



# RBSEF

# Risk Based Supervision Framework

Central Bank of The Bahamas

**INDUSTRY SEMINAR**

**Bank Supervision Department**

**October 29<sup>th</sup> 2010**

# Agenda

---

- ▶ Governor's opening remarks
- ▶ Fundamentals of the risk based supervisory framework
- ▶ Risk aggregation model
- ▶ Risk assessment process
- ▶ Q&A



# Defining Risk Based Supervision

---

- ▶ Focus and dedicate supervisory resources to identify activities and practices of greater risk to the soundness of banks.
- ▶ Identify higher-risk institutions
- ▶ Assess and measure risks identified
- ▶ Evaluate the significance of those risks for the financial system



# Our Risk Based Approach's Aim

---

- ▶ To Identify, measure, monitor and control risk against supervisory objectives:
  - ▶ Maintaining confidence in the Bahamian financial system
  - ▶ Strengthening the Banking and Trust Sector
  - ▶ Strengthening and improving the effectiveness of supervisory process
  - ▶ Maintaining legal and regulatory financial compliance with international norms and standards



# Fundamentals of our Risk Based Framework

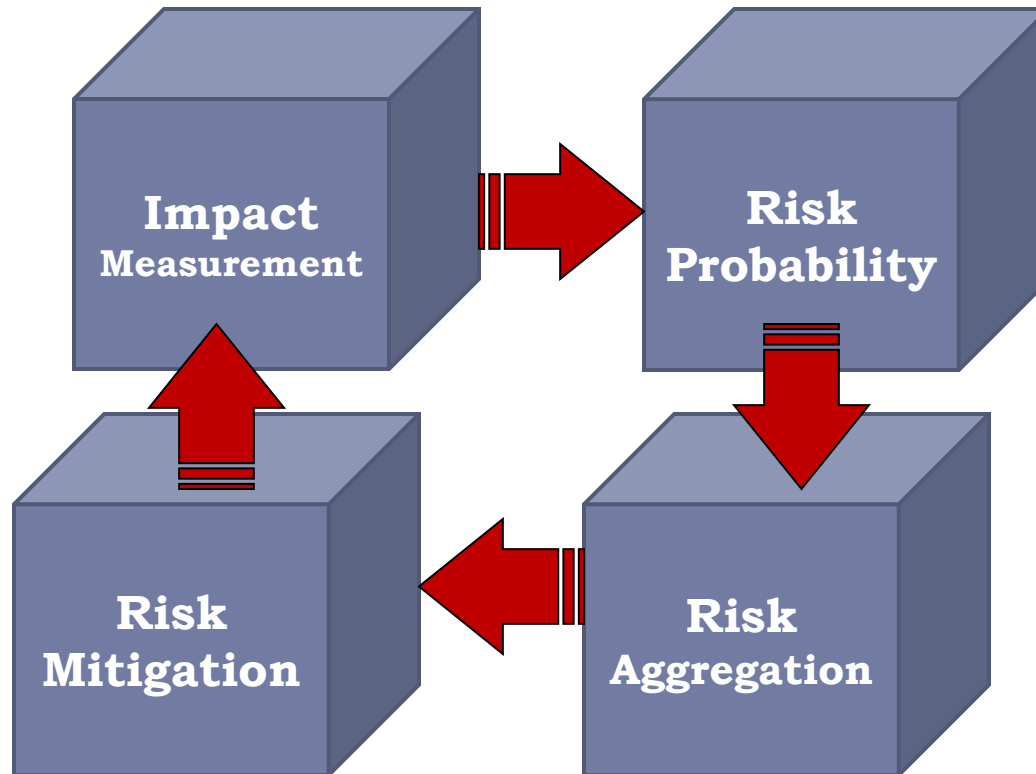
---

- ▶ Probability – the likelihood that a particular risk will crystallise
- ▶ Impact – the scale of the detrimental effect if it crystallises
- ▶ Impact metrics – fiduciary assets, total expenditure, number of staff, B\$ deposits
- ▶ Probability dimensions – Inherent risks, controls, oversight and governance, financial soundness
- ▶ Risk aggregation and assessment
- ▶ Risk mitigation



