



# FSAP Progress

- Three major benchmarks :
- 1999 – Program begins – Canada-Lebanon-South Africa
- 2009 – Review of the Program
- 2014 – Review of the Program –Survey and  
2016 – Going forward

# FSAP 1999

1. Objectives
2. Output / Publication policy
3. Financial System Stability Assessment (FSSA) : Macro prudential Surveillance
4. Stress Testing
5. Financial Sector Infrastructure
6. Standards and Codes, including AML/CFT

# FSAP : Objectives

*The FSAP is a joint IMF-World Bank program that aims to reduce the likelihood and/or severity of financial sector crises and cross-border contagion by:*

- identifying strengths, vulnerabilities and risks;
- ascertaining development and technical assistance needs;
- assessing observance and implementation of relevant international standards, codes and good practices; and
- helping design appropriate policy responses to make financial systems more resilient to shocks.

# How to achieve the objectives?

**Assessments are comprehensive and seek to ascertain mainly:**

- *Two-way links between macroeconomic performance and financial sector soundness*
  - vulnerabilities to external and policy shocks
  - implications for macroeconomic performance
- *Links among financial sector sub-sectors and to non-financial sectors*
  - institutional setting
  - risk exposures
  - legal and regulatory gaps
- *degree and relevance of observance of financial sector standards*
  - extent to which observance of standards in supervision (financial policies generally) help to address the identified (prospective) risks
  - identification and prioritization of corrective actions.

# Institutions Cooperating in the FSAP

- **65 (Initially) Central Banks and Supervisory agencies**
- **International Standards setting Bodies:**
  - Basel Committee on Banking Supervision (BCBS)
  - Committee on Payment and Settlement Systems (CPSS)
  - Financial Action Task Force (FATF)
  - International Association of Insurance Supervisors (IAIS)
  - International Accounting Standards Committee (IAS)
  - International Organization of Securities Commissions (IOSCO)
- **Other institutions including:**
  - African Development Bank
  - Bank for International Settlements
  - FATF-style Regional Bodies
  - Inter-American Development Bank

# Technical Foundations of FSAP:

## Three components

### 1. Macroprudential surveillance

- Analysis of financial soundness indicators
  - Macroeconomic factors
  - Sectoral indicators of the health of the banking and financial system
- Stress-testing

### 2. Effectiveness of Financial Sector Supervision

- Assessment of key supervisory standards (e.g., banking, insurance, securities markets)

### 3. Robustness of Financial Sector infrastructure

- Payment system design, systemic liquidity, accounting/disclosure, corporate governance, insolvency regime, and safety nets.

# • • **Macroprudential Surveillance**

## Analysis of Financial Soundness Indicators:

- **Macroeconomic factors:**
  - Slowdown in economic growth
  - Weaknesses in the balance of payments and external vulnerabilities
  - Inflation (volatility in inflation)
  - Sharp fluctuations in interest and exchange rates
  - Lending and asset price booms
  - Contagion effects (financial markets correlation, trade spillovers)
  - Other factors (directed lending and investment, government recourse to the banking system and other quasi-fiscal imbalances).

# • • **Macroprudential Surveillance**

## Analysis of Financial Soundness Indicators:

- **Sectoral Indicators of the Health of the Banking and Financial System:**

- Capital Adequacy Indicators
- Asset Quality and Credit Risk Indicators\*
- Indicators of Sound Management
- Profitability Indicators
- Liquidity Indicators
- Market Risk Indicators
- Market-based Indicators

\*including indicators of corporate sector health (e.g. debt/equity ratios)

# • • • **Macroprudential Surveillance**

## **Stress-Testing:**

- **Decision sequence:**
  - Identify the relevant types of risks that the system faces: credit, commodity/equity, foreign exchange, interest rate, liquidity, multiple risks.
  - Specify shocks: single factor (sensitivity), multiple (scenario)
    - Historical or hypothetical
  - Which balance sheets to stress, relevant risk factors, size and horizon, revaluing portfolio, contagion analysis
  - Output: Impact on profits, capital, etc.

# Macroprudential Surveillance

## Stress-Testing:

- **Information requirements:**
  - Ideally based on bank-by-bank data
  - Stress-test results are aggregated to avoid disclosure of market sensitive information and identification of individual institutions
  - Given the diversity of member countries a fully standardized approach is not possible
  - Data
    - Detailed on and off-balance sheet information – “gap” position
    - Structure of cash flows
    - Non-performing loans by classification
    - Open foreign exchange positions
    - Positions in commodities
    - Investments in equities and securities
    - Information relating to interconnectedness (lending to shareholders, exposure to insurance sector)

# Financial Sector Infrastructure

- **Assessment of systemic liquidity developments and policies**
  - Capital account framework
  - Foreign exchange liquidity
  - Market microstructure

