

# An Overview of Financial Stability and Macro- Prudential Issues for the Caribbean




Port-of-Spain, Trinidad and Tobago  
November 18-20, 2014.

Presentation to XLVI Annual CCMF  
Monetary Studies Conference

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# Presentation Format

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1. Financial Stability: Core Principles
  2. Systemic Risk and Macro-Prudential Policy
  3. Key Elements of a Financial Stability Risk Architecture for the Caribbean
  4. Financial Stability Components - State of Play
  5. Key Financial Stability Matters for Policy Focus: An Agenda for the Region
  6. Conclusion

# 1.0 Financial Stability: Core Principles



- Global financial crisis and the reverberations from the collapse of a key regional financial conglomerate (CL Financial) have brought to the fore the importance of systemic risks and the need to develop a macro-prudential policy framework in the Caribbean region.
- No fully agreed upon risk assessment framework for financial stability exists globally. Various elements needed for a unified framework are still being elaborated and developed by international bodies (IMF, BIS, ECB, FSI) and academic institutions. Some Consensus around Core Principles.

# 1.1 Financial Stability : Core Principles



## Some Consensus around Schinasi's Principles

### Efficient and Smooth Allocation of Resources

- Facilitate efficient and smooth allocation of resources inter-temporally and spatially between savers and investors.

### Effective Management of Forward-looking Risks

- Enable forward-looking risks to be continuously assessed, reasonably priced and effectively managed.

### Absorption and Dissipation of financial and economic shocks

- Be able to contain and absorb financial and economic shocks with minimal disruption to financial and economic activity.



## 2.0 Systemic Risk and Macro-Prudential Policy

- Systemic Risks: The risk that an event could trigger a loss of value or confidence in a substantial portion of the financial system resulting in adverse “nation-wide” and region-wide” effects.
- CONSIDERABLE EFFORTS ARE ONGOING TO DEVELOP A FRAMEWORK FOR ASSESSING SYSTEMIC RISK AND FOR PREDICTING SYSTEMIC EVENTS.
- WHILE SEVERAL PERSPECTIVES ABOUT SYSTEMIC RISK ABOUND, IT IS NOW COMMON PLACE TO ASSESS SYSTEMIC RISK IN TWO DIMENSIONS.

# 2.1 Systemic Risk and Macro-Prudential Policy

## Time-Series Dimension

- Risks caused by credit cycles and the pro-cyclicality of the financial system.
- (Progressive build-up of aggregate risk over time).