# Key Features of the Risk Based Approach

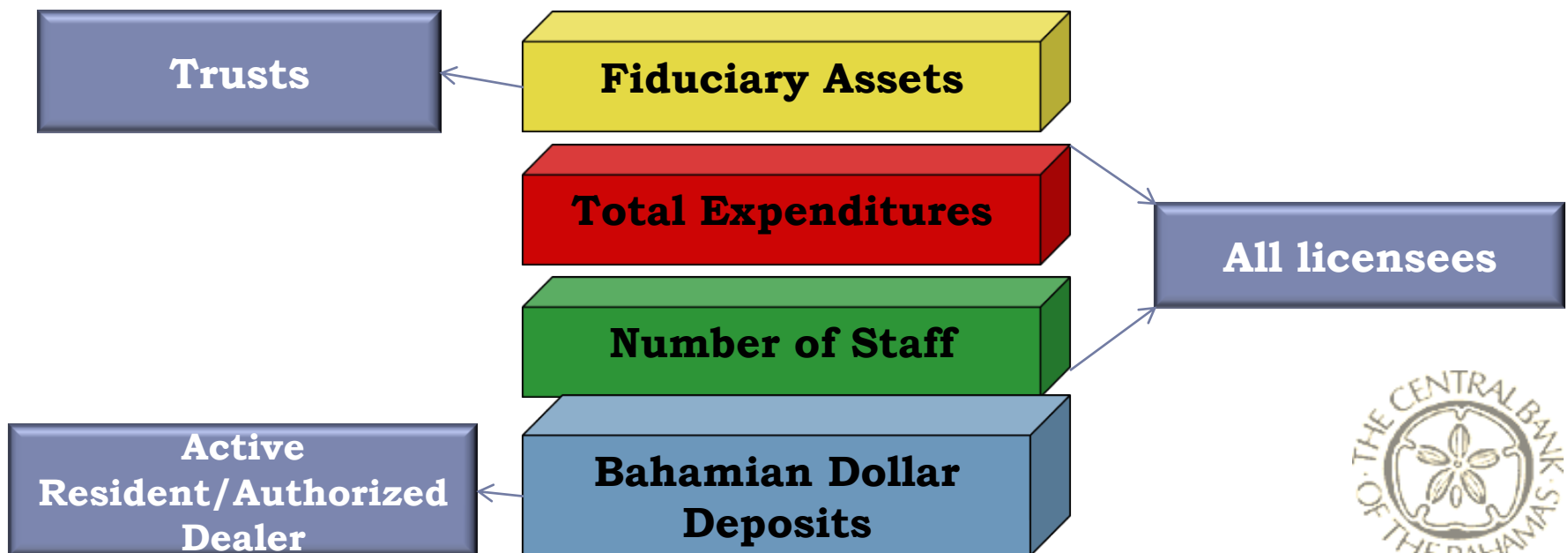
---



# Impact

Impact

- ▶ Impact – the scale of the detrimental effect if it crystallises
- ▶ We determine the impact of a firm using these quantitative proxy metrics:



# Impact – Low Impact Threshold Equivalent (LITE)



Impact

High	LITE Score > 100	Commercial Banks, Largest Offshore Public Banks and Trusts
Medium High	$20 \leq \text{LITE Score} < 100$	Material Offshore Public Banks, Other Material Domestic Licensees
Medium Low	$5 \leq \text{LITE Score} < 20$	Less Material Offshore Banks and Trusts, Less Material Domestic Trusts with Unrestricted Licenses
Low	LITE Score < 5	Least Material Onshore and Offshore Domestic Banks and Trust, Restricted Trust





