



6th BSP International Research Conference
“Revisiting macro-financial linkages: Looking back and looking ahead”
20-21 September 2016 • Manila, Philippines

WELCOME REMARKS¹

Good morning and welcome to the 6th International Research Conference of the Bangko Sentral ng Pilipinas (BSP). The theme of this year’s conference “Revisiting macro-financial linkages: Looking back and looking ahead,” highlights the growing attention placed on the importance of the interactions between financial conditions and the real economy.

A look back: The traditional view on transmission

Macro-financial linkages as a body of economic work was not that extensive before the turn of the century. To help illustrate, I asked staff to do an advanced search in Google Scholar for articles on macro-financial linkages. The results are quite revealing. If you take the period 1980-1999, the search will yield 82 articles on the subject. But if the search is made for the period 2000-2016, the number of articles increases dramatically to 2,700.²

The reviews of literature done in formal research work confirm this finding as well. Research and modeling of macroeconomics and the financial sector traditionally proceeded in isolation from one another. Previously, the models of the economic growth process were largely driven by "real" factors -- productivity of the workforce, the quality of entrepreneurs, the quantity and quality of the capital stock, the availability of resources, the state of technical knowledge. And, financial markets were assumed to be frictionless.

But the work on asymmetric information and principal-agent theory³ afforded economists new ways of thinking about the role that financial markets play in the real economy. For instance, because of asymmetric information, banks would need to “screen” borrowers either by carefully looking at the firm’s value or requiring collateral. Now, when the value of assets increases, the value of a firm’s balance sheet, including its collateral, also increases. At the same time, the upward valuation of assets raises a bank’s capital, allowing it to increase its lending. In other words, an increase in asset prices leads to an increase in loans and raises economic activity. By contrast, a fall in asset prices results in slower economic activity.

¹ Welcome address of Governor Amando M. Tetangco, Jr. at the Opening Ceremony of the 6th BSP International Research Conference on 20-21 September 2016 at The Peninsula Manila Hotel.

² Google Scholar search made on 15 September 2016 (excluding citations).

³ This work was led Joseph Stiglitz, Michael Spence and George Akerlof in the 1970s and 1980s. In 2001, the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel was awarded jointly to these three economists for their analyses of markets with asymmetric information.

Weak macroeconomic conditions, in turn, reduce profits of businesses and incomes of households, which can push up borrowers' default probabilities that may weaken balance sheets of banks and other financial institutions.

This cycle or reversal mechanism can last long and the results may be pervasive - affecting investment decisions, investor confidence, consumption, savings, and risk aversion, among others. In the literature, this vicious feedback loop is what we refer to as financial accelerator⁴.

The Feedback loop – there is a real cost

The concept of a feedback loop became even more pronounced during and post-2008 Global Financial Crisis (GFC), creating a need to reassess and review the monetary transmission mechanism as we knew it then.

The GFC has taught policy makers and academia, that we could no longer deal only with monetary impulses and “assume away” the financial market. A clear lesson from the GFC is that there are frictions in the financial market and that these frictions can increase costs in the economy significantly.

Empirical estimates before the 2008 GFC (that is from 1980-2007) show that output losses after a financial crisis could result in losses of more than 25 percent of GDP.⁵ In some cases, financial crisis could have lasting effects by lowering the trend growth of GDP.⁶

For the US, estimates by the US Federal Reserve Bank of Dallas⁷ show that relative to the 2007 output, about 40 to 90 percent of the output was foregone as result of the financial crisis in 2008.⁸ Not only was the crisis associated with a huge loss of economic output and financial wealth, but also with psychological consequences from extended unemployment, homelessness, university drop-outs, deferred or denied retirements, among others. Thus, the real total cost of the crisis likely exceeded the value of one year's output.

Domestic turbulences can spill over

⁴ The idea that changes in financial and credit conditions propagate the business cycle -- was introduced by Bernanke et al. (1999). [Bernanke, B. S., M. Gertler and S. Gilchrist (1999). “The Financial Accelerator in a Quantitative Business Cycle Framework,” *Handbook of Macroeconomics*, Volume 1.]