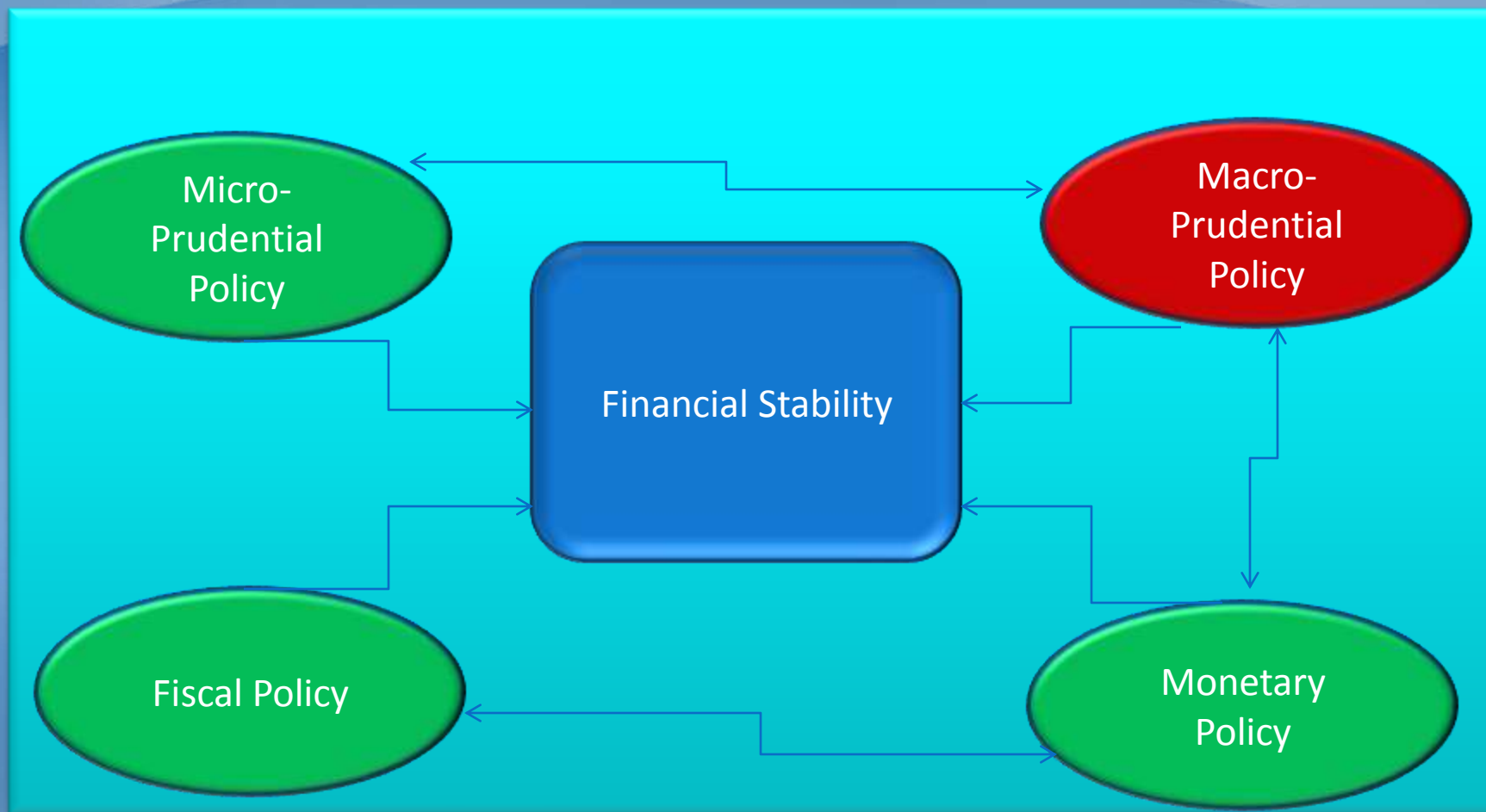
## Cross-Sectional Dimension

- Interconnectedness risks through spillovers to financial system from SIFIs or through common exposures.

## 2.2 Meaning of Macro-Prudential Policy

- Macro-Prudential Policy: Refers to prudential measures aimed at reducing or limiting systemic risk and preserving financial stability.

## 2.3 Financial Stability and Macro-Prudential Policy





# 3.0 Main Elements of Financial Stability

## Risk Architecture for the Caribbean

| Financial Sector Components   | Sources of Risk         | Risk Assessment         | Major Risks  | Risk Metrics   | Risk Mitigation   |
|---|-------------------------|-------------------------|--|--|---|
| <b>Financial Institutions</b> <ul style="list-style-type: none"> <li>• Banks</li> <li>• Insurance/Pension Funds</li> <li>• Credit Unions</li> <li>• Securities Firms</li> </ul>                       | <b>Endogenous Risks</b> | <b>Macro-Prudential</b> | <ul style="list-style-type: none"> <li>•Credit</li> <li>•Liquidity</li> <li>•Reputational</li> </ul>                                       | <ul style="list-style-type: none"> <li>•FSIs</li> <li>•EWIs</li> <li>•Stress Tests</li> <li>•Flow of Funds Matrix</li> </ul>   | <ul style="list-style-type: none"> <li>•Financial Safety Nets</li> <li>•Crisis Management</li> <li>•Regulatory System (Single, Multiple)</li> <li>•Business Continuity</li> <li>•Robust Network and ICT Platform</li> </ul> |
| <b>Financial Markets</b> <ul style="list-style-type: none"> <li>• Interbank Mkt</li> <li>• Forex Mkt.</li> <li>• Capital Mkts (Equity, Debt)</li> </ul>   |                         |                         | <ul style="list-style-type: none"> <li>•Counterparty</li> <li>•Asset Price Misalignment</li> <li>•Market</li> <li>•Reputational</li> </ul> | <ul style="list-style-type: none"> <li>•Interdependency Matrix</li> <li>•Interconnectedness Map</li> <li>•Financial Models (Macro, DSGE)</li> <li>•Network Analysis</li> </ul> |   |
| <b>Financial Infra - Structure</b> <ul style="list-style-type: none"> <li>• Legal/Regulatory Systems</li> <li>• Payments Systems</li> <li>• Clearance Systems</li> <li>• Deposit Insurance</li> </ul> | <b>Exogenous Risks</b>  | <b>Micro-Prudential</b> | <ul style="list-style-type: none"> <li>•Payment</li> <li>•Operational</li> <li>•Regulatory</li> <li>•Reputational</li> </ul>               |  |   |

Source: Prepared by Shelton Nicholls.



## 3.1 Financial Stability Risk Architecture for the Caribbean: Main Elements

- Risk Assessment of Financial system requires:
  - **Identification of major sources of risks**
    - **Endogeneous** (shocks generated and amplified within financial system)
    - **Exogeneous** (shocks arising from outside the system)
  - **Assessment of Nature of the Risk**
    - Macro-Prudential (driven by common exposures, interconnectedness, interdependence from Endogeneous and Exogeneous Shocks).
    - Micro-Prudential (addresses risks in individual financial institutions arising from Endogeneous. and Exogeneous. Shocks).



