption must follow the same mechanism as in the past.

The changing patterns of financial intermediation mean that we need to revise constantly our understanding of the relevant players in the financial system. Long-term investors have become increasingly important in recent years. Some of them are reaching for yield, but many long-term investors are chasing disappearing yield in their attempt to hedge duration, as government bond yields have plunged in recent weeks.

¹ See International Monetary Fund, *The interaction of monetary and macroprudential policies*, Washington: International Monetary Fund, 2013. See also E Cerutti, S Claessens and L Laeven, "Macroprudential policies: analysing a new database", paper presented at the DNB-EBC conference on "Macroprudential regulation: from theory to implementation" on 29–30 January 2015, Amsterdam; K Kuttner and I Shim, "Can non-interest rate policies stabilise housing markets? Evidence from a panel of 57 economies", *BIS Working Papers*, no 433, November 2013; and O Akinici and J Olmstead-Rumsey "How effective are macroprudential policies? An empirical investigation" Federal Reserve working paper.

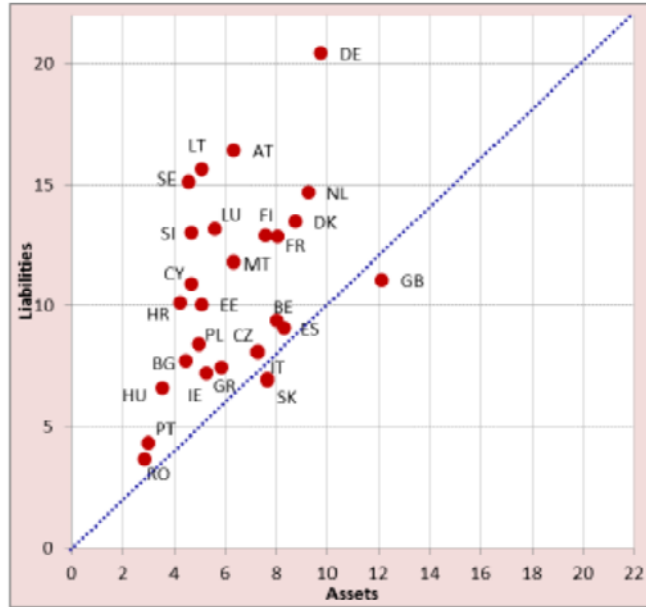
² See V Bruno, I Shim and H S Shin, "Comparative assessment of macroprudential policies", *BIS Working Papers*, forthcoming, 2015.



The German 10-year sovereign yield is 13 basis points this morning. The German 30-year rate is down to 53 basis points. The Swiss 10-year rate is actually *negative*, at -14 basis points.

Duration of assets and liabilities of European insurance companies

Graph 3



Source: European Insurance and Occupational Pensions Authority (EIOPA).

Graph 3 plots the duration gap for European insurers, and illustrates how insurance company liabilities tend to have longer duration than their assets. The gap is largest for German insurers.

Given the duration mismatch, the duration of liabilities runs away from investors faster than the increased duration of assets as long-term yields fall. Investors who wish to match duration may need to chase long-dated bonds, pushing down their yields further. Like a dog chasing its tail, bidding up the price of long-dated bonds may succeed only in extending liabilities duration further.

The recent plunge in long-dated yields should give us pause for thought. The greater risk-taking involved in chasing disappearing yield has pushed term premiums deep into negative territory. But other measures of risk premium – such as high-yield bond spreads or equity volatility premium – are sending mixed messages.

What if the deeply negative term premium is not just a sign of exuberance? What if it is also a sign of distress, of buyers forced into adding positions? We are reminded of the title of the Stevie Smith poem: "Not Waving, but Drowning".

These questions are worth asking, as the amplification forces that are driving long rates lower could just as well work in reverse, leading to sharply higher rates when eventually yields start to rise again. The further term premiums fall into negative territory, the sharper will be the snap-back when they reverse their decline.

Few of these forces are amenable to the macroprudential policies that have been deployed so far. All this goes to show that macroprudential policy is more than a specific toolkit. It is about a perspective, or a frame of mind.