## Joint HKSS-HKIMR Workshop on Financial and Economic Statistics (15th February 2003)

# Financial Soundness Indicators and their Potential Uses

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#### Introduction

Increasing demand for better financial statistics

- **to monitor financial risks and vulnerabilities**
- to assess the soundness and stability of financial systems

Objective measures of financial system soundness:

- **⇒ Financial Soundness Indicators (FSIs)**
- **⇒** Macroprudential Analysis (MPA)

#### What are FSIs?

♦ No universally accepted definition

Narrower definitions adopted by IMF:

Aggregated microeconomic indicators on the health of

- (i) financial institutions, both banks and nonbanks
- (ii) major clients of the financial institutions, namely corporations and households

## FSIs proposed by IMF

#### Two sets of FSIs are proposed by IMF:

(i) Core set ⇒

- assessing the financial risks of the banking sector of an economy
- (ii) Encouraged set ⇒ assessing the health of other sectors that are also relevant in assessing financial sector

vulnerability

#### What is CAMELS?

#### "Core set" of FSIs

- **✓** comprises 15 indicators for banking sector
- **✓** is organized using the CAMELS framework:
  - Capital adequacy
  - ♦ Asset quality
  - → Management soundness ⇒ a qualitative exercise
  - ♦ Earnings
  - **♦ Liquidity**
  - ♦ Sensitivity to market risk

## **Detailed descriptions on C of CAMELS**

Capital adequacy: 

determines the robustness of financial institutions to shocks affecting their balance sheets

- **♦ Regulatory capital to risk-weighted assets**
- **♦ Regulatory Tier 1 capital to risk-weighted assets**

## Detailed descriptions on A of CAMELS

- Asset quality: 

  reflects the repayment
  performance and loan
  diversification of the credit
  portfolios of banks
- **♦ Nonperforming loans to total gross loans**
- **♦ Nonperforming loans net of provisions to capital**
- **♦ Sectoral distribution of loans to total loans**
- **♦ Large exposures to capital**

## Detailed descriptions on E of CAMELS

- Earnings: 

  given weak profit performance can ultimately threaten a bank's solvency, it is important to monitor bank performance
- → Return on assets (net income to average total assets)
- **♦** Return on equity (net income to average equity)
- **♦ Interest margin to gross income**
- **♦** Non-interest expenses to gross income

## Detailed descriptions on L of CAMELS

**Liquidity:** ⇒ level of liquidity influences the ability of a banking system to withstand shocks

- **♦ Liquid assets to total assets (liquid asset ratio)**
- **♦ Liquid assets to short-term liabilities**

## **Detailed descriptions on S of CAMELS**

Sensitivity to market risk: 

Diversified operations of banks involving various aspects of market risk, including interest rate and exchange rate risks

- **♦ Duration of assets**
- **♦ Duration of liabilities**
- **♦ Net open position in foreign exchange to capital**

## **Encouraged set of FSIs**

**Encouraged set of FSIs includes additional indicators for** 

- (i) deposit-taking institutions
- (ii) other institutions (e.g. non-bank financial intermediaries, corporate sector, households)
- (iii) markets (e.g. securities market, real estate market)

#### **Examples:**

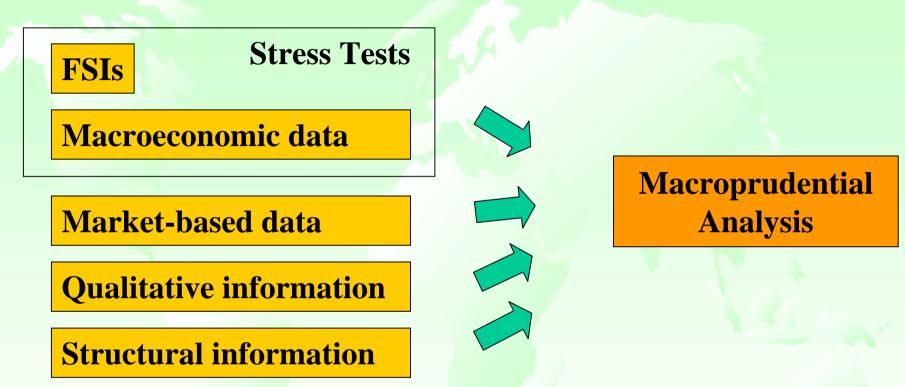
**Corporate Sector:** total debt to equity, return on equity

Real estate markets: residential real estate loans to total loans

## What is Macroprudential Analysis (MPA)?

- ♦ focuses on health and stability of financial system

## **Components of MPA**



#### **Stress tests:**

- **♦** Tests for potential impact of shocks on selected FSIs
- **♦ Identify necessary pre-emptive remedies**

## Important issues on compilation and dissemination of FSIs

IMF Survey on the Uses, Compilation and Dissemination of Macroprudential Indicators:

- → required components of certain core FSIs are widely available
- **♦ two important issues should be resolved** 
  - heterogeneity of standards (concepts, accounting, regulatory, statistical standards)
  - high resource costs (substantial data reporting requirements)

#### **International Standard on FSIs**

#### Compilation Guide on Financial Soundness Indicators

- ♦ being developed by the IMF, in consultation with other international organisations and national authorities
- provide guidance on concepts, definitions, data sources and compilation techniques
- **♦ planned to be finalised within 2003**

## Relevance to Hong Kong

- strengthen Hong Kong's position as an international financial centre
- **♦** facilitate the surveillance of the financial market
- → provision of relevant information for Financial Sector Assessment Program (FSAP), Financial System Stability Assessment (FSSA) and Article IV Consultation

## **Current Availability of FSIs for Hong Kong**

Capital Adequacy: - Capital adequacy ratio

**Asset Quality:** 

- Non-performing loans to total gross loans

**Earnings:** 

- Return on assets

- Net interest margin

- Cost-income ratio

## **Way Forward**

- ♦ to draw up the work plan for compilation and dissemination of FSIs for Hong Kong, subject to the finalisation of the Compilation Guide on Financial Soundness Indicators
- **♦** important issues to be addressed
  - development of benchmarks for level of FSIs
  - cooperation from data suppliers

