Interconnectedness and the importance of international data-sharing

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Interconnections within the financial sector make international cooperation essential to monitor and respond to vulnerabilities. In order to detect, for example, common exposures to particular asset classes, or to gauge the ripple effects from the failure of a particular institution, information is required from the balance sheets of banks worldwide. Cooperation to promote international data-sharing has a long history at the BIS. The international banking and financial statistics collected by central banks and compiled by the BIS have evolved substantially over time, in response to the concerns of the day. The most recent crisis highlighted some limitations in the statistics, and forthcoming enhancements will address many of these.

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The international financial crisis has reminded us once again of how interconnections within the financial sector can amplify shocks. A high degree of interconnectedness essentially set the dominoes close to one another – except that unlike in the game, in the financial system interconnectedness is coupled with a lack of transparency. So it is hard to predict which will be the first domino to fall – and harder still to predict how problems in one part of the system will affect other parts.

Let me cite just three examples.

- The growth of credit transfer mechanisms had been hailed as promoting a socially optimal redistribution of risk to those entities most able to bear it. But the crisis showed that much of the credit risk had been transferred to opaque off-balance sheet entities, such as securities investment vehicles, and had ended up concentrating in specific firms. Sometimes these firms didn't even realise it.
- Derivatives had allowed market participants to hedge various market risks. But in the process they had given rise to huge bilateral credit exposures among relatively few counterparties.
- Even counterparty exposures through familiar instruments, such as commercial paper and interbank credit, were not reported, or not reported in a timely fashion. Think of the money market fund Primary Reserve. Since the fund disclosed its holdings only once a quarter, investors could not know whether it had sold off its claims on Lehman Brothers by the time Lehman went bankrupt.

When the financial dominoes do begin to fall, they do not respect national borders. Thus, by its nature, interconnectedness demands a policy response that goes beyond the national level. International cooperation is essential to monitor and respond to vulnerabilities.

Today I will focus on international cooperation to improve transparency: cooperation in collecting, compiling and analysing data. For crisis prevention, policymakers require information from the balance sheets of many banks in order to detect, for example, common exposures to particular asset classes or concentrations in funding markets. When crises unfold, policymakers require data on bilateral links between institutions to gauge the ripple effects from the failure of a particular institution.[1]

Cooperation to promote international data-sharing has a long history at the BIS. One of the oldest central bank committees is the Committee on the Global Financial System (CGFS). G10 Governors established it in 1971 to analyse the macroeconomic and financial consequences of the growth of international deposit markets; hence its original name, the Euro-currency Standing Committee. To fulfil its mandate, the committee needed internationally comparable and comprehensive data on cross-border banking. Any significant gaps in coverage would have limited the data's usefulness.

Thus were born the BIS international banking statistics. These statistics have evolved substantially over time, in response to the concerns of the day. In particular, the initial focus on the international components of monetary and credit aggregates, because of concerns with loss of control over domestic monetary conditions, has given way to a focus on aspects of banks' balance sheets that cast light on financial vulnerabilities.

A key milestone was the Latin American foreign debt crisis that hit in 1982, which prompted central banks to begin to collect data on banks' foreign assets on a worldwide consolidated basis. Such data facilitated analysis of concentrations and commonalities in exposures.

The most recent crisis has once again highlighted some limitations in the data, and forthcoming enhancements will address many of these (see Box 1). For example, the international banking statistics will be broadened to capture banks' entire balance sheets, not just their foreign positions. This will make it easier to assess system-level funding risks across a wide range of currencies. It will also allow the scale of banks' international activities to be compared with their total balance sheets.

In addition, the introduction of additional breakdowns will make it possible to see simultaneously a bank's location, its nationality, the location of its counterparty, and the currency and type of its position. This will facilitate a more detailed analysis of how shocks in one part of the world might affect borrowers elsewhere.

Over time, the growing size and sophistication of international financial markets have reinforced the importance of international data-sharing. Central banks have therefore extended their data collection efforts well beyond banks.

- In 1986 the BIS coordinated the first of what has now become a triennial survey of activity in foreign exchange markets. This survey is the most comprehensive source of information on the size and structure of such markets. Preparations are under way for the 10th survey in 2013.
- The triennial surveys of the early 1990s revealed the rapid growth of markets for over-the-counter derivatives. Consequently, in 1998 the BIS began publishing semiannual statistics on OTC derivatives. These were later expanded to measure concentration among derivatives dealers and to capture credit default swaps.