# Impact

Impact

**High – Full risk assessment in an 18 month to 2 year cycle**

**Medium High – Full risk assessment in an 18 month to 2 year cycle**

**Medium Low – Annual review and annual structured meeting**

**Low – Base line monitoring of statutory supervisory requirements**

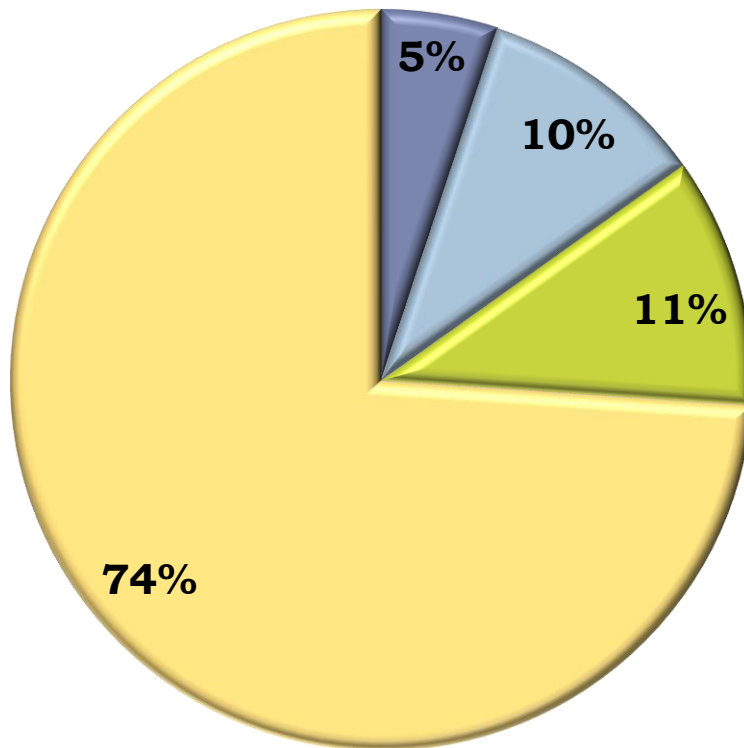


# Impact

Impact

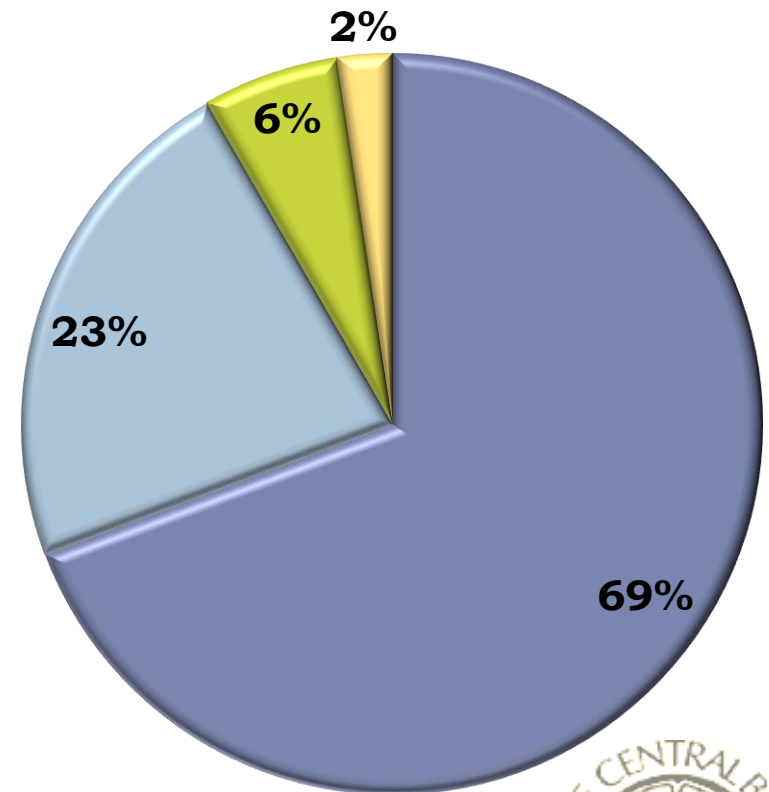
**No. of Licensees (pop. 257)**

■ HIGH ■ MEDIUM HIGH ■ MEDIUM LOW ■ LOW



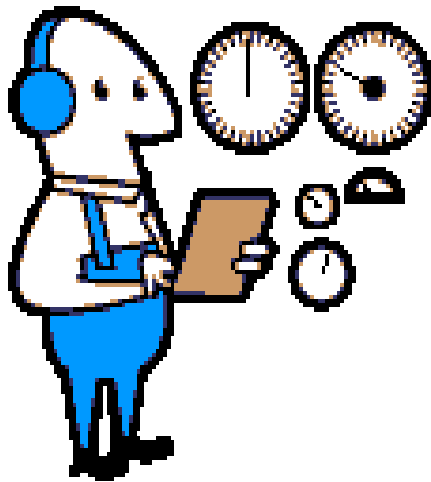
**Impact (Tot. 4,500)**

■ HIGH ■ MEDIUM HIGH ■ MEDIUM LOW ■ LOW

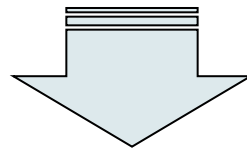


# Probability

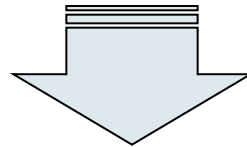
Probability



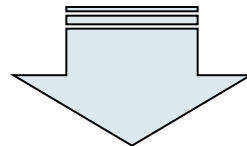
**Risk Type**



**Risk Group**



**Risk Elements**



**Risk Indicators**

- ☐ High level categories of risk
- ☐ Sources 10 risk groups which reflect underlying risk elements.

- ☐ Individual components of the risk group
- ☐ Capture totality of risks that may arise in any firm



# Risk Groups and Risk Elements

Probability

Risk Groups	Risk Elements
<b>Environment and Strategy</b>	<ul style="list-style-type: none"> <li>- Impact of economic, legal, regulatory and political factors</li> <li>- Business Strategy</li> </ul>
<b>Fiduciary &amp; KYC/AML Risk</b>	<ul style="list-style-type: none"> <li>- Nature of business</li> <li>- Fiduciary risk</li> <li>- KYC/AML risk</li> </ul>
<b>Business Process Risk</b>	<ul style="list-style-type: none"> <li>- Litigation/legal risk</li> <li>- People risk</li> <li>- IT systems</li> <li>- Structure/ownership</li> <li>- Other business process risk</li> </ul>
<b>Prudential Risk</b>	<ul style="list-style-type: none"> <li>- Credit risk</li> <li>- Market risk</li> <li>- Liquidity risk</li> </ul>