⁵ This estimate is based on a sample of 40 systemic banking crisis in the period 1980-2007, where 10 cases resulted in cumulative output losses of more than 25 percent of pre-crisis GDP (Cecchetti, S. G., M. Kohler and C. Upper (2009). “Financial Crises and Economic Activity,” Bank for International Settlements).

⁶ Cecchetti et al. (2009).

⁷ Atkinson, T., D. Luttrell, and H. Rosenblum (2013). “How Bad Was It? The Costs and Consequences of the 2007-09 Financial Crisis,” Federal Reserve Bank of Dallas Staff Papers, No. 20, July.

⁸ The cost of the crisis was estimated from the gap between a counterfactual – what GDP would have been had the financial crisis never occurred – and realized GDP. In terms of 2012 dollars, this cost is equivalent to US\$ 6-14 trillion.

But output losses can go beyond the boundaries of a single economy. As we witnessed in the last two decades, the progress in the globalization of financial markets was accompanied by the frequent occurrences of financial crisis. What might, in the past, have been considered to only be a domestic problem, could now quickly “spillover” and become a global problem. Moreover, in considering such spillovers, the IMF warns that there could also be spillbacks. IMF Managing Director Lagarde refers to spillovers and spillbacks as the “two-way street of unintended knock-on effects.”

Let me cite fairly recent developments that can magnify spillovers, particularly to EMEs. First, the global presence of asset managers. A 2014 study by the BIS concluded that asset managers in emerging market economies tend to behave in a correlated manner. In particular, the BIS study found that because these global asset managers used common/similar portfolio benchmarks, their strategies/recommendations to institutional clients tended to also be similar, ultimately fanning “herding behavior” in investor flows. Investment flows to asset managers and asset prices then amplified each other's fluctuations, and reinforced each other's directional movements.

Second, co-movements among non-financial corporates in emerging market economies. Chui, Fender and Shusko (2014)⁹ found that non-financial EME corporates have been borrowing more internationally than domestically to take advantage of global low interest rates and strong local currencies. While “cheap” funding could boost economic performance if it supports viable investment projects, it also increases the borrower's rollover interest and currency risks, especially if revenues are in local currency. Furthermore, some corporations may have used borrowed funds for purely financial (i.e., speculative) purposes.

Third, the asynchronous monetary policy in advanced economies, and more recently, the uncertainty regarding the timing and pace of further monetary policy tightening by the US Federal Reserve. These developments have led to heightened interest rate volatility and rising spreads, adding pressures on emerging market currencies.¹⁰

Looking forward: Macrofinancial Stability

Clearly, given these interlinkages, policy makers can no longer view macrostability only as “either” monetary/macroeconomics “or” just the financial sector. There have been increasing discussions on the development of a macro-financial stability framework that would embody policies – whether monetary, fiscal or prudential – to systematically incorporate financial stability considerations into traditional macroeconomic analysis – to more effectively address financial booms and busts or the so-called financial cycles.¹¹

⁹ Chui, M., I. Fender and V. Sushko (2014). “Risks related to EME corporate balance sheets: the role of leverage and currency mismatch,” BIS Quarterly Review, September.

¹⁰ Shin, H. S. (2016). “Global liquidity and procyclicality,” speech delivered during the World Bank Conference “The State of economics, the state of the world,” Washington, D.C., 8 June 2016.

¹¹ Bank for International Settlements (2016). 86th Annual Report (1 April 2015–31 March 2016), Basel, 26 June.

Moreover, work by Borio and Zhu (2012)¹² point to the “risk taking channel” of monetary policy transmission, or how monetary policy affects the way economic agents perceive, tolerate and ultimately price risk. In considering the risk taking channel of policy transmission, it is quite evident that policy makers need to more closely examine market behavior and its phases -- the uncharacteristic calm, market herding, reversal and then panic. When one stops to think about it, these phases really led us from the Great Moderation to the Great Global Financial Crisis.

