Goal 10: Reduce inequality within and among countries

Target 10.5: Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations

Indicator 10.5.1: Financial Soundness Indicators (FSIs)

Institutional information

Organization(s):

International Monetary Fund

Concepts and definitions

Definition:

Seven FSIs are included as SDG indicators for 10.5.1 and expressed as percent.

1. Regulatory Tier 1 capital to assets
2. Regulatory Tier 1 capital to risk- weighted assets
3. Nonperforming loans net of provisions to capital
4. Nonperforming loans to total gross loans
5. Return on assets
6. Liquid assets to short-term liabilities
7. Net open position in foreign exchange to capital

Regulatory Tier 1 capital to assets: This is the ratio of the core capital (Tier 1) to total (balance sheet) assets.

Regulatory Tier 1 capital to risk- weighted assets*:* It is calculated using total regulatory Tier 1 capital as the numerator and risk-weighted assets as the denominator. The data for this FSI are compiled in accordance with the guidelines of either Basel I, Basel II, or Basel III.

Nonperforming loans net of provisions to capital*:* This FSI is calculated by taking the value of nonperforming loans (NPLs) less the value of specific loan loss provisions as the numerator and capital as the denominator. Capital is measured as total regulatory capital.

Nonperforming loans to total gross loans*:* This FSI is calculated by using the value of NPLs as the numerator and the total value of the loan portfolio (including NPLs, and before the deduction of specific loan- loss provisions) as the denominator.

Return on assets*:* This FSI is calculated by dividing annualized net income before extraordinary items and taxes (as recommended in the FSI Guide) by the average value of total assets (financial and nonfinancial) over the same period.

Liquid assets to short-term liabilities: This FSI is calculated by using the core measure of liquid assets as the numerator and short-term liabilities as the denominator. The ratio can also be calculated by taking the broad measure of liquid assets as the numerator. For jurisdictions that have implemented Basel III, this indicator could be supplemented with the liquidity coverage ratio.

Net open position in foreign exchange to capital: The net open position in foreign exchange should be calculated based on the recommendation of the Basel Committee for Banking Supervision (BCBS). Capital should be total regulatory capital as net open position in foreign exchange is a supervisory concept.

Concepts:

Regulatory Tier 1 capital to assets*:* Regulatory Tier 1 capital is calculated based on Basel I, II, or III depending on countries' supervisory practices. Denominator is total balance sheet (non-risk weighted) assets.

Regulatory Tier 1 capital to risk- weighted assets: Regulatory Tier 1 capital is calculated based on Basel I, II, or III depending on countries' supervisory practices. Denominator is risk-weighted assets also calculated based on Basel standards.

Nonperforming loans (NPLs) net of provisions to capital*:* A loan is classified as NPL when payment of principal or interest is past due by 90 days or more, or evidence exists that a full or partial amount of a loan is not going to be recovered. Only specific loan loss provisions are used in this calculation and they refer charges against the value of specific loans. Data exclude accrued interest in NPLs. Capital is measured as total regulatory capital calculated based on Basel I, II, or III depending on countries' supervisory practices.

Nonperforming loans to total gross loans*:* A loan is classified as NPL when payment of principal or interest is past due by 90 days or more, or evidence exists that a full or partial amount of a loan is not going to be recovered. The denominator is the total value of the loan portfolio (including NPLs, and before the deduction of specific loan- loss provisions).

Return on assets: The numerator is annualized net income before extraordinary items and taxes. The denominator is the average value of total assets (financial and nonfinancial) over the same period.

Liquid assets to short-term liabilities*:* Core measure of liquid assets includes currency and deposits and other financial assets available on demand or within three months. Broad measures equal core measure plus securities traded in liquid markets that can be converted into cash with minimal change in value. The denominator is short-term elements of debt liabilities plus net (short-term) market value of financial derivatives position. The latter is calculated as financial derivatives liability position minus financial derivative asset position. Short-term refers to three months and should be defined on a remaining maturity basis. If remaining maturity is not available, original maturity can be used as an alternative.

Net open position in foreign exchange to capital: The net open position in foreign exchange equals the foreign-currency and foreign-currency linked element of balance sheet assets and off-balance sheet exposures minus the foreign-currency and foreign-currency linked element of balance sheet liabilities and off-balance sheet exposures. Foreign-currency-linked instruments refer to accounts denominated in national currency, but their payments are linked to exchange rates, thus subject to foreign exchange risk. The denominator is total regulatory capital as defined above.

Rationale:

Regulatory Tier 1 capital to assets: It is a more stringent version of the leverage ratio and indicates the extent to which assets are funded by other than own funds and is a measure of capital adequacy of the deposit-taking sector.

Regulatory Tier 1 capital to risk- weighted assets: It measures the capital adequacy of deposit takers based on the core capital concept of the Basel Committee on Banking Supervision (BCBS). Capital adequacy and availability ultimately determine the degree of robustness of financial institutions to withstand shocks to their balance sheets.