## 3.2 Financial Risk Architecture for the Caribbean: Main Elements

### ➤ Measurement of Risk (Risk Metrics)

- **Micro-Prudential Measures** (CAMEL, CAMEL , PEARLS for individual financial institutions)
- **Macro-Prudential Measures**
  - FSIs, EWS
  - Macro-Stress Tests
  - Network and Interconnection Matrices and Maps
  - Macro-econometric Link Models, DSGE Models
  - Financial Contagion Matrices

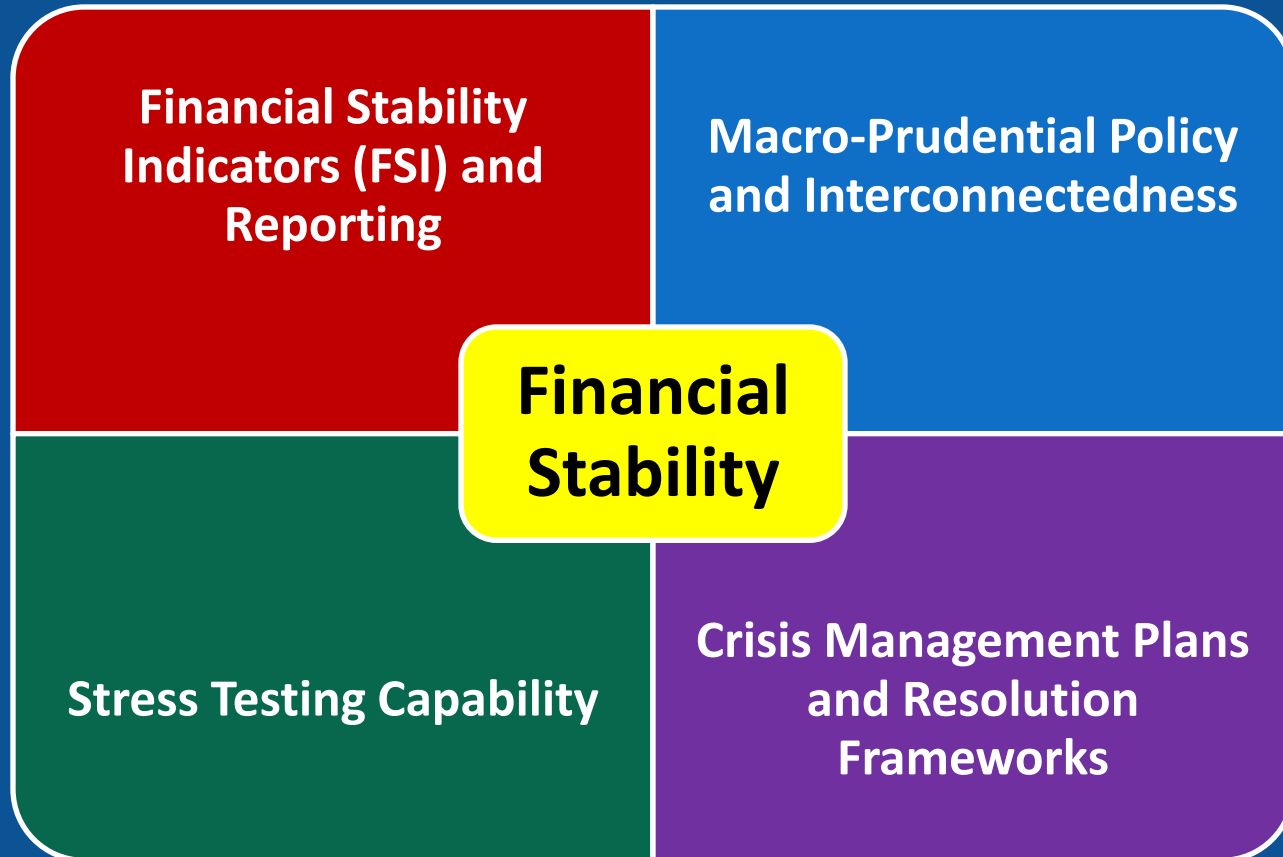


## 3.3 Financial Risk Architecture for the Caribbean: Main Elements

### ➤ Effective Risk Mitigation through:

- Complementary macro-prudential and micro-prudential regulation (a major blindspot).
- Crisis Preparedness Plan and Strategy.
- Robust Information, Communication and Technology platform (including robust computer networks and flexible databases).
- Business Continuity framework and Plan for the financial sector.

# 4.0 Financial Stability Components: State of Play







## 4.0 Financial Stability Indicators and Reporting: State of Play

- Region has made some progress with putting in place FSI indicators (both core and enhanced) for the banking sector.
- There has been some strengthening of financial reporting to support financial stability objectives.
- Significant effort is however required in developing and compiling FSIs and EWIs for non-banks, life and non-life insurance companies, credit unions and pension funds.











## 4.1a Financial Stability Indicators: State of Play (Banking Sector)

### Banking Sector:

- Economic stagnation has led to a sharp rise in the Non-Performing Loans to Total Loans (NPL/TL) ratio which hovered at just under 10.0% in 2012. But banks maintained sufficient liquidity and had robust capital adequacy provisions.
- High NPL/TL ratios in Belize, Barbados, ECCB and the Bahamas.