Policies and macro-financial linkages

This risk-taking behavior by agents necessitates a new set of tools. To address financial stability concerns arising from financial cycles, policymakers in both advanced and developing economies have increasingly used macroprudential policies in all forms. We have seen credit-related measures such as caps on loan-to-value ratio and debt-to-income ratio, caps on foreign currency lending, and ceiling on credit or credit growth; liquidity-related measures such as limits on net open currency positions or currency and maturity mismatch, and reserve requirements; and capital-related measures such as countercyclical capital requirements and dynamic provisioning.¹³

While some specific measures have proven to be more effective than others, all these policies intend to change the constraints and incentives faced by financial market participants. In Asia,¹⁴ there is evidence that credit-related and sector-specific macroprudential policy instruments have been effective in addressing imbalances, which have helped contain the severity of economic downturns or prevent the occurrence of a major economic crisis.¹⁵

Even fiscal policies can have significant impacts on financial stability. The structure of taxes and subsidies can influence private sector decisions on leverage.¹⁶ Studies have shown that corporate income tax systems generally encourage the use of debt rather than equity finance. This is because interest payments are allowed as a deduction in calculating taxable profits, but the return to equity is not. The favorable tax treatment on corporate debt can create a debt bias, which, in turn, can lead to more highly leveraged banks.¹⁷ Likewise, underpriced and implicit government guarantees of corporate debt liabilities have often encouraged debt over equity financing.¹⁸

Today's Conference -- Contribution to the discussion

¹² Borio, C. and H. Zhu (2012). “Capital regulation, risk-taking and monetary policy: a missing link in the transmission mechanism?,” BIS Working Paper No. 268, December.

¹³ Cerutti, E., S. Claessens, and L. Laeven (2016). “The use and effectiveness of macroprudential policies: New evidence,” VOX (Center for Economic and Policy Research’s Policy Portal), 10 February.

¹⁴ People’s Republic of China, Hong Kong, Indonesia, India, Republic of Korea, Malaysia, Singapore, Thailand, Taiwan, Philippines

¹⁵ International Monetary Fund (IMF, 2013). “Key Aspects of Macroprudential Policy – Background Paper,” 10 June.

¹⁶ BIS (2016)

¹⁷ IMF (2013)

¹⁸ BIS (2016)

Ladies and gentlemen, macro-financial linkages are continuing to evolve. There are just so many moving parts and therefore many possible outcomes. The risk that our analysis of these evolving developments as well as the risk that our policy tools may not be responsive enough to these changes are present.

In this two-day conference, we re-examine what we know about macro-financial linkages, with the hope of reducing what we do not know, and possibly reduce the risks of unknown outcomes.

We have brought together experts with a wide range of backgrounds, including policymakers, and those working in international research institutions and academia, to exchange ideas on these issues. I thank the authors and discussants, and your respective institutions for your valuable contribution to this research conference. The BSP is also grateful to the session chairs for accepting our invitation to facilitate the discussions.

This morning's session will focus on the international aspect of macro-financial linkages as papers dwell on financial globalization, monetary and financial spillovers, and financial contagion. The afternoon session will focus on the macro-financial linkages within the domestic economy with papers touching on liquidity, sovereign bond markets, credit conditions, and interbank markets. In tomorrow's morning session, discussions will be on the implications of different policies on financial and business cycles, including the possible use of macroprudential, monetary, and fiscal measures at different stages of the cycle.

We shall conclude the conference with a panel discussion comprised of distinguished economists from organizations that cover the globe. The experience and expertise of these gentlemen in research and policy making promises to provide an insightful discussion on macro-financial linkages and the transmission mechanism of monetary policy. Thank you for gracing this year's BSP International Research Conference.

Final Thoughts

Ladies and gentlemen, it is very apparent that we have entered an era of intensifying and uncertain macro-financial linkages. The challenges that this era brings demand not just more scrutiny of linkages, but may even require altering our policy perspectives.

I am confident that the sessions in this conference will provide a good opportunity to share ideas and to take stock of the different dimensions of macro-financial linkages.

I wish you well in this Conference. And I look forward to a productive and interesting exchange.

Thank you very much and once again, welcome good morning.