Nonperforming loans net of provisions to capital*:* This FSI is a capital adequacy ratio and is an important indicator of the capacity of bank capital to withstand losses from NPLs that are not covered by specific loan loss provisions.

Nonperforming loans to total gross loans: This FSI is often used as a proxy for asset quality and is intended to identify problems with asset quality in the loan portfolio.

Return on assets: It is an indicator of bank profitability and is intended to measure deposit takers' efficiency in using their assets.

Liquid assets to short-term liabilities: It is a liquid asset ratio and is intended to capture the liquidity mismatch of assets and liabilities and provides an indication of the extent to which deposit takers can meet the short-term withdrawal of funds without facing liquidity problems.

Net open position in foreign exchange to capital*:* This FSI is an indicator of sensitivity to market risk, which is intended to gauge deposit takers' exposure to exchange rate risk compared with capital. It measures the mismatch of foreign currency asset and liability positions to assess the vulnerability to exchange rate movements.

Comments and limitations:

Data for most countries are reported on a monthly or quarterly basis; a few countries report data on a semi-annual basis and with a lag of more than a quarter. As of end-December 2018, there were 138 FSI reporters. Some countries' compilation practices deviate from the FSI Guide methodology in certain areas and are documented in the FSI metadata also posted on the IMF's FSI website. Reporting countries provide all or most core FSIs and some encouraged FSIs that can be used to support the interpretation of these seven SDG indicators. FSI data and metadata reported by countries are available at http://data.imf.org/FSI.

Methodology

Computation method:

The calculation of the seven FSIs is detailed in section on "Definition" above. The common source data are data reported by banks to supervisory authorities, which are usually the FSI compilers.

Treatment of missing values:

- At country level

It is not relevant to the seven FSIs. Source data are collected by banks' supervisory authorities and complete reporting is usually mandated by law.

- At regional and global levels

The FSIs are not compiled at regional or global levels.

Regional aggregates:

The FSIs are not aggregated at regional levels.

Sources of discrepancies:

Data calculated by other sources could be different from the FSIs disseminated by the IMF due to the use of different compilation methodology and/or institutional coverage. The FSIs disseminated by the IMF are compiled based on the *FSI Compilation Guide*, which provides the guidance on the concepts and definitions, and sources and techniques for the compilation of cross-country comparable data to support national and international surveillance of financial systems. To facilitate identification of possible discrepancies across countries, reporters provide metadata to the IMF that detail departures from recommendations in the *FSI Guide*.

Methods and guidance available to countries for the compilation of the data at the national level:

The FSI Compilation Guide (206) available at http://data.imf.org/FSI.

Quality assurance:

The common source data are data reported by banks for supervisory purposes. National supervisors check and validate the data that are used by national FSI compilers. IMF staff check the FSIs reported by countries before posting on the FSI website and address data issues in collaboration with the national compilers whenever such issues are flagged by the validation and consistency checks implemented in the IMF data processing system.

Data sources

Description:

The common source data are data reported by banks for supervisory purposes. They include balance sheet, income statement, and supervisory series (such as Tier 1 capital, Tier 2 capital, risk-weighted assets).

Collection process:

The national central banks or supervisory agencies collect these data for supervisory purposes, and these data are used for FSI compilation.

Data availability

Description:

As of end-December 2018, there were 138 FSI reporters. All countries report all or most core FSIs and some encouraged FSIs that can be used to support the interpretation of these seven SDG indicators.

Time series:

Data for most countries are reported on a monthly or quarterly basis; a few countries report data on a semi-annual basis and with a lag of more than a quarter. Data are available as far back as 2005 for some countries.

Disaggregation:

The FSIs disseminated by the IMF are weighted averages for the sector as a whole (e.g., deposit takers, other financial corporations, nonfinancial corporations). Data for parent banks, their branches, and relevant subsidiaries are consolidated; if this consolidation is not possible or not applicable, an explanation is provided in the metadata. There are no disaggregated breakdowns of the FSIs reported to the IMF.

Calendar

Data collection:

There are no predetermined deadlines. Countries report new FSIs as soon as they are ready.

Data release:

Data are disseminated on the IMF website as soon as they are ready.

Data providers

The national central banks or bank supervisory agencies.

Data compilers

The FSIs are compiled at national level, but not at region or global level.

References

URL:

http://data.imf.org/FSI

References:

Related indicators

Linkages with any other Goals and Targets: Recommendation II.2 of G-20 Data Gap Initiative – 2 concerns FSIs. Its target is by 2021, G-20 economies to report the seven FSIs expected from the

Special Data Dissemination Standards Plus (SDDS Plus) adherent economies on a quarterly frequency, with a timeliness of one quarter. The seven SDG FSIs are the same as the FSIs under SDDS, but with one exception under SDDS Plus, where resident real estate price index is used instead of net open position in foreign exchange to capital.