



Global financial interconnectedness: why does it matter and how to analyse it?

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Networks and global financial interconnectedness

Good morning to all of you. It is a pleasure to welcome you to the 3rd BIS Research Network Meeting on “global financial interconnectedness”. This is the third meeting of the BIS Research Network, and it is the first one to be co-organised with the Nederlandsche Bank, the Deutsche Bundesbank and the Review of Finance. This is also the first meeting in this series with a public call for papers. We have received over 130 submissions and the organising committee had the difficult task of selecting 14 for presentation at the conference. Christian will say a few words on how they did this in a moment.

Let me say a few words about the BIS Research Networks, since most of you have not attended the first two meetings. The network was set up last year as part of our effort to serve as a bridge between central banks and academics to tackle some of the most pressing conceptual and empirical questions facing central banks today. The network brings together active researchers from academia and central banks to meet regularly and share findings on issues related to banking, monetary policy, regulation and financial stability. We hold two meetings a year, alternating between micro- and macro-related themes.

The inaugural meeting of the BIS Research Network in September last year was “Banking and asset management”, and it explored the interaction between capital and liquidity regulation; the adjustment of bank capital to Basel III; the cyclical behaviour of leverage; asset management flows; and equilibrium asset prices. The second meeting in March of this year focused on “Macroeconomics and global financial markets”.

The theme of this third meeting is “global financial interconnectedness”. The last decade has provided many examples showing that financial interconnectedness matters, both at the local and the global scale. The global economy is arguably more interconnected than ever before. The most obvious connections are international trade and financial exposures, but there are many more. For example, monetary policies appear to be more connected between countries than what can be explained by economic conditions. The result is that monetary conditions in one country tend to spill over into other economies, and possibly even back.

In spite of this, a lot of work on financial networks stops at national borders. More often than not, the reason has to do with data availability. Most of the datasets containing detailed information on financial linkages are domestic in scope, even though the markets involved are international. But data availability is improving, albeit slowly. For example, at the BIS, we have been improving our international banking statistics by expanding the coverage of the data, both in terms of reporting countries and the number of series available. If you would like to learn more about the BIS data, I recommend that you



take a look at the September issue of the BIS Quarterly Review, which has several articles on the topic, including an introduction to the various statistics we disseminate.

Many of the paper that will be presented today and tomorrow take a network approach, but not all of them. Whether or not a network perspective adds insight is a question to be asked more often. Before concluding, let me raise three points that need to be addressed to make network analysis more relevant for policy.

First, any analysis has to focus on the right network. This may sound obvious but it is not. For instance, is it the network of interbank lending, cross-shareholdings or derivatives exposures that matters most for contagion? Or perhaps even the unobservable network of internal credit limits that banks have with each other? Zooming in on the right network is made even more difficult by the fact that some of the connections that turn out to be important in times of stress are not apparent before the fact. For example, who would have predicted that linkages on the funding side through money market mutual funds would play a much bigger role than direct linkages on the asset side, which continue to be the subject of most research? Focusing on the right type of connections is crucial to understand problems and to address them.

Second, we need more behaviour in network models. The nodes in international financial networks are not just particles that react in a simple and predictable way but countries, people or institutions. Unlike particles, they are forward looking and, whether rational or not, may display complex behaviour. This limits the applicability of models from other disciplines, such as physics or engineering. And these nodes have balance sheets and are engaged in many other activities. It would seem promising to consider what they do *outside* the network to better understand the formation and behaviour of financial networks.

Indeed, the next frontier is to explore how networks come into being. Why does bank A lend to bank B but not to bank C? How do investors allocate their funds across countries? Why have regional players formed in the Asian banking market but not in Latin America? Good models of network formation could also help us simulate the impact of policy measures such as higher collateral requirements.

Closing

Judging by the quality of the papers and the authors on the programme, we will have another very fruitful meeting that can enrich the research agenda on the various linkages that hold together the world economy and the global financial system. So let me thank the presenters and all those who will be actively contributing to the discussion. I wish you a successful and engaging discussion.