An Integrated Macroprudential Framework in the Post-Pandemic World

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1 Introduction

French novelist Jean-Baptiste Alphonse Karr once said of political revolutions, "The more things change, the more they stay the same". Regime changes often disappoint because succeeding leaders tend to share the same motives and constraints as their predecessors'. Such a dim worldview may seem a far cry from central banking. After all, departure from the gold standard or the adoption of inflation targeting framework did bring about consequential and persistent changes. Even within the current framework, few could fault central banks for lacking imagination or willingness to adapt their playbooks when new policy challenges arise. The introduction of unconventional policies in the wake of the Great Financial Crisis (GFC), and an expanded role as a lender of last resort during the most recent global lockdown are cases in point.

Karr's remark resonates somewhat louder when it comes to macroprudential policy frameworks (MPF), defined broadly here as frameworks for internalizing macroeconomic implications of financial stability into policy considerations.[2] Before the Great Financial Crisis (GFC), major central banks followed a benign-neglect approach, refraining from counteracting financial booms with policy tightening, choosing to mop up after the bust with policy rate cuts. Macroprudential tools, though already routine in emerging market economies, were viewed skeptically as a counterproductive meddling with credit allocations. The GFC has forced a rethink of MPF by putting a spotlight on financial stability as a pre-condition

[1] I thank David Archer, Claudio Borio, Daniel Rees and Christian Upper for insightful discussions and their comments on an earlier draft. Views expressed in this article are mine alone, and do not necessarily reflect those of the Bank for International Settlements or my colleagues.

[2] MPF as defined here could entail the use of any policy tools at disposal to central banks, including monetary policy.

for macroeconomic stability and advanced the debate on how best to achieve this objective. This debate remains active to this day, though many major central banks have effectively followed the 'separation principle', which takes macroeconomic and financial stability as two distinct objectives, to be independently pursued by two policy instruments. Macroprudential tools, now fully embraced, are tasked with ensuring financial stability. Monetary policy retains its singular focus on macroeconomic targets such as growth and inflation. One might conclude that, as far as the monetary policy's role in MPF is concerned, the more things change, the more they remain the same.

This essay critically evaluates this compartmentalized approach to MPF, against an integrated alternative, where both monetary and macroprudential policies work in concert towards an encompassing goal. I will discuss the challenges posed by the environment of low interest rates in making this choice. I will also draw some lessons from the current ongoing pandemic, and conjecture what the future may hold for MPF.

2 Separate or integrated? The state of debate

A key advantage of the compartmentalized approach to MPF is a clear division of responsibility. Monetary policy can focus on keeping inflation near its target and output close to its potential, while macroprudential policy can devote itself solely to financial stability. In principle, this sharp demarcation should help lessen the inaction bias, and protect both policymakers' credibility. Assigning one tool for one purpose also appears consistent with the well-established Tinbergen principle, which states that the number of instruments must match that of targets if all of the latter were to be achieved.[3]

Another argument in favor of the separation principle is that each tool has a comparative advantage within its domain. Monetary policy has a broader reach, hence is suitable as a macroeconomic management tool. Macroprudential tools can be targeted to micro pockets of overheating, harder to manage with a blunt instrument. It has also been argued that macroprudential tools such as countercyclical capital buffers offer something monetary policy cannot, in that they help strengthen the financial sector's resilience to shocks (see e.g. Aikman et al (2018)).

In reality, the demarcation line between the two sides can often be blurry. The two objectives are not independent - indeed financial stability is only a means to macroeconomic stability. As instruments, monetary and macroprudential tools

[3] Note, however, that the Tinbergen principle only states the minimum number of tools required, not how they should be used. Whether or not one tool can independently achieve its designated objective lies beyond the Tinbergen principle, and depends on the relationship between the objectives as well as the way the tools interact.

work similarly by influencing financial risk taking, so both can contribute to financial stability or vulnerability. And while many macroprudential tools are generally more targeted, they too generate a macroeconomic impact. That is why releasing macroprudential buffers in recessions is part of the standard rulebook.

