Session 5: Systemic indicators: Developing inputs on system-wide risks for financial stability analysis and macroprudential policy.

Indicators to analyze financial stability and implement macroprudential policy
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Background

Financial Soundness indicators (FSIs)—originally termed macroprudential indicators (MPIs) in the Fund, as similar indicators are still known in some fora, such as the ECB—were developed as a response of the international community to the financial crises of the 1990s. These were conceived as a new area of statistics—macroprudential statistics—that would fill the gap between monetary/macroeconomic statistics and micro-prudential data in assessing the *soundness* of the financial sector *as a whole*. In deriving from sector-level supervisory/prudential data, they are seen to complement data derived from monetary surveys as well as those from other economic sources, which at the time were recognized as insufficient.

FSIs are the outcome of a long-term collective effort that began in 1999. The framework was taken broadly from the CAMEL rating system widely used in supervisory agencies. This was set out in two IMF Occasional Papers (attached) prepared jointly by STA and MAE/MFD (the predecessor department to MCM), with the methodology of compilation developed together by STA and MAE/MFD staff during 2000-2003, in close consultation with a group of experts from international institutions and major member countries specifically constituted for that purpose. In 2000 STA conducted an extensive survey of 122 countries to ascertain countries' preferences as regards indicators as well as their current availability. As a result, a list of 40 FSIs was presented to, and approved by, the IMF Board—25 for the deposit taker sector (of which 12 are core FSIs), and 15 for client sectors of deposit takers and for markets crucial to deposit takers' soundness. These were recognized to be the **initial** list, with updates and broadening envisaged over time, as capacity and experience with the indicators increased.

A particular challenge in constructing FSIs has been the absence of any consensus or recognized best practice on key variables, such as the definition of non-performing loans or the required levels of bank provisioning, which has made the development of harmonized indicators difficult, and the use of unharmonized indicators—whilst superficially appealing and sometimes unavoidable—potentially misleading.

In order to assist countries to prepare the approved FSIs, procedural insights from the recently-launched Consolidated Portfolio Investment Survey (CPIS) were incorporated. Thus a Coordinated Compilation Exercise (CCE) was initiated in 2004, involving 62 countries (55 of which were SDDS subscribers) and a reference group of 17 international agencies, to collaborate with the Fund on the FSI compilation and on further refining of the methodology of FSIs. On five occasions between 2000 and 2007, the IMF Executive Board has reviewed progress made in developing and implementing the FSIs, and has endorsed and provided guidance on further steps in the FSI work program. In the summing up of the 2007 Board meeting, Directors considered the Fund's work on FSIs to be appropriately aligned with the IMF's Medium-Term Strategy and as contributing to the IMF's responsibilities on surveillance and crisis prevention.

In this context, the Board endorsed the regular (voluntary) reporting of FSIs by all member countries to the IMF, and the creation of a database to be used by the IMF as well as by the public (policy makers, markets, academia). Directors also reviewed and acknowledged the need for specific amendments to the FSI methodology that align the latter even more closely with supervisory and international financial reporting standards. They urged the staff to add to the list of FSIs additional indicators, including for other financial corporations, nonfinancial corporations, households, and markets, and to consider refining the division between core and encouraged FSIs. Although some Directors had pressed from an early date for the inclusion of some FSIs within the SDDS, this had been regarded as “premature” until the Seventh Review of Data Standards in December 2008, when Directors agreed that some FSIs should be included in the SDDS on an encouraged basis, and urged STA to develop specific proposals.

Current tasks

A principal ongoing task is the development of the new database for FSIs. Of the 62 countries that participated in the CCE, 52 countries (of which, 50 SDDS and 2 near-SDDS subscribers) have up to now signed up for regular reporting. Data dissemination is expected to take place by end-July 2009, with country coverage and initial data points extended subsequently on a rolling basis as countries submit new data.[1] 25-35 countries are expected to be amongst those whose data is disseminated at end-July, of which up to 14 may be from the G-20.

At this point it seems that roughly 40-50 percent of any single reported FSI will be provided by countries quarterly, 10-30 percent semiannually, and the rest annually. All participating countries will be providing virtually all the 12 *core* FSIs for deposit takers; about 70 percent of countries will be providing any given *encouraged* FSI for deposit takers; and between 30

[1] Given the diversity of practices that remains with regard to the compilation of FSIs, focus in compiling the database has also been on providing detailed metadata. The data coding will provide analytical querying of the FSI database by users on the basis of this metadata.

and 50 percent of countries will also be providing any given *encouraged* FSI pertaining to the other sectors and crucial markets.

Way forward

The ongoing financial crisis has added to the interest in developing financial data, as evidenced by a December 2008 Board meeting that approved a work program to identify FSIs for future inclusion in the SDDS on an encouraged basis. FSIs may be seen as one of the tools for analyzing the crisis, and signaling future crises, and are complementary to other exercises in the Fund, such as the early warning system (EWS) and the vulnerability exercise.[2]

None of these approaches yields a "silver bullet" to handle the present crisis and predict those of the future. Analysts needs to continue to use all these various tools and employ judgment in their application, and to seek to refine them to better meet users' needs.

Once the database is established, the intention is to broaden it. Over time countries would be added to the list of regular reporters. Fund staff plan also to work to propose refinements to the categorization of FSIs between core and encouraged, as well as additions of new FSIs to the current list, drawing from the lessons of the current financial crisis. Leverage ratios, for instance, seem to have performed better than some other ratios in predicting the present crisis.

As importantly, it is likely to be necessary to broaden the perimeter of consolidation for commercial banks, to capture exposures built up in associated entities, and the coverage of FSIs is likely to have to be expanded beyond banks to other financial intermediaries that play critical roles in the provision of credit, liquidity, and risk transformation. There is a strong case also for encouraging higher frequency reporting (at least quarterly) of at least a core of FSIs, at least for countries considered critical.

Finally in this regard, it has been widely recognized that aggregate indicators can only tell a limited amount about the soundness of a financial system, and indeed may give misleading signals. In the future, work will focus also on various measures seeking to incorporate the distribution of FSIs across the reporting population. Measures of variance, size of distribution tails, and identification of outliers, will add substantially to the usefulness of the FSIs.

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[2] Also, monetary data have been substantially refined by STA through the Supplementary Report Form (SRF) in many countries, and provide an important additional indicator.