**Controls**

**Business Risk**

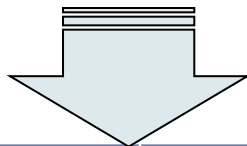
Risk Groups	Risk Elements
<b>Fiduciary &amp; KYC/AML Controls</b>	<ul style="list-style-type: none"> <li>- Fiduciary risk controls (over client assets etc.)</li> <li>KYC/AML Controls</li> </ul>
<b>Business Process Controls</b>	<ul style="list-style-type: none"> <li>- Financial controls</li> <li>- Operational controls</li> <li>- Human resources controls</li> <li>- Outsourcing</li> </ul>
<b>Prudential Risk Controls</b>	<ul style="list-style-type: none"> <li>- Credit risk controls</li> <li>- Market risk controls</li> <li>- Liquidity risk controls</li> </ul>



# Risk Groups and Risk Elements

Probability

Oversight and  
Governance

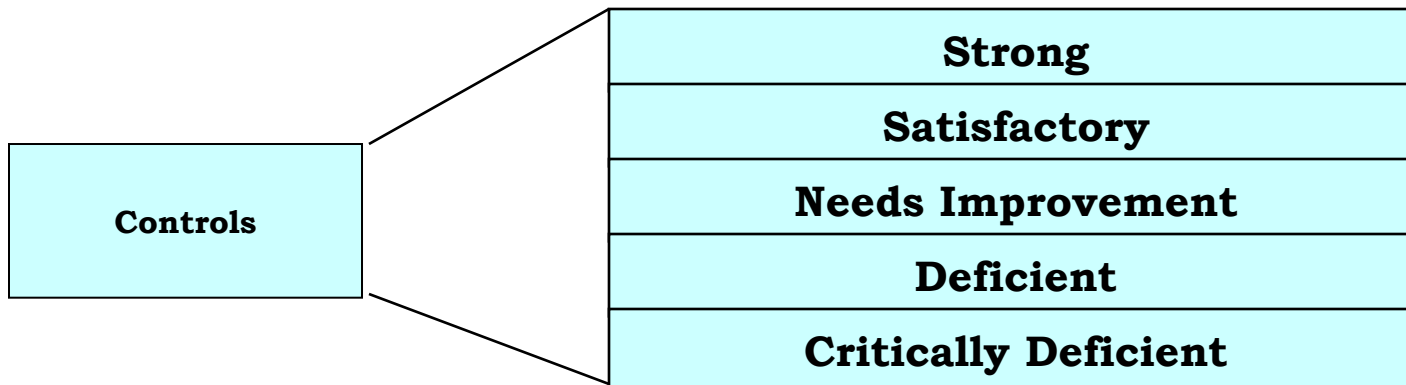
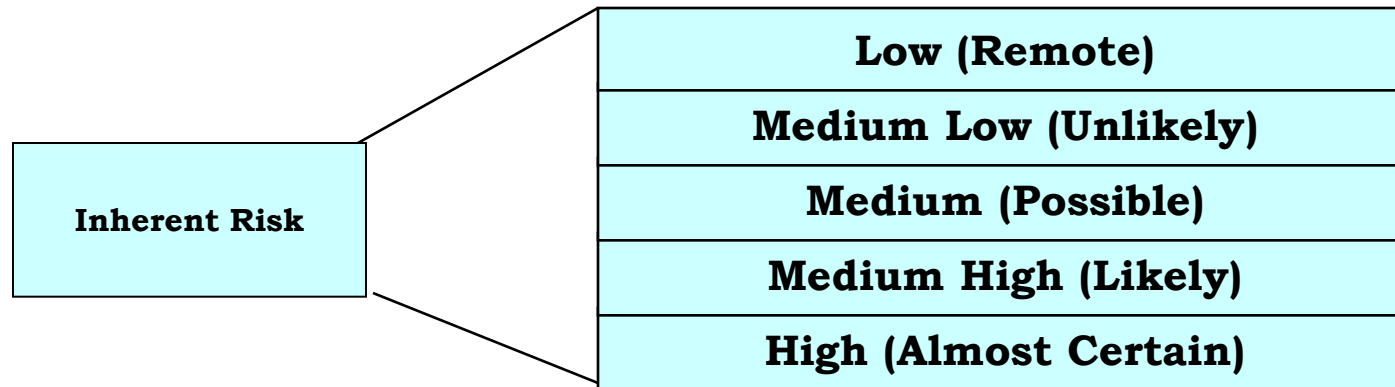


Risk Group	Risk Element
<b>Control Functions</b>	<ul style="list-style-type: none"><li>- Compliance Function</li><li>- Audit Function</li></ul>
<b>Management and Oversight</b>	<ul style="list-style-type: none"><li>- Management</li><li>- Corporate Governance</li><li>- Strategic/Business Planning</li><li>- Relationship with the rest of the group</li></ul>
<b>Financial Soundness (Part of)</b>	<ul style="list-style-type: none"><li>- Liquidity position</li><li>- Capital Position</li><li>- Strength of Earnings</li></ul>