These considerations argue for a tighter integration between the two sides, with monetary and macroprudential tools adjusted under one roof in pursuit of an integrated policy objective. This objective clearly must transcend narrow operational targets (e.g. strict inflation targeting over a fixed horizon), but does not have to depart from the usual concept of sustainable economic expansion.[4] The key is to take an intertemporal perspective and take into account macro-financial feedback mechanisms comprehensively. If attaining a "full employment" in the short term would put financial imbalances on an unsustainable path and jeopardize future macroeconomic stability, then the right policy balance should incorporate this intertemporal trade-off. Any combinations of the two policy tools could be used to achieve the objective.[5]

The separation principle approach may be made necessary by an institutional or political economy backdrop that demands a high degree of accountability. Even so, the interdependence between the two goals will necessitate a pecking order. Typically, short-term macroeconomic goals take precedence, leaving macroprudential policy to mop up any financial stability risks that emerge following monetary policy decisions. Aside from being sub-optimal, this raises the question of whether macroprudential policy can single-handedly do the job, not least if monetary policy is pulling in the opposite direction. Available evidence casts much doubt that it can (see e.g. Gambacorta and Murcia (2017)). In practice, macroprudential policy can also be highly political, and in many countries, central banks do not have binding tools.

The MPF debate is sometimes couched starkly in terms of whether monetary policy is at fault for causing financial crises. Unless such a causal link is proven, the argument goes, monetary policy should not have to respond to financial stability risks. This is an oversimplification of the policy problem, however. The business cycle itself is influenced by a myriad of forces, monetary policy probably ranking low in the list. This does not mean that monetary policy cannot help steer the economy and make it more stable. The financial imbalance process is similarly complex and depends on a host of factors beyond monetary policy. Still, monetary policy can contribute to stabilizing the financial cycle and mitigate its macroeco-

[4] For example, the Reserve Bank of Australia has a broad mandate to contribute to "the economic prosperity and welfare of the people of Australia".

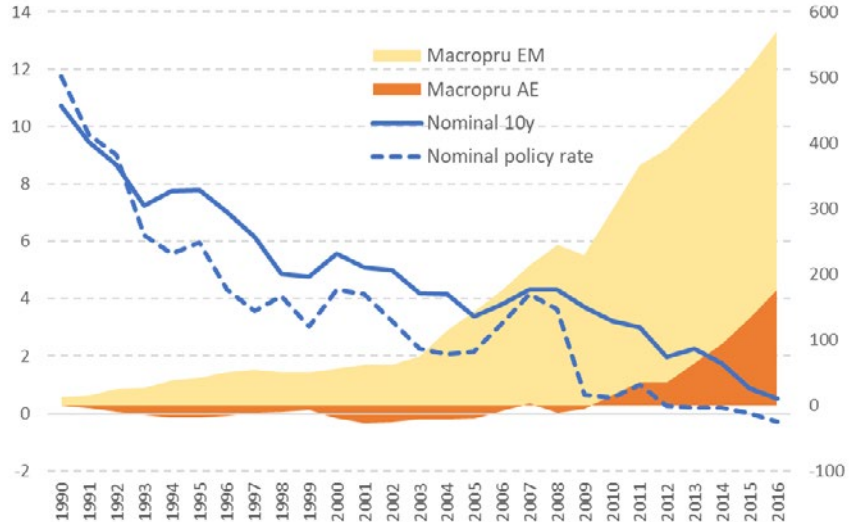
[5] Under an integrated approach, monetary and macroprudential policies could work as either substitutes or complements depending on the situation. The separation principle would rule out complementary uses of the tools, at least in countering a financial boom.

nomic repercussions.[6] Whether or not it is the most decisive factor driving financial crises is beside the point.