All of these statistics comprise aggregated information. They reveal vulnerabilities across sectors, banking systems or markets. For a fuller analysis of interconnectedness, more detailed data are needed: data on firm-level balance sheets, including data on individual

[1] BIS, "Closing data gaps to enhance systemic risk measurement", *81st Annual Report*, June 2011, pp 83–96.

counterparties. Such data are already accessible to individual bank supervisors. However, legitimate confidentiality concerns have historically inhibited international sharing.

Under the auspices of the Financial Stability Board (FSB), central banks and supervisors are putting a framework in place to facilitate the international sharing of firm-level data on systemically important financial institutions. The BIS has agreed to serve as the data hub. The first phase will be operational by early 2013, but limits data-sharing to supervisors. Future phases envision access for national and international authorities with macroprudential responsibilities, and are planned for implementation beyond 2013.

Such firm-level data will significantly enhance our understanding of interconnectedness. While confidentiality concerns will necessarily limit access to the data, the identity of individual banks is not absolutely essential for a richer analysis than current data allow. For example, firm-level data offer flexibility in constructing aggregated information, and analytical results can often be shared without revealing identities.

While the cooperative efforts of central banks and supervisors to collect and compile data have typically been motivated by policy requirements, we should not forget the importance of dissemination and analysis. The dissemination of data, as well as of rigorous analysis of the data, is critical to strengthen market discipline by helping market participants to better price and manage risk. The main reason crises occur is not lack of statistics, but the failure to interpret them correctly and to take remedial action.

Thank you.

Box 1

The BIS's role in closing data gaps

The global financial crisis that started in 2007 highlighted the need for better data to monitor and manage the build-up of risks to financial stability. In cooperation with central banks and other international organisations, the BIS is focusing on closing data gaps in five areas, outlined below in order of their closeness to completion.[①]

The first gap to be closed was in data relating to credit default swaps (CDS).[②] The initial set of enhancements to the CDS statistics compiled under the aegis of the CGFS were implemented for end-June 2010 data and provided additional details about counterparties and index products. The final set of enhancements were implemented for end-June 2011 data and resulted in new information about the characteristics of the underlying debt (eg sector, rating and maturity) as well as the ultimate distribution of credit risk transferred through CDS.

The second gap to be closed was in data relating to property prices. In 2010 the BIS began disseminating on its website property price statistics from 37 countries – today 45 countries – and continues to work with central banks to make these data comparable across as many countries as possible. The BIS contributed to the development of a *Handbook on Residential Property Prices* that recommended best practice for compiling residential property price indices. A *Handbook on Commercial Property Prices* is also being prepared by an international working group.

The third gap is in data relating to debt securities markets. The BIS contributed to the preparation of a *Handbook on Securities Statistics* providing a framework for the compilation and presentation of securities statistics. Moreover, the BIS worked with central banks to collect debt securities statistics on a comparable basis and revised its own data on international debt securities, published since the late 1980s, to conform to the *Handbook*. The revised statistics will be published in December 2012, including for the first time data on total debt securities aggregating international and domestic issues.

The fourth gap that the BIS has been instrumental in closing is in data relating to international banking. The first stage of enhancements, which will be implemented for end-June 2012 data, involves expanding the BIS locational banking statistics to cover positions vis-à-vis residents of the reporting country and including additional details on the nationality of the bank behind positions vis-à-vis individual countries. A second stage will be implemented for end-December 2013 data and result in a more detailed counterparty sector breakdown in the locational and consolidated banking statistics, as well as new data on liabilities on a consolidated basis and the maturity structure of debt security liabilities.

Finally, the BIS has a role in closing a gap in data relating to the interconnectedness of systemically important financial institutions. Under the aegis of the FSB, detailed information about the exposures and activities of key global banks will be centralised in a data hub hosted by the BIS.

Other data gaps that the BIS has helped to close include the development of measures of aggregate leverage and maturity mismatches in the banking system, and the investigation of options for monitoring and measuring the cross-border exposures of non-bank entities.

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① IMF and FSB, *The financial crisis and information gaps: report to the G20 Finance Ministers and central bank Governors*, October 2009. ② CGFS, "Credit risk transfer statistics", *CGFS Publications*, no 35, September 2009.