# Inherent Risk vs. Controls

Probability



# Aggregation of Risk Groups

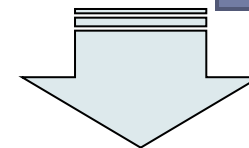
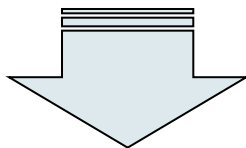
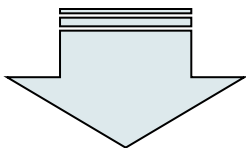
Aggregation

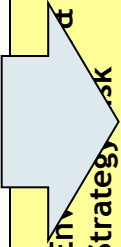
Environmental	Business Risk	Controls Risks	Oversight & Governance		Prudential Mitigants	Net Risk
Environmental & Strategy Risk	Fiduciary & KYC/AML	Fiduciary & KYC/AML Controls	Control Functions	Management & Governance		Fiduciary & KYC/AML
	Business Process Risk	Business Process Controls				Operating
	Prudential Risks	Prudential Risk Controls			Capital Position, Liquidity & Earnings	Financial Soundness
Business Risks		Controls	Oversight & Governance			



# Aggregation of Risk Groups

Aggregation



Environmental	Business Risk	Controls Risks	Oversight & Governance		Prudential Mitigants	Net Risk
 Environmental & Strategy Risk	Fiduciary & KYC/AML	Fiduciary & KYC/AML Controls	Control Functions	Management & Governance		Fiduciary & KYC/AML
	Business Process Risk	Business Process Controls				Operating
	Prudential Risks	Prudential Risk Controls			Capital Position, Liquidity & Earnings	Financial Soundness
Business Risks		Controls	Oversight & Governance			















# CASE STUDY

## BANK A and BANK B

Aggregation

### Inherent Risk

### Controls

High 	5	Critically Deficient 
Medium High 	4	Deficient 
Medium 	3	Needs Improvement 
Medium Low 	2	Satisfactory 
Low 	1	Strong 



















# BANK A

Risk Group	Issue/Risk Element	Risk Score
<b>Environmental &amp; Strategy Risk</b>	<b>Economic Environment</b> - Strong economic recovery <b>Business Strategy</b> -The bank has a heavily concentrated consumer ad commercial loan portfolio	<b>M (3)</b>
<b>Fiduciary &amp; KYC/AML Risk</b>	<b>KYC/AML Risk</b> – The bank has low risk customers along with few PEPS	<b>ML (2)</b>
<b>Business Process Risk</b>	<b>People Risk</b> – People turnover low and loss of employees in key functions low; sufficient skilled staff to manage business and control risk <b>Operational Risk</b> – Low levels of operational losses; <b>Structure &amp; Characteristic of Ownership</b> – stand alone entity with no external support	<b>ML (2)</b>
<b>Prudential Risk</b>	<b>Credit Risk</b> – Over 60% of the bank’s assets are in loans with 70% of loans are consumer with the remaining held as trade financing commercial & mortgage loans; Salary deduction limit exposures to clients. <b>Liquidity risk</b> – Relatively high cash flow with 25% - 30% of total assets held in Cash and Investments (Govt securities and bonds). Strong customer base with well distributed retail deposits	<b>ML (2)</b>



Risk Group	Issue/Risk Element	Risk Score
<b>Fiduciary &amp; KYC/AML Controls</b>	<b>KYC/AML Controls</b> – Nearly half of client files non-compliant; Branch staff not fully understanding risk rating of customers;	<b>CD (5)</b>
<b>Business Process Controls</b>	<b>IT Controls</b> – Absence of robust IT infrastructure; Change of 3 systems within 5 years <b>Operational Controls</b> – Low staff complement compromises segregation of duties <b>Human Resources Control</b> – Lack of clear succession planning; no staff development programme	<b>D (4)</b>
<b>Prudential Controls</b>	<b>Credit Risk Controls</b> – Lack of robust credit policies; credit review absent <b>Liquidity Risk Controls</b> – Absence of Liquidity planning and reporting; Contingent line of funding not adequate to cover liquidity gap for no extended period of time	<b>D (4)</b>
<b>Control Functions</b>	<b>Compliance Function</b> – Failure of compliance to implement & monitor KYC/AML controls; no differentiation in monitoring high risk clients (PEPS, Senior Public Officials); high turnover of compliance staff <b>Internal Audit</b> – Robust internal audit program (policies and procedures), however parental oversight in implementing and tracking deficiencies weak	<b>CD (5)</b>
<b>Management &amp; Governance</b>	<b>Corporate Governance</b> – Lack of self assessment to support internal audit; board composition not diverse; Annual board attestations incomplete <b>Management</b> – Executive management dominated by one individual; inability to maintain high staff moral; high turnover in middle management <b>Strategic Plan</b> – evidence of strategic plan in place but needs updating	<b>D (4)</b>
<b>Financial Soundness</b>	<b>Capital Position</b> – CAR below target ratio set by regulator <b>Liquidity Position</b> – Satisfactory LAR levels despite heavy reliance on institutional depositors <b>Strength of Earnings</b> – Pressure on interest rate spread; increase in arrears slow earnings	<b>NI (3)</b>