## Banking Sector Risk Analysis (Regional 2012)

| FLAG  | COUNTRIES | NPL/TL (%) | LA/TA (%) | RegCAP/RWA (%) | Credit Risk (NPL/TL) | LIQUIDITY RISK (LA/TA) | Cap. Adq. Risk (RegCAP/RWA) |
|---|-----------|------------|-----------|----------------|----------------------|------------------------|-----------------------------|
|  | BAH       | 13.0       | 20.2      | 26.9           | VH                   | L                      | L                           |
|  | BDS       | 10.6       | 13.0      | 25.5           | VH                   | M                      | L                           |
|  | BEL       | 17.2       | 29.7      | 22.4           | VH                   | L                      | L                           |
|  | ECCB      | 15.3       | 22.5      | 19.8           | VH                   | L                      | L                           |
|  | GUY       | 5.6        | 21.9      | 18.9           | L                    | L                      | L                           |
|  | HAT       | 2.4        | 45.5      | 15.7           | VL                   | VL                     | M                           |
|  | JAM       | 6.8        | 22.6      | 14.1           | M                    | L                      | M                           |
|  | SUR       | 6.2        | 28.4      | 12.6           | M                    | L                      | M                           |
|  | T&T       | 5.4        | 25.2      | 24.6           | L                    | L                      | L                           |
|   | PEER AVG  | 5.6        | 29.9      | 18.4           |                      |                        |                             |
|   | REG. AVG  | 9.2        | 25.4      | 20.1           |                      |                        |                             |

Peer - Selected Developing Countries












## 4.1b Financial Stability Indicators: State of Play (Credit Union Sector)

### Credit Union Sector:

- FSIs collected for the credit union sector remain quite sparse although this sector is quite important in some regional jurisdictions such as Barbados and the ECCU.
- Even sparse data show that credit risk in this sector is above the PEARLS target.

## Credit Union Sector Risk Analysis (Regional, 2012)

| FLAG  | COUNTRIES            | NPL/TL (%)  | LA/TA (%)        | CAPRES/RWA (%) | Credit Risk (NPL/TL) | LIQUIDITY RISK (LA/TA) | Cap. Adq. Risk (CAPRES/RWA) |
|---|----------------------|-------------|------------------|----------------|----------------------|------------------------|-----------------------------|
|    | BAH                  | NA          | NA               | NA             | ?                    | ?                      | ?                           |
|    | BDS                  | 8.5         | NA               | NA             | M                    | ?                      | ?                           |
|    | BEL                  | 8.5         | NA               | 23.7           | M                    | ?                      | L                           |
|    | ECCB                 | NA          | NA               | NA             | ?                    | ?                      | ?                           |
|    | GUY                  | NA          | NA               | NA             | ?                    | ?                      | ?                           |
|    | HAT                  | NA          | NA               | NA             | ?                    | ?                      | ?                           |
|    | JAM                  | 2.7         | NA               | 4.0            | L                    | ?                      | M                           |
|  | SUR                  | NA          | NA               | 3.8            | ?                    | ?                      | M                           |
|  | T&T                  | NA          | NA               | NA             | ?                    | ?                      | ?                           |
|   | <b>PEARLS Target</b> | <b>≤5.0</b> | <b>15.0-20.0</b> | <b>≥10.0</b>   |                      |                        |                             |
|   | <b>REG. AVG</b>      | <b>6.6</b>  | <b>NA</b>        | <b>10.5</b>    |                      |                        |                             |

PEARLS Target from WOCCU





## 4.1c Financial Stability Indicators: State of Play (Insurance Sector)










### Life Insurance Segment:

- Medium underwriting and asset quality risks exist for the life insurance sector. Data remain sparse and difficult to compare meaningfully across the region.

### Non-Life Segment:

- High combined ratios (loss ratio and expense ratio) may be signaling some difficulty in an environment of low investment yields.










## Life Insurance Sector Risk Analysis (Regional 2011/2012)

| FLAG   | COUNTRIES       | EXP/NP (%)  | [RE/UE/D]/TA (%) | CAP/TR (%)  | Underwrit Risk (EXP/NP) | Asset Risk ([RE/UE/D]/TA) | Cap. Adq. Risk (CAP/TR) |
|--|-----------------|-------------|------------------|-------------|-------------------------|---------------------------|-------------------------|
|   | BAH             | NA          | NA               | NA          | ?                       | ?                         | ?                       |
|   | BDS             | NA          | NA               | NA          | ?                       | ?                         | ?                       |
|   | BEL             | 42.3        | 7.3              | 38.9        | M                       | L                         | L                       |
|   | ECCB            | NA          | NA               | NA          | ?                       | ?                         | ?                       |
|   | GUY             | NA          | NA               | NA          | ?                       | ?                         | ?                       |
|   | HAT             | NA          | NA               | NA          | ?                       | ?                         | ?                       |
|   | JAM             | 58.1        | 78.5             | 21.1        | M                       | H                         | L                       |
|   | SUR             | 102.9       | 22.0             | 13.8        | H                       | M                         | M                       |
|  | T&T             | 37.1        | 14.4             | 22.1        | M                       | L                         | L                       |
|  | <b>PEER AVG</b> | <b>NA</b>   | <b>NA</b>        | <b>NA</b>   |                         |                           |                         |
|  | <b>REG. AVG</b> | <b>60.1</b> | <b>30.6</b>      | <b>24.0</b> |                         |                           |                         |

Peer - Selected Developing Countries

Sources: Central Bank Reports, CCMF.

