

Box 2 Financial Soundness Indicators

Financial system stability and monetary stability are vital for the functioning of the economy. Financial instability creates uncertainties and inefficient utilisation of capital. Shocks to the financial system can have serious consequences for economic activity and entail substantial costs. This makes it increasingly important to monitor the soundness and efficiency of financial market institutions, and the development of aggregates and markets that could jeopardise financial stability.

In cooperation with other organisations, in recent years the International Monetary Fund has been developing financial soundness indicators (FSIs) and methodologies for macroprudential analysis. Work in this area has constituted part of its Financial System Assessment Program (FSAP).¹ Originally this embraced a fairly broad range of macro- and micro-prudential indicators, consisting of macroeconomic aggregates that have a bearing on financial stability, aggregated individual financial institution data and indicators that are representative of the markets in which the financial institutions operate.

In January 2000 the Executive Board of the IMF proposed limiting the number of indicators to a core set which would be useful for FSAP assessments and surveillance within the countries themselves. In 2000 the IMF undertook a survey of its member countries and of regional international agencies to identify those indicators considered to be most relevant to them both as

compilers and users of data.² The outcome of the survey was that it was decided to divide FSIs into a core set and encouraged set. The core set provides data covering all main categories of bank risk, while the encouraged set includes more indicators from the banking sector as well as other institutions and markets which were considered important in financial stability assessments. These include data on the corporate and household sectors, real estate developments and non-banking financial institutions. By compiling two datasets, the IMF aimed to avoid imposing too rigid a system, and instead to give respective countries the opportunity to select the indicators that are most relevant to their circumstances.

Work began in 2001 on producing a guide for compiling, working with and analysing FSIs. A Draft Compilation Guide was published in March 2003 which is expected to be completed before the end of the year.

The IMF, along with other national and international institutions, has clearly made a determined effort to decide on a set of indicators which will present a realistic picture of financial system stability. However, this remains an ongoing task, since markets and financial systems are in a continuous process of development and new risks are constantly emerging. Research in this field therefore needs to be stepped up still further.

1. Introduced in May 1999 as a joint effort of the IMF and World Bank.

2. Six criteria were used to determine the most important indicators: focus on the core markets and institutions; analytical significance;

revealed usefulness through high scores in the survey results; relevance in most circumstances; availability; and keeping them to a minimum.

Core Set

Deposit-takers

<i>Capital adequacy</i>	Regulatory capital to risk-weighted assets Regulatory Tier I capital to risk-weighted assets
<i>Asset quality</i>	Nonperforming loans to total gross loans Nonperforming loans net of provisions to capital Sectoral distribution of loans to total loans Large exposures to capital
<i>Earnings and profitability</i>	Return on assets Return on equity Interest margin to gross income Noninterest expenses to gross income
<i>Liquidity</i>	Liquid assets to total assets (liquid asset ratio) Liquid assets to short-term liabilities
<i>Sensitivity to market risk</i>	Duration of assets Duration of liabilities Net open position in foreign exchange to capital

Encouraged Set

Deposit-takers

Capital to assets
Geographical distribution of loans to total loans
Gross asset position in financial derivatives to capital
Gross liability position in financial derivatives to capital
Trading income to total income
Personnel expenses to noninterest expenses
Spread between reference lending and deposit rates
Spread between highest and lowest interbank rate
Customer deposits to total (non-interbank) loans
Foreign currency-denominated loans to total loans
Foreign currency-denominated liabilities to total liabilities
Net open position in equities to capital

Other financial corporations

Assets to total financial system assets
Assets to GDP

Nonfinancial corporate sector

Total debt to equity
Return on equity
Earnings to interest and principal expenses
Net foreign exchange exposure to equity
Number of applications for protection from creditors

Households

Household debt to GDP
Household debt service and principal payments to income

Market liquidity

Average bid-ask spread in the securities market
Average daily turnover ratio in the securities market

Real estate markets

Real estate prices
Residential real estate loans to total loans
Commercial real estate loans to total loans