# Financial Sector Infrastructure

- **Institutional and legal framework for dealing with financial and corporate sector distress**
  - Bank exit policies
  - Framework for corporate bankruptcy, restructuring and loan recovery
  - Guarantee schemes and deposit insurance
  - Emergency lending / LOLR procedures

# Assessment of standards and institutional arrangements

## Standards Assessed or used in FSAP

### Regulatory & Supervisory Standards

Banking (BCP): Basel Core Principles for Effective Banking Supervision  
Insurance (ICP): IAIS Insurance Core Principles  
Securities (SCP): IOSCO Objectives and Principles for Securities Regulation

### Transparency and Disclosure Standards

IMF Code of Good Practices on Transparency in Monetary and Financial Policies (MFP Code)  
Financial Policies (Banking, Insurance, Payments, Securities, Deposit Insurance, and others)

### Institutional and Market Infrastructure Standards

CPSS Core Principles for Systemically Important Payment Systems— Recommendations for Security Settlement Systems  
AML & CFT Standards  
Insolvency & Creditor Rights Regime  
Acctg/Disclosure/Corp. Governance

# Standards and Codes

- **Basel Core Principles for Effective Banking Supervision**
  - Objectives, Autonomy, Powers, and Resources
  - Licensing and Structure
  - Prudential Regulations and Requirements
  - Methods of Ongoing Supervision
  - Information Requirements
  - Formal Powers of Supervisors
  - Cross-border Banking

# Standards and Codes

- **IAIS Insurance Core Principles**
  - Organisation of an Insurance Supervisor Licensing and Changes in Control
  - Corporate Governance
  - Internal Controls
  - Prudential Rules
  - Market Conduct
  - Monitoring, Inspection and Sanctions
  - Cross-border Business Operations
  - Supervisory Coordination and Cooperation, and Confidentiality

# Standards and Codes

- **IOSCO Objectives and Principles for Securities Regulation**
  - Principles relating to the regulator
  - Principles of self-regulation
  - Principles for the enforcement of securities regulation
  - Principles for cooperation in regulation
  - Principles for issuers
  - Principles for collective investment schemes
  - Principles for market intermediaries
  - Principles for the secondary market

# Standards and Codes

- **IMF Code of Good Practices on Transparency in Financial Policies**
  - Clarity of roles, responsibilities and objectives of central banks / financial policies
  - Open process for formulating and reporting monetary / financial policies decisions
  - Public availability of information on monetary / financial policies
  - Accountability and assurance of integrity by the central bank / financial policies

# Standards and Codes

- **CPSS Core Principles for Systemically Important Payment Systems**
  - Legal basis
  - System's impact on risks and procedures for management of risks
  - Security and operational reliability and contingency arrangements
  - Governance of the system – its effectiveness, transparency and accountability
  - Responsibilities of the central bank in applying the Core Principles
  - CPSS recommendations for securities settlement systems

# Standards and Codes

- **Anti–Money Laundering & Countering the Financing of Terrorism- FATF-**
  - Set out the risks for the Country-
  - Analysis of Technical Compliance and Effectiveness
  - 2014--Give ratings for 40 Recommendations and 11 Immediate Outcomes (Effectiveness)
  - Make / Prioritize Recommendations
  - Coverage
    - Criminal justice measures and international co-operation
    - Preventive measures for financial institutions
    - Information on controls and monitoring of cash and cross border transactions

# FSAP 2009 – What's new?

Aftermath of the global financial crisis :

- -strengthen the analytical focus/coverage
- -introduce modular assessments to give IMF and Authorities greater flexibility on scope
- IMF/World Bank : stability/development
- -FSAP in 25 then 29 systemically important countries mandatory every 5 years –still voluntary for others

# Focus and Analytical Depth

## Three main components

- Identification key vulnerabilities – assessment of resilience financial sector
- Assessment financial stability policy framework –micro/macro regulatory prudential supervision in practice
- Evaluation safety nets : system's capacity to manage/resolve crisis

# 1- Assessment

## Vulnerabilities/Financial System

### resilience

- Introduction of Risk Assessment Matrix (RAM) in all FSAP's-from Global RAM
- Stress tests to cover a wider range of sectors and risks— like banks and insurances-
- Stress tests cover the key macro financial risks identified in RAM –prior FSAP focus mainly on solvency risk

# Risk Assessment Matrix

- Requirement to include RAMs in all FSAPs to think through plausible risks- possible impact and prioritize them.
- Country specific RAMs from Global RAM
- Help and support Stress Tests
- Survey: High degree of satisfaction on detecting risks and trace propagation channels and mitigating policies

# Malta: RAM

- Risk : protracted slow growth EU
- Delays in SOE restructuring
- Inconsistent/partial implementation EU regulatory framework
- Delays in implementing structural reforms
- Sharp correction in housing prices

## 2- Financial Stability Policy Framework

- Detailed Assessment Report (DAR) and shorter Report on Observance of Standards and Codes (ROSC): Banking, Insurances and Securities.
- BCP-IOSCO the most assessed- IAIS-CPSS-CPSS/IOSCO-MFPT –time consuming
- Targeted ( partial) ? Streamlining and focus on relevant principles for the country?