## Non-Life Insurance Sector Risk Analysis (Regional 2011/2012)

| FLAG  | COUNTRIES       | EXP+NC/NP (%) | [RE/UE/D]/TA (%) | CP+SP/TA (%) | Underwrit Risk (EXP+NC/NP) | Asset Risk ([RE/UE/D]/TA) | Cap. Adq. Risk (CP+SP/TA) |
|---|-----------------|---------------|------------------|--------------|----------------------------|---------------------------|---------------------------|
|    | BAH             | NA            | NA               | NA           | ?                          | ?                         | ?                         |
|    | BDS             | NA            | NA               | NA           | ?                          | ?                         | ?                         |
|    | BEL             | 172.6         | 43.6             | 49.0         | H                          | H                         | L                         |
|    | ECCB            | NA            | NA               | NA           | ?                          | ?                         | ?                         |
|    | GUY             | 88.0          | 55.0             | 54.0         | M                          | H                         | L                         |
|    | HAT             | NA            | NA               | NA           | ?                          | ?                         | ?                         |
|    | JAM             | 156.1         | 65.9             | 29.8         | H                          | H                         | M                         |
|  | SUR             | NA            | 46.3             | NA           | ?                          | H                         | ?                         |
|  | T&T             | 98.5          | 17.0             | NA           | M                          | L                         | ?                         |
|   | <b>PEER AVG</b> | <b>100.0</b>  | <b>NA</b>        | <b>NA</b>    |                            |                           |                           |
|   | <b>REG. AVG</b> | <b>128.8</b>  | <b>45.6</b>      | <b>44.3</b>  |                            |                           |                           |

Peer - Selected Developing Countries

Sources: Central Bank Reports, CCMF.

# 4.1d Financial Stability Reporting

**Financial Stability Reporting in the Caribbean (As at June 2014)**

| Countries         | Published by | FSR Prepared (Year) | Most Recent FSR Published (Year) | FSR Published (Number per year)           | Number Published to Date (June 2014) |
|-------------------|--------------|---------------------|----------------------------------|---|--------------------------------------|
| The Bahamas       | Central Bank | 2012                | 2013                             | 1 (annually)                              | 2                                    |
| Barbados          | Central Bank | 2011                | 2014                             | 2 (Annual + mid-year update (since 2012)) | 6                                    |
| Belize            | Central Bank | 2013                | -                                | -   | -                                    |
| ECCU Area         | Central Bank | 2013                | -                                | -   | -                                    |
| Guyana            | Central Bank | 2006                | 2013                             | 1 (annually)                              | 8                                    |
| Haiti             | -            | -                   | -                                | -   | -                                    |
| Jamaica           | Central Bank | 2005                | 2013                             | 1 (annually)                              | 9                                    |
| Suriname          | -            | -                   | -                                | -   | -                                    |
| Trinidad & Tobago | Central Bank | 2008                | 2013                             | 2 (Annual + mid-year update (since 2012)) | 9                                    |

# 4.1e Financial Stability Reporting

**Sectoral Coverage of Published Financial Stability Reports (as at Dec 2013)**

| Caribbean Territories | Published by | Banking Sector | Insurance Sector | Credit Union Sector | Pensions | Mutual Funds | Securities Mkt | Payments System |
|-----------------------|--------------|----------------|------------------|---------------------|----------|--------------|----------------|-----------------|
| The Bahamas           | Central Bank | Y              | Y                | Y                   | N        | N            | Y              | Y               |
| Barbados              | Central Bank | Y              | Y                | Y                   | N        | Y            | N              | N               |
| Guyana                | Central Bank | Y              | Y                | N                   | N        | N            | Y              | N               |
| Jamaica               | Central Bank | Y              | Y                | Y                   | N        | N            | Y              | N               |
| Trinidad & Tobago     | Central Bank | Y              | Y                | N                   | Y        | Y            | N              | Y               |






## 4.2 Stress-Testing Capability: State of PLAY

- Stress Tests have been conducted in the banking systems of most Caribbean countries - Trinidad and Tobago, Barbados, Suriname, Jamaica, Belize, OECS , Guyana .
- Most of the Stress Tests have been directed at single factor shocks with an emphasis on one component of the financial system (banking). [**Jamaica and Barbados have conducted stress tests of credit union sectors**].
- No combined stress tests have been developed that examine the impact of Endogeneous shocks (e.g. interest rate declines/increases) on the entire financial system (banking, insurance, pension funds and credit union sectors) in national financial systems and across the region.