# Net Risk = High

Environmental	Business Risk	Controls Risks	Oversight & Governance		Prudential Mitigants	Net Risk
Environmental & Strategy Risk 	Fiduciary & KYC/AML 	Fiduciary & KYC/AML Controls 	Control Functions 	Management & Governance 		Fiduciary & KYC/AML 
	Business Process Risk 	Business Process Controls 				Operating 
	Prudential Risks 	Prudential Risk Controls 			Capital Position, Liquidity & Earnings 	Financial Soundness 
Business Risks 		Controls 	Oversight & Governance 			



# BANK B

Risk Group	Issue	Risk Score
<b>Environmental &amp; Strategy Risk</b>	<b>Economic Environment</b> - Prolonged Global Downturn, Increased Unemployment and sluggish economic growth. <b>Business Strategy</b> - Complex products ; New customer strategy compromising core asset component of mortgages	<b>MH (4)</b>
<b>Fiduciary &amp; KYC/AML Risk</b>	<b>Nature of Business</b> – Large number of PEP's; business relies on introductions from intermediaries in overseas jurisdictions	<b>M (3)</b>
<b>Business Process Risk</b>	<b>IT Systems</b> – effectiveness of IT system hindered by ineffectiveness of service providers <b>Structure &amp; Characteristic of Ownership</b> – stand alone entity with small international parent company in financial difficulties	<b>MH (4)</b>
<b>Prudential Risk</b>	<b>Credit Risk</b> – Concentration of mortgage lending; uncertainty regarding collateral values; deterioration in credit quality greater than peer averages <b>Liquidity risk</b> – Excessive reliance on wholesale funding; inability to obtain funding support at times of stress	<b>MH (4)</b>

Risk Group	Issue	Risk Score
<b>Fiduciary &amp; KYC/AML Controls</b>	<b>KYC/AML Controls</b> – Strong AML platform and training; Over 95% compliant with KYC documents of customers.	<b>S (1)</b>
<b>Business Process Controls</b>	<b>Financial Controls</b> –remains consistently compliant in its regulatory and financial reporting <b>Operational Controls</b> – Operations are transparent as spelt out in policies and procedures <b>Human Resources Control</b> – Major staff development projects yielding positive results (employee satisfaction)	<b>S (1)</b>
<b>Prudential Controls</b>	<b>Credit Risk Controls</b> – Credit policies generally satisfactory but provisioning policies require review <b>Liquidity Risk Controls</b> – Treasury continues to be adequate for nature of business; liquidity positions are monitored daily and produce weekly funding reports	<b>SAT (2)</b>
<b>Control Functions</b>	<b>Compliance Function</b> – strong compliance policies and procedures. <b>Internal Audit</b> – Outsourced IA function to external firm; bank has satisfactorily addressed issues identified; audit committee approved audit plan and reviews quarterly	<b>S(1)</b>
<b>Management &amp; Governance</b>	<b>Corporate Governance</b> – Board has diverse skill set and performs annual self assessments; <b>Management</b> – Adequate management size; assess management efficiency ratio <b>Strategic Plan</b> – Has a defined strategic plan with updates to strategy noted in annual report	<b>SAT (2)</b>
<b>Financial Soundness</b>	<b>Capital Position</b> – Consistently remained slightly above CBOB cap adequacy ratio <b>Liquidity Position</b> – Liquidity position reported to CBOB generally in a surplus <b>Strength of Earnings</b> – Despite a decline in earnings, (year-over-year) profit margin remains between 15-20%; Earnings support operations	<b>SAT (2)</b>

# Net Risk = Low

Environmental	Business Risk	Controls Risks	Oversight & Governance		Prudential Mitigants	Net Risk
Environmental & Strategy Risk <div>MH</div>	Fiduciary & KYC/AML <div>M</div>	Fiduciary & KYC/AML Controls <div>S</div>	Control Functions <div>S</div>	Management & Governance <div>SAT</div>		Fiduciary & KYC/AML <div>ML</div>
	Business Process Risk <div>MH</div>	Business Process Controls <div>S</div>				Operating <div>L</div>
	Prudential Risks <div>MH</div>	Prudential Risk Controls <div>SAT</div>			Capital Position, Liquidity, Earnings <div>SAT</div>	Financial Soundness <div>ML</div>
Business Risks <div>MH</div>		Controls <div>S</div>	Oversight & Governance <div>S</div>			