## 3- Financial Safety Nets

More prominence to crisis management and safety nets than in the past !

- Overview of of the country's liquidity management framework ( instruments, collateral policies); crisis preparedness and bank resolution frameworks; and possible spillovers from the financial sector to the sovereign balance sheet .

# IMF- World Bank

## Accountability and Flexibility:

- The roles of the two institutions in the FSAP more clear and aligned with their respective mandates – avoid duplication and more effective cooperation where the links between stability and developmental are tight ( role of state owned banks, capital market deepening,.....)

## 29 Systemically Important FS

- Australia, Austria, Belgium, Brazil, Canada,
- China, Denmark, Finland, France, Germany, Hongkong,
- India, Ireland, Italy, Japan, Korea,
- Luxembourg, Mexico, Netherlands, Norway, Poland,
- Russia, Singapore, Spain, Sweden,
- Switzerland, Turkey, United Kingdom,
- United States

# New methodology for SIFS

Integrated Surveillance to allow a more comprehensive analysis of spillovers:

- Greater emphasis on interconnectedness,
- Expands range of covered exposures
- Price contagion across financial sectors

# FSAP Summary (2014)

- Around 300 FSAP Assessments
- Around a 100 countries have had two or more FSAP assessments
- Some 715 Coverage of Standards of which 231 systemic countries
- Source : IMF

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## FSAP Summary (2014) cont.

Standards completed :

-BCP : 255 --- 56 systemic countries (SC)

-ICP : 125 – 49 SC

-IOSCO: 117- 49 SC

-CPSS : 96- 28 SC

-CPSS/IOSCO : 33- 26 SC

-MFPT : 91 – 23 SC

AML : 45 published since 2002

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# FSAP(2014) Summary conclusion

|   | 1999 | 2014 |
|---|------|------|
| Principles                                | 72   | 93   |
| Criteria                                  | 565  | 739  |
| Average number pages in assessment report | 29   | 163  |

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# 2014 FSAP Review-going forward

Financial stability assessments more focus on systemic risks

-Macro-financial approach and macro-prudential policy issues –handout

-Stress tests : expansion coverage- interconnections- cross-border –disclosure of limitations of risk assessments

-Article IV and FSSA – Technical Assistance

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# Macro-prudential policy

- The 2008 crisis shown that micro-prudential policies ( caps on loan values, limits on credit growth, capital adequacy, liquidity requirements..) need to be complemented with macro-prudential policy to achieve stability of the financial system-
- Early intervention in banks in difficulty and specific legal regimes to resolve banks-

# Macro-prudential policy what is?

IMF : Use of primarily prudential tools to limit systemic risks arising from macro-financial linkages and interconnectedness among financial institutions- Such policy complements micro prudential policies, whose main focus is on the soundness of individual financial institutions -

----FSAP: technical notes -----

# ESRB Recommendation

(ESRB/2013/1)

## Objectives:

- Credit growth and leverage
- Excessive mismatch maturity and illiquidity
- Direct and indirect exposure concentration
- -Moral hazard reduction
- -Strengthen resilience financial infrastructures

# Austria FSAP- Technical note

As of January 2014

- FMMSG : Financial Market Stability Committee: macro-prudential recommendations to FMA ( Supervisory )
- FMMSG chaired by two MOF members, one OeNB, one FMA, and two members of Fiscal Council-
- FMA: macro prudential supervision CRDIV

## Austria cont.

- OeNB : collaborates with FMA off-site and on-site inspections as requested by FMA and payments system supervision
- OeNB financial stability: assess systemic risks and advise FMMSG, propose recommendations, assess FMA's implementation of recommendations, and annual financial stability report.

# Denmark FSAP Technical note

## Denmark framework 2013 –non-Euro

- Systemic Risk Council (SRC) with representatives from the National Bank , Financial Supervisory Authority( DFSA), relevant Government Ministries, and independent experts-
- Chairman of National Bank heads the SRC and the central bank hosts the Secretariat

## Denmark FSAP cont.

- The SRC's task : identify and monitor systemic financial risks and to issue observations, warnings, ad recommendations to the DFSA and the Government- Decision making : Minister of Business and Growth appointed as designated macro prudential authority-

# Denmark - Macroprudential

- A- Current Framework
- - Identification SIFIs: large to create problems- every year- six banks
- - Cyclical risk: credit growth, mismatch maturity and market liquidity, exposure concentration, moral hazard, resilience financial sector

## Denmark – cont.

- Other tools: Every six months stress test
- Financial stability map: identify potential sources macro financial risks: liquidity spillovers, credit risk, monetary conditions
- Heat maps: vulnerability ratings
- Interconnections between sectors and cross-bank spillovers= too big to fail-
- Autoregression linkages :credit growth,GDP, etc...