# 4.2a Stress-Testing Capability: State of PLAY




| Stress-Tests (as at December 2013) |         |           |               |                  |                         |
|------------------------------------|---------|-----------|---------------|------------------|-------------------------|
| COUNTRIES                          | Banking | Insurance | Credit Unions | Securities Firms | Entire Financial Sector |
|                                    | SF      | SF        | SF            | SF               | Combined                |
| BAH                                | √       | ×         | ×             | ×                | ×                       |
| BDS                                | √       | ×         | √             | ×                | ×                       |
| BEL                                | √       | ×         | ×             | ×                | ×                       |
| ECCB                               | √       | ×         | ×             | ×                | ×                       |
| GUY                                | √       | ×         | ×             | ×                | ×                       |
| HAT                                | √       | ×         | ×             | ×                | ×                       |
| JAM                                | √       | √         | √             | ×                | ×                       |
| SUR                                | √       | ×         | ×             | ×                | ×                       |
| T&T                                | √       | √         | ×             | ×                | ×                       |
| SF - Single Factor Stress Tests.   |         |           |               |                  |                         |



## 4.3 Macro-Prudential Policy and Interconnectedness: State of Play

- Systemic risk **remains potential Achilles heel** unless more rapid progress is made with macro-prudential surveillance and regulation.



## 4.3a Macro-Prudential Policy and Interconnectedness: State of Play

- Limited and Un-organised Information on Linkages between Financial Sector and Real Sector. No Interconnectedness Matrices exist to inform macro-prudential policy.
- Currently, no country in the CARICOM region produces a Flow of Funds table.
- On-going project between Central Banks , CCMF and IMF to develop interconnectedness matrices and maps for the Caribbean.



## 4.3b Macro-Prudential Policy and Interconnectedness: State of Play

| KEY AREAS   | ACTIONS   |
|---|---|
| <b>1. Legal Regulatory/Mandate</b>                  | Need to Ensure Legal Mandate for Financial Stability is established.  |
| <b>2. Organisational/Institutional Arrangements</b> | Need for a System-wide Oversight Committee or Regulatory Policy Council that is focused on macro-prudential policy and financial stability.   |
| <b>3. Macro-Prudential Policy Framework</b>         | Need to establish a macro-prudential policy framework with <b><u>clear terms of reference</u></b> . <ul style="list-style-type: none"><li>• Building capital buffers</li><li>• Contain build-up of vulnerabilities over time, in sectors and across the system.</li></ul> |



## 4.3c Macro-Prudential Policy and Interconnectedness: State of Play

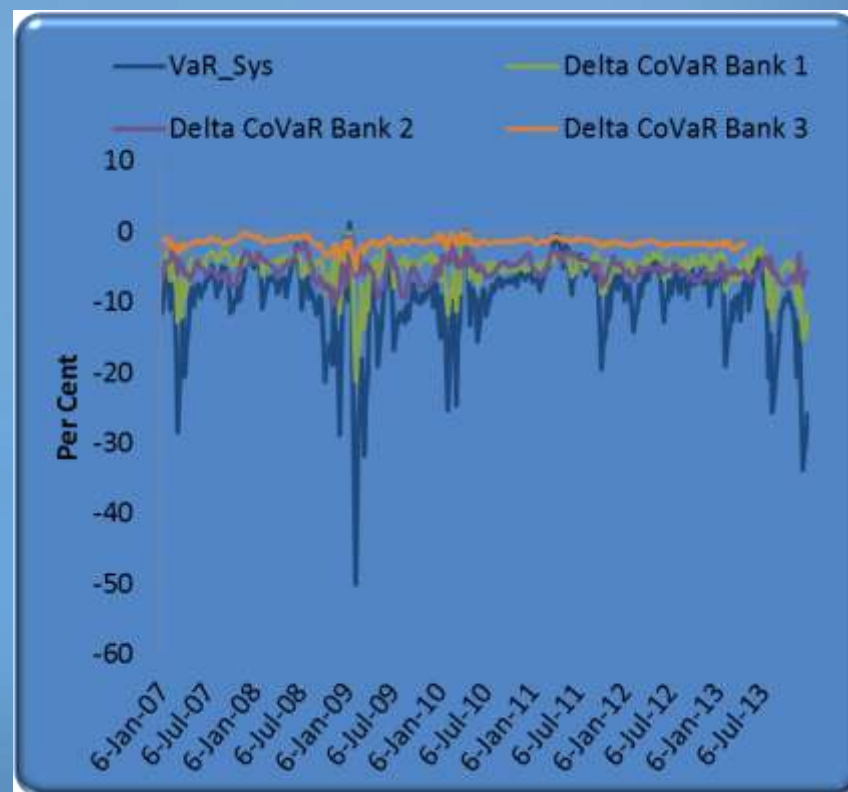
| KEY AREAS  | ACTIONS  |
|--|--|
| <b>4. Operating Framework for Financial Stability</b>    | <ul style="list-style-type: none"><li>• <b>Assessing Systemic Risk</b> (Assess imbalances, Map out linkages in the system)</li><li>• <b>Design Macro-prudential tools to contain systemic risks</b> (countercyclical capital buffers and provisions, sectoral capital requirements, Loan-to-value limits, Debt-to-income limits, risk-weighting of highly connected sectors, liquidity coverage ratios, net stable funding ratios, reserve requirements, )</li></ul> |
| <b>5. Financial Safety Net/Crisis Preparedness Plans</b> | <ul style="list-style-type: none"><li>• <b>Design appropriate financial safety net</b> (deposit insurance, financial stability fund or levy)</li><li>• <b>Preparation of national crisis preparedness plans.</b></li></ul>   |