3 The low-for-long interest rate environment

The operational separation between macroeconomic and financial stability objectives faces even greater challenges in the era of low-for-long interest rates. Global nominal interest rates have never been this low and for this long. The decline in interest rates in turn has boosted asset prices and debt, calling for an increasing reliance on macroprudential policies, both in advanced and emerging market economies (Chart 1). A long list of measures has been introduced, each designed to quell overheating in a different area of the financial markets. Loan-to-value limits and borrower-based measures were adopted to tackle high house prices. Debt-to-income limits were tasked to address high household debt problems. Curbs on foreign exchange lending were introduced in response to high dependence on foreign exchange debt in emerging markets. The list goes on.

Chart 1: Macroprudential policy more active as interest rates fall



Sources: iMaPP database. Author's calculations

Experience since the GFC suggests that, despite their best efforts, macroprudential policies have often struggled to go at it alone in this environment. As macroprudential policies tightened their grip, risks have shifted to darker corners. In the United States, growth in leveraged loans and collateralized loan obligation (CLO) soared in the decade after the GFC. In response, regulatory agencies including the

Federal Reserve have issued guidance to banks, yet this may have triggered a migration of leveraged lending to nonbanks (see Kim et al (2018)). There were also signs of non-bank portfolios becoming riskier and more illiquid, and greater search-for-yield behavior by pension funds and insurance companies. All these developments lay beyond the macroprudential policy reach. Low-for-long interest rates also sapped bank profitability, which macroprudential policy could do little about. Releasing the countercyclical capital buffer would have betrayed its spirit.

One defense for monetary policy is that it has its own war to fight, namely the secular decline in the natural rate of interest (r-star). An influential explanation for the decline in real (hence nominal) risk-free interest rates is that real saving has trended up and outpaced investment over the past few decades, owing to exogenous forces such as declining productivity, higher life expectancy, greater demand for safe assets and global saving glut. This has driven down r-star, requiring an ever lower level of policy interest rate to keep the economy in full employment and the goods market in equilibrium.

What are the implications of falling r-star on financial stability risks? One view is that when the real economy is in equilibrium, so should the financial market. A lower r-star should then imply a lower equilibrium discount rate, which justifies higher levels of sustainable asset prices and debt. Lower interest rates then need not require any macroprudential policy responses.[7]

Another view is that there need not be a divine coincidence between the goods market equilibrium and the financial market stability. This potential disconnect was indeed emphasized by Knut Wicksell in his original conception of the natural interest rates. For example, if investors have nominal target returns, then a lower risk-free interest rate would necessarily push them to take on greater risks. A decline in r-star, or indeed a persistent decline in interest rates whatever its causes, could then exacerbate financial stability risks and worsen the intertemporal tradeoff between short- and long-run macroeconomic stability. In this case, a low-for-long interest rate environment would pose greater challenges to MPF.

The r-star explanation for low interest rates itself is not without dispute. The empirical link between real interest rates and posited determinants such as productivity and demographic changes is elusive in a long sample (see Borio et al (2017)). In fact, shifts in monetary policy regimes appear more successful in predicting changes in real interest rate trends. One way this could arise is through the interaction between monetary policy framework and financial stability. A decline in the risk-free interest rate could encourage excessive financial risk taking, gradually sapping the financial system‘s strength. When financial institutions finally retrench, this weakens the transmission and justifies even more policy easing to regain the same

[7] This view assumes that a low r-star is a persistent phenomenon that is unlikely to reverse in the near future.

level of output (see Rungcharoenkitkul et al (2019)). An MPF that places too much emphasis on short-term outcomes could be one cause of a secular decline in real and nominal interest rates, making it increasingly difficult to maintain macroeconomic stability over time.

4 The Covid-19 lessons

At the time of writing, the world is facing a momentous challenge from the Covid-19 pandemic. The crisis is set to leave a lasting imprint on consumer behavior as well as production of goods and services. The debate on monetary policy and macroprudential frameworks would also likely be reshaped, though what the new normal will be remains to be seen. Experiences over the last several months however already highlight some general lessons.