# Risk Mitigation

---



Mitigation

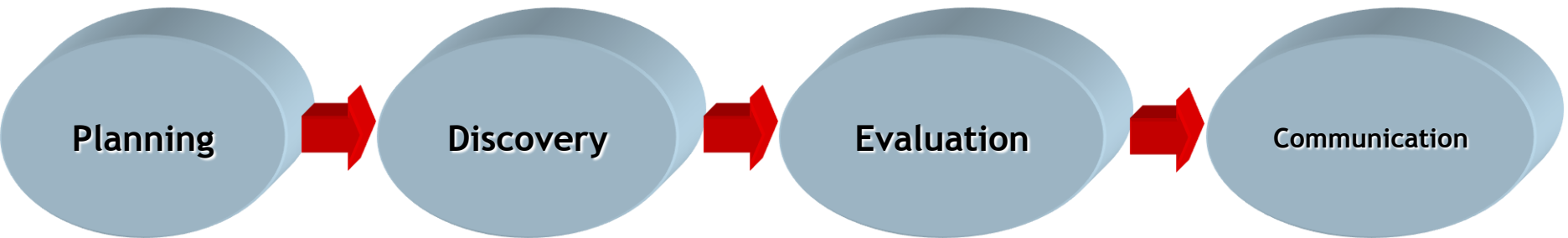
- ▶ Actions in response to issues raised may be:
  - ▶ for the firm themselves to perform
  - ▶ for the Central Bank to undertake
  - ▶ for a third party, e.g.
    - ▶ overseas regulators
    - ▶ the firm's external & internal auditors
- ▶ Clear timescale and intended outcomes
- ▶ Choice of tools depend on severity of risk





# Stages in the Risk Based Assessment Process

---



# Important Dates

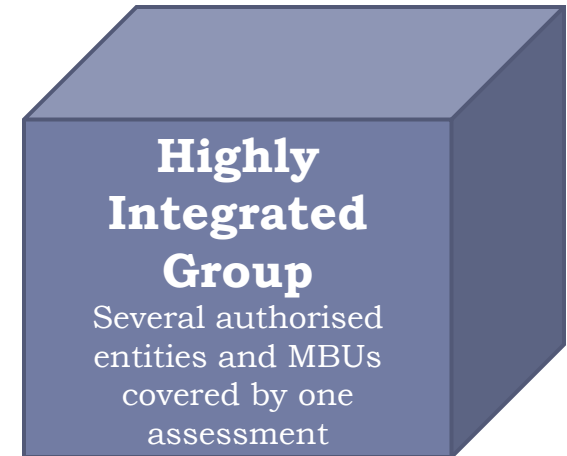
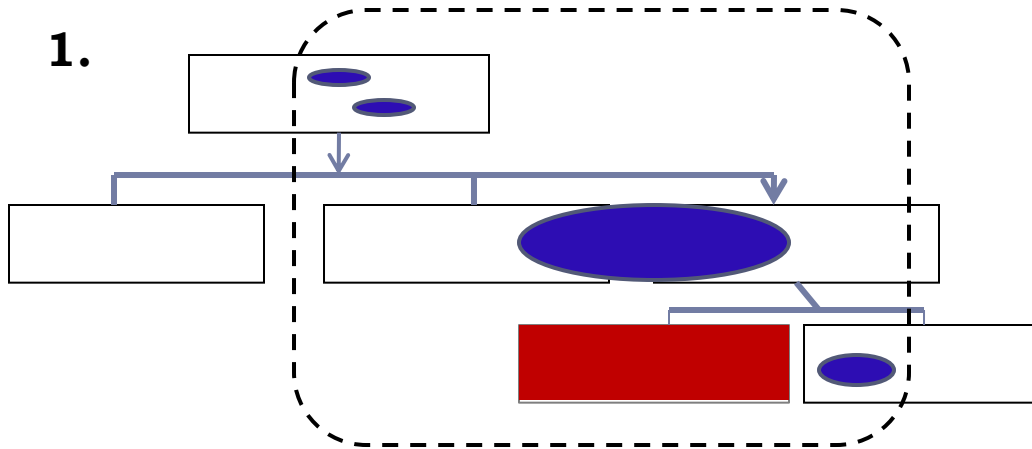
---

- ▶ 3 phase roll-out process
- ▶ Meetings with banks scheduled for:
  - ▶ November 2010
  - ▶ January 2011
  - ▶ March 2011