# 4.3d Examples of Macro-Prudential Indicators from Bank of Jamaica

**CCA distance-to-default for banks\***

**CoVaR for banks\*\***



Source: Brian Langrin (Bank of Jamaica)

# 4.3e Macro-Prudential Policy and Interconnectedness: State of Play



Macro-Prudential Policy Framework (as at December 2013)

| COUNTRIES | Financial Stability Mandate in Law | Macro-Prudential Mandate in Law | Macro-Prudential Frameworks |             |           |              |
|-----------|------------------------------------|---------------------------------|-----------------------------|-------------|-----------|--------------|
|           |                                    |                                 | Metrics                     | Policy      | Operating | Tools        |
| BAH       | x                                  | x                               | x                           | x           | x         | Very Limited |
| BDS       | x                                  | x                               | √ (Limited)                 | x           | x         | Very Limited |
| BEL       | x                                  | x                               | x                           | x           | x         | Very Limited |
| ECCB      | x                                  | x                               | x                           | x           | x         | Very Limited |
| GUY       | x                                  | x                               | √ (Limited)                 | x           | x         | Very Limited |
| HAT       | x                                  | x                               | x                           | x           | x         | Very Limited |
| JAM       | In Progress                        | In Progress                     | √                           | In Progress | x         | Very Limited |
| SUR       | x                                  | x                               | x                           | x           | x         | Very Limited |
| T&T       | x                                  | x                               | √ (Limited)                 | x           | x         | Very Limited |

# 4.3f Flow-of-Funds and Interconnectedness

|                        |               | Financial Sector (FS) |     |      |     |     |     |          | Real Sector (RS) |     |     |     |          |        |
|------------------------|---------------|-----------------------|-----|------|-----|-----|-----|----------|------------------|-----|-----|-----|----------|--------|
|                        |               | CB                    | BKS | NBKS | INS | PNS | CUS | SubTot   | HH               | FRM | GOV | ROW | SubTot   | Tot AA |
| FS                     | CB            |                       |     |      |     |     |     |          |                  |     |     |     |          |        |
|                        | BK            |                       |     |      |     |     |     |          |                  |     |     |     |          |        |
|                        | NBK           |                       |     |      |     |     |     |          |                  |     |     |     |          |        |
|                        | INS           |                       |     |      |     |     |     |          |                  |     |     |     |          |        |
|                        | PNS           |                       |     |      |     |     |     |          |                  |     |     |     |          |        |
|                        | CU            |                       |     |      |     |     |     |          |                  |     |     |     |          |        |
|                        | SEC           |                       |     |      |     |     |     |          |                  |     |     |     |          |        |
|                        | <b>SubTot</b> |                       |     |      |     |     |     | <b>A</b> |                  |     |     |     | <b>B</b> |        |
| RS                     | HH            |                       |     |      |     |     |     |          |                  |     |     |     |          |        |
|                        | FRM           |                       |     |      |     |     |     |          |                  |     |     |     |          |        |
|                        | GOV           |                       |     |      |     |     |     |          |                  |     |     |     |          |        |
|                        | ROW           |                       |     |      |     |     |     |          |                  |     |     |     |          |        |
|                        | <b>SubTot</b> |                       |     |      |     |     |     | <b>C</b> |                  |     |     |     | <b>D</b> |        |
|                        | <b>Tot FR</b> |                       |     |      |     |     |     |          |                  |     |     |     | <b>F</b> |        |
| Source: Suk Hyun(2010) |               |                       |     |      |     |     |     |          |                  |     |     |     |          |        |



## 4.4 Crisis Management Plans: State of Play

- Draft Regional Crisis Management Plan Exists.
  - But Plan has to go beyond broad principles to identify scenarios, policy actions and resolutions strategies.
- National Crisis Management Plans being developed in a few countries (e.g Tdad &T'go and Jamaica).



## 5.0 Key Financial Stability Matters for Policy Focus: An Agenda

- Move to Codify Financial Stability and Macro-Prudential Policy in law to give them a firmer foundation (similar status to monetary policy actions).
- Strengthen Macro and Micro-Prudential Policy and Operating frameworks.
- Expand Perimeter of financial surveillance to cover systemic and cross-border risks.
  - Develop a financial interdependency matrix to map interconnections of SIFIs at both a national and regional level.



## 5.1 Key Financial Stability Matters for Policy Focus: An Agenda

- Close Information gaps through developing workflows and processes to support information gathering, analysis and dissemination.
  - Develop FSIs for Credit Unions and non-Deposit Taking Institutions (insurance, securities firms, pensions).
  - Build integrated database for regional financial conglomerates and SIFIs and develop a consolidated FSI database for the Caribbean.