First, the pandemic shatters any illusion that monetary and macroprudential tools can be kept separate under the one tool one purpose arrangement. Given the enormity of the global lockdown shock, there was little debate that all hands must be on deck and macroprudential releases could usefully complement monetary policy easing in providing support to the economy. This raises the question why monetary policy should not also pull some weight to counter financial overheating, particularly if macroprudential policy alone would not suffice. Else, policy would be asymmetric and biased over the cycle, potentially amplifying the financial cycle and adding to macroeconomic instability.

Second, the pandemic shock illustrates the value of preserving financial buffers for rainy days. More stringent financial regulation post-GFC helped build stronger financial institutions that are not only more able to withstand the extended lockdown, but also serve as a source of stability for the rest of the economy. Fostering and preserving the financial sector's resilience may entail some sacrifice of immediate output due to lower borrowing and debt than otherwise, but pay off when bad times materialize. Recognizing and willing to make this intertemporal tradeoff is a central part of MPF.

Third, the financial system extends beyond large systemic financial institutions, and is an ecosystem of lenders and borrowers, large and small. Highly indebted and less liquid firms and households are less able to withstand income losses during the Covid-19 lockdown, and it is their potential destruction that poses the greatest threat to the economy. Limiting real-sector leverage is therefore a key part of making the financial system and macroeconomy more resilient to adverse shocks. Policymakers should maintain this broad perspective, even if their policy tools work more narrowly through bigger players in the financial markets.

Fourth, rebuilding financial system resilience takes time, so should start as soon as the macro-financial conditions permit. Large shocks can arrive at any moment, and the MPF must help prepare the financial system for them in advance. A key

amplification mechanism of the Covid-19 is the high private-sector debt, following a decade of low interest rates. Once the worst of the storm has passed and the recovery has gained traction, it may thus pay to look through smaller shocks and promote prudent risk-taking behavior through opportunistic and carefully timed policy normalization. This would help the financial system regain buffers quickly, as one never knows when the next lightning would strike.

Finally, the pandemic-fighting strategy provides an apt analogy for thinking about MPF. Contact tracing and quarantining can isolate few infected individuals initially and prevent further spread of an epidemic. But this targeted approach relies on an ability to quickly identify new infections, which becomes more difficult and ultimately impossible with active social interactions. That is why contact tracing must go hand in hand with social distancing. Similarly, targeted macroprudential policy can only go so far without some assistance from the more sweeping monetary policy.

5 Toward the post-pandemic era

Time will tell if the role of MPF would evolve in the post-pandemic world. In a bleaker scenario, the next decade could be similar to the one before it, with policy interest rates staying close to their lower bounds most of the time and central bank balance sheets continuing to grow. This could be a necessary response to a prolonged and deep recession, possibly worse than the GFC. Or, similar to the preceding decade, it could also be driven by decisions to run the economy hot and buy extra insurance against the economy sliding back into a slumber. In the latter case, increased financial risk taking will again be the means to achieve desired ends, probably at the cost of lower resilience to future shocks. Macroprudential policy will again need to shoulder the burden, perhaps even heavier than before. Karr's remark would resonate even louder this time around.

With luck, the current decisive health and economic policies will work and help put the global economy back on its feet quickly. Once the patient recovers from the coma, policymakers face a choice. They could maintain the emergency dosage of medicine, to insure against any relapse. The risk is that the patient may catch a new disease before being discharged, with a weaker immune system and a higher dependence on life-support machines. Another option is to take a step back once economic activity resumes robustly, and encourage the economy to rebuild buffers and financial resilience against future shocks – akin to allowing the patient to regain her natural immune system. This would require a somewhat different playbook from what was used in the GFC aftermath, possibly at a cost of somewhat higher short-term market and economic volatility. In return, this strategy would help forge a more resilient macro-financial system than in the past, and mark a major evolution in MPF design.

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