# Real estate prices as financial soundness indicators

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## I. Introduction

"Real estate has been a neglected area because it has always been treated as an independent sector. Now, the real estate sector is viewed as a significant contributor to the financial position of financial institutions in terms of mortgage loans as well as asset holdings. Thus, real estate prices are critical for the financial sector and in terms of measuring the wealth of the country. This is an area where information is lacking. In our country, there is no agency that collects real estate market prices."

This comment was received by the International Monetary Fund (IMF) in response to comments on the draft *Compilation Guide on Financial Soundness Indicators* (*Guide*) that was posted on the IMF's public website in March 2003. It sums up succinctly a common view of real estate prices from both the user and compiler perspectives. The data are needed but are lacking.

## II. What are financial soundness indicators?

Financial Soundness Indicators (FSIs) are indicators of the current financial health and soundness of the financial institutions in a country, and of their corporate and household counterparts. They include both aggregated individual institution data and indicators that are representative of the markets in which the financial institutions operate. FSIs are calculated and disseminated for the purpose of supporting national and international surveillance of financial systems. In short, the development of FSIs is a key tool in the IMF work to strengthen financial system stability.

This initiative was prompted by the financial market crises of the late 1990s and the growing observation of the number of banking crises that has occurred globally in the last two decades. As has been well reported in research by the IMF, BIS, and others, there are significant costs arising from these crises, both direct (such as the cost of recapitalising the deposit-takers) and indirect (such as the loss of real economic activity), and this has demonstrated a need to develop a body of statistics that could support policymakers in identifying the strengths and vulnerabilities in their financial system and in taking action to prevent the likelihood of such crises occurring.

FSIs are only one part of the IMF's work in the field of crisis prevention, and of course the IMF's work itself is part of a larger international effort, including the Bank for International Settlements and others. Notably, FSIs are an input into the IMF-World Bank Financial System Assessment Program (FSAP). This programme is designed to identify financial system strengths and vulnerabilities and to help develop appropriate policy responses. More information on FSAPs, including the countries that have participated, is available at http://www.imf.org/external/np/fsap/fsap.asp.

## III. Where do we stand with the FSI project?

The work began in 1999 with a conference of experts in the field of financial stability issues. That conference was similar to this one on real estate, with private and public sector experts exploring key user and compiler issues. Taking forward the outcome of that meeting, and after undertaking wide consultation, in 2001 IMF staff presented the IMF Executive Board with a list of FSIs, which it endorsed. The list (attached) is divided between core indicators and encouraged indicators in order to help prioritise future work at the national level. All the core indicators - FSIs considered to be useful in all countries and generally available - relate to deposit-takers, which are institutions that are central in all financial systems. The encouraged FSIs include real estate prices and the extent of deposit takers' exposures to residential and commercial real estate.

Subsequent to the 2001 meeting, and with Directors' endorsement, to support national compilation efforts IMF staff began preparing a draft *Guide*, collaborating with international and regional organisations, and national agencies interested in financial soundness issues. Following extensive public consultation this year, the *Guide* should be finalised in 2004. The text is available at http://www.imf.org/external/np/sta/fsi/eng/guide/index.htm.

## IV. Where do real estate prices fit into FSIs?

From the very start of the work on FSIs at the conference for experts, it has been evident that for most economies monitoring real estate prices is important for financial stability analysis. Others will discuss this issue in more depth ahead so I will not dwell on the reasons why, but simply note that from the viewpoint of deposit-takers, and other sectors, there can be large exposures (both direct and indirect) to an asset whose price can be volatile not least because of the actions of lenders themselves. For this reason, residential and commercial real estate prices are included in the list of FSIs along with deposit-takers' lending on such real estate.

In the draft *Guide*, there is a chapter providing advice on compiling real estate prices. The chapter is modest in its ambitions. It acknowledges the relative lack of international experience in constructing real estate price indices, particularly in the official sector, and the costs involved in creating real estate price indices. Therefore, the chapter focuses on describing a range of techniques whose application can be based on local needs, conditions, and resources rather than recommending a single set of indices or compilation methods. The chapter is more focused on prerequisites than on providing detailed technical advice. We see this meeting as the beginning of a process of raising technical knowledge and capabilities in this field, and building on the start represented by the chapter in the *Guide*.

We expect that implementing the new *Guide* is likely to prove a medium-term rather than a short-term process. This is nowhere more true than in the field of real estate prices.

## V. Types of questions raised

Finally, let me turn back to the author of the quote at the start of this presentation. The commentator went on to raise a number of possible technical issues that could be discussed. I leave them as examples of the types of questions that those who want to move forward with real estate prices are asking:

1. "How do we deal with the large diversity in residential and non-residential buildings?
2. Another problem is the lack of an inventory of residential/non-residential buildings. How is this compiled?
3. How are prices for real estate assets collected? Can unit values be used instead of actual prices? Does market price refer only to current cost of construction and land or the selling price of the real estate unit?
4. How do we deal with conversions of agricultural land to commercial properties? Prices can increase significantly."

**Financial soundness indicators: the core and encouraged sets**

| Core set | |
|---|---|
| Deposit-taking institutions | |
| *Capital adequacy* | Regulatory capital to risk-weighted assets<br>Regulatory Tier I capital to risk-weighted assets<br>Nonperforming loans net of provisions to capital |
| *Asset quality* | Nonperforming loans to total gross loans<br>Sectoral distribution of loans to total loans |
| *Earnings and profitability* | Return on assets<br>Return on equity<br>Interest margin to gross income<br>Noninterest expenses to gross income |
| *Liquidity* | Liquid assets to total assets (liquid asset ratio)<br>Liquid assets to short-term liabilities |
| *Sensitivity to market risk* | Net open position in foreign exchange to capital |
| **Encouraged set** | |
| Deposit-taking institutions | Capital to assets<br>Large exposures to capital<br>Geographical distribution of loans to total loans<br>Gross asset position in financial derivatives to capital<br>Gross liability position in financial derivatives to capital<br>Trading income to total income<br>Personnel expenses to noninterest expenses<br>Spread between reference lending and deposit rates<br>Spread between highest and lowest interbank rate<br>Customer deposits to total (non-interbank) loans<br>Foreign currency-denominated loans to total loans<br>Foreign currency-denominated liabilities to total liabilities<br>Net open position in equities to capital |
| Other financial corporations | Assets to total financial system assets<br>Assets to gross domestic product (GDP) |
| Nonfinancial corporate sector | Total debt to equity<br>Return on equity<br>Earnings to interest and principal expenses<br>Net foreign exchange exposure to equity<br>Number of applications for protection from creditors |
| Households | Household debt to GDP<br>Household debt service and principal payments to income |
| Market liquidity | Average bid-ask spread in the securities market[1]<br>Average daily turnover ratio in the securities market[1] |
| Real estate markets | Real estate prices<br>Residential real estate loans to total loans<br>Commercial real estate loans to total loans |

[1] Or in other markets that are most relevant to bank liquidity, such as foreign exchange markets.