# Denmark: final

- Linkages between Denmark and other countries- especially Norway and Sweden
- Policy Instruments: capital surcharges- countercyclical capital buffer
- Limits on Loan to value and debt-service-to income to contain vulnerabilities housing sector

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# 2016-Macro: Stronger Focus on Systemic Risk

FSAP as a complimentary contribution to  
IMF Surveillance –Article IV-

- Current evaluation of financial sector oversight relies heavily on compliance international standards ( BCP-IAIS-IOSCO)
- Future: Most relevant risks faced by financial sector and integrate in FSAP

## 2016-Systemic Risk cont.

Macro-financial approach to supervisor standards – 2016 Review Standards & Codes

- Combines quantitative and qualitative criteria to identify a macro-financially relevant subset of individual principles in BCP-IAIS-IOSCO – IMF background paper

## 2016-Systemic risk cont.

Summary of new macro-fin. approach:

- Identify key macro-financial risks (banks-insurances and securities sectors)
- Techniques ( principal component and factor analysis) to reduce to a smaller number of factors that explain variation of grades across assessments

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# 2016-Systemic risk-Summary

## cont.

- - Use parametric and non-parametric econometric approach to identify correlations between each principle –or each explanatory factor- and each measure of risk
- - Expert judgment to identify macro-financially relevant principles
- ----- Stronger analysis of safety nets -----

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# 2014-Stress Test: Upgraded Tools and Analytical Framework

Improving stress test - Stronger analysis of interconnectedness and spillover analysis:

- Expand sectoral coverage and incorporate advanced methodologies and models
  - Encourage Authorities' cooperation on a voluntary basis to share all relevant data
  - Interconnection across sectors, cross-border spillovers, acknowledge limitations
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# 2014 Going-forward conclusion

- Systemic risk focus and analysis should be communicated clearly and effectively
- Changing structure of the FSSA :
  - systemic risk to prioritize FSAP findings and recommendations
- Ensuring adequate presentation of key macro-financial linkages and identify data gaps

# What can we conclude from an FSAP?

- Is the overall system stable? If not what to do
- Risks? Spillover effects? Macro-surveillance
- How to strengthen the financial system further? Prioritize and sequence reform plans
- How to improve the level of observance with international financial sector standards?

## 2002/3 FSAP Overall Outcome

- Malta's financial sector is sound and well supervised but very concentrated
- Very concentrated sector and strong reliance on real estate properties collateral
- Insurance and securities : not systemically important
- Insurance companies are healthy

# 2010 BCP- IAIS-IOSCO

- Positive: progress noted in all assessments
- Banking sector : the most clear progress ( but in 2002/3 was not so good!)
- Insurances: hard comparison due to change in IAIS principles
- Securities : progress from an already relatively 2002/3 positive assessment

# Major Changes 2002/3-2010

- Entry of Malta in the EU and adoption of EU regulations and ECB jurisdiction
- Final transition of MFSA as the sole Regulator in Malta
- MFSA supervision of MSE
- Settlement securities legislation

# BCP Comparison

## Change in number of Principles 24-26

- | 2002/3 Assessment      | 2010 Assessment  |
|------------------------|------------------|
| Compliant: 11          | Compliant: 21    |
| Largely compliant : 12 | Largely compl: 5 |
| Materially NC: 1       | Materially NC :0 |

# Insurances -IAIS

Very difficult to compare :

- October 2000 methodology : 17 principles
- October 2003 methodology : 28 Principles

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## Insurances— IAIS cont.

- |                                  |                      |
|----------------------------------|----------------------|
| • 2002/3 – 17 ICP                | 2010 – 28 ICP        |
| • Observed : 12                  | Observed : 22        |
| • Broadly observed : 3           | Largely observed : 4 |
|                                  | Partly observed: 2   |
| • Materially not<br>observed : 2 | Not observed: 0      |

# IOSCO Securities -30 Principles

- | 2002/3              | 2010             |
|---------------------|------------------|
| • Implemented : 22  | Implemented : 24 |
| • Broadly impl.: 0  | Broadly impl.: 4 |
| • Partly implem.: 6 | Partly implem: 0 |
| • Non implem. : 0   | Non implem.: 0   |
| • Not applicable :2 | Not applicable:2 |

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Molte grazie!

Grazzi ħafna !