## 5.2 Key Financial Stability Matters for Policy Focus: An Agenda

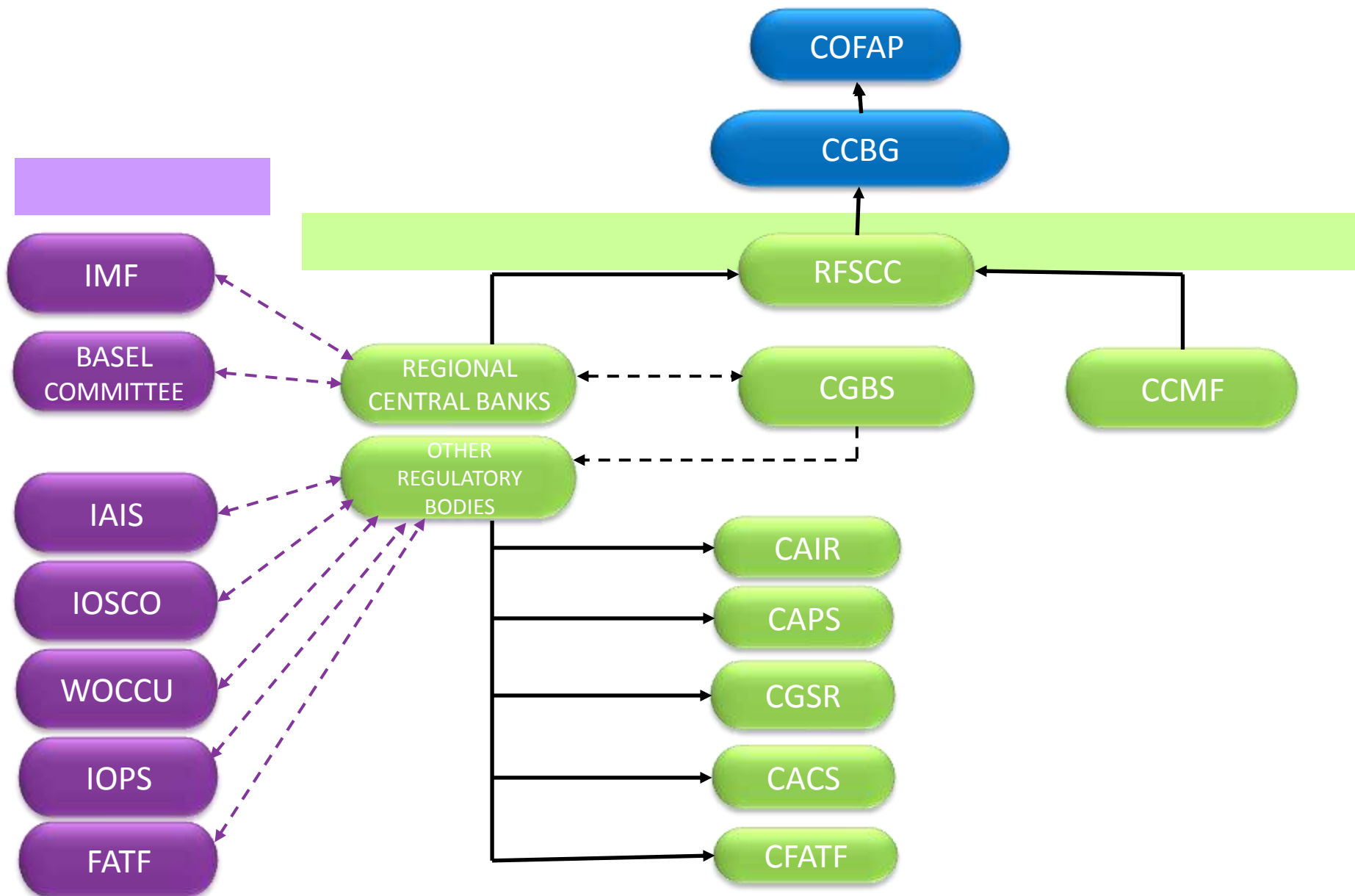
- Enhance Macro-Stress Testing Capabilities
  - Extend macro stress tests beyond banking sector to other key areas, especially insurance and the securities market.
  - Conduct at least one significant region-wide stress test for banking and insurance sectors.



## 5.3 Key Financial Stability Matters for Policy Focus: An Agenda

- **Develop an Effective Regional Architecture to Support Macro-Prudential Policy and financial Stability.**

# REGIONAL REGULATORY STRUCTURE IN RELATION TO INTERNATIONAL FINANCIAL STABILITY ARCHITECTURE





## 5.4 Key Financial Stability Matters for Policy Focus: An Agenda

### Long Term:

- Re-establish national flow of funds matrices and build an integrated flow of funds matrix for the region.
- Develop a financial contagion matrix for the region.
- Build a quarterly regional link model (dynamic macro-econometric financial model) to detail linkages between the national and regional financial sectors and the regional economic system.



## 6.0 CONCLUSION

- Macro-prudential policy still remains a relatively under-developed aspect of financial stability arrangements in the region.
- Developing an adequate macro-prudential framework will need a strong micro-prudential framework to undergird it.
- Significant work is needed to develop an appropriate suite of macro-prudential indicators and tools to measure and contain the build-up in imbalances.

END OF PRESENTATION