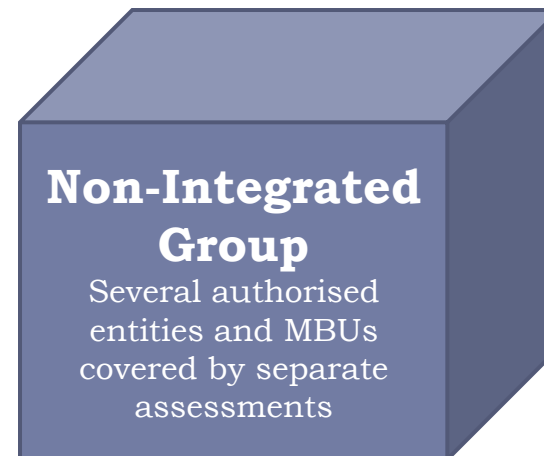
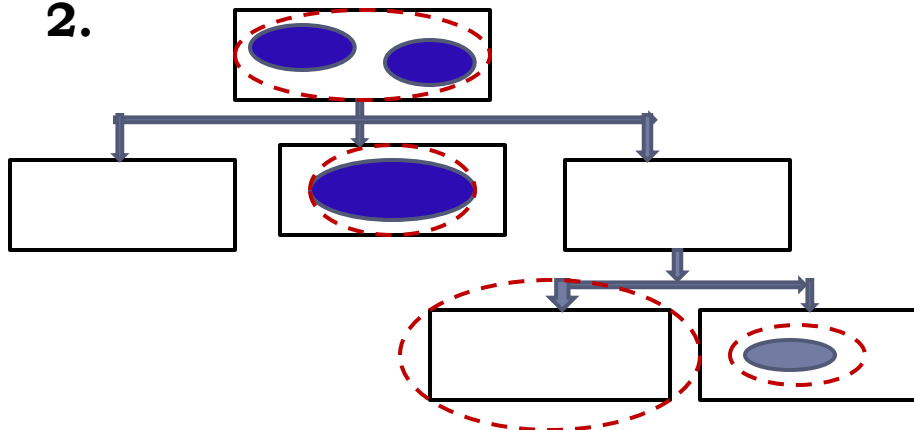


# Deciding which firms will be assessed and how

1.



2.



# Planning

---

- ▶ Gather existing knowledge of firms by analysing the following:
  - ▶ Probability assessments of the firm
  - ▶ Financial Soundness indicators
  - ▶ CAMEL analysis – capital, asset quality, management, liquidity, strength of earnings, credit quality, interest rate risk and market risk
  - ▶ Most recent on-site examination report
  - ▶ Risk issues discovered during meetings and supervisory interactions



# Planning

---

- ▶ Information Requests
  - ▶ Risk Assessment Questionnaire
  - ▶ Product and Service Offering Matrix
  - ▶ Other relevant documents which may include:
    - ▶ Balance Sheet and Profit and Loss Financials
    - ▶ Latest Management accounts for the operations
    - ▶ Strategic/ Business plan
    - ▶ Internal audit plans and reports
    - ▶ Most recent Management Letter
    - ▶ Internal organization chart



# Risk Groups and Risk Elements

Probability

Risk Groups	Risk Elements
<b>Environment and Strategy</b>	<ul style="list-style-type: none"> <li>- Impact of economic, legal, regulatory and political factors</li> <li>- Business Strategy</li> </ul>
<b>Fiduciary &amp; KYC/AML Risk</b>	<ul style="list-style-type: none"> <li>- Nature of business</li> <li>- Fiduciary risk</li> <li>- KYC/AML risk</li> </ul>
<b>Business Process Risk</b>	<ul style="list-style-type: none"> <li>- Litigation/legal risk</li> <li>- People risk</li> <li>- IT systems</li> <li>- Structure/ownership</li> <li>- Other business process risk</li> </ul>
<b>Prudential Risk</b>	<ul style="list-style-type: none"> <li>- Credit risk</li> <li>- Market risk</li> <li>- Liquidity risk</li> </ul>

**Controls**

**Business Risk**

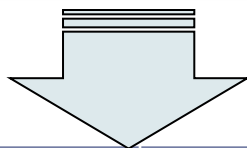
Risk Groups	Risk Elements
<b>Fiduciary &amp; KYC/AML Controls</b>	<ul style="list-style-type: none"> <li>- Fiduciary risk controls (over client assets etc.)</li> <li>KYC/AML Controls</li> </ul>
<b>Business Process Controls</b>	<ul style="list-style-type: none"> <li>- Financial controls</li> <li>- Operational controls</li> <li>- Human resources controls</li> <li>- Outsourcing</li> </ul>
<b>Prudential Risk Controls</b>	<ul style="list-style-type: none"> <li>- Credit risk controls</li> <li>- Market risk controls</li> <li>- Liquidity risk controls</li> </ul>



# Risk Groups and Risk Elements

Probability

Oversight and  
Governance



Risk Group	Risk Element
<b>Control Functions</b>	<ul style="list-style-type: none"><li>- Compliance Function</li><li>- Audit Function</li></ul>
<b>Management and Oversight</b>	<ul style="list-style-type: none"><li>- Management</li><li>- Corporate Governance</li><li>- Strategic/Business Planning</li><li>- Relationship with the rest of the group</li></ul>
<b>Financial Soundness (Part of)</b>	<ul style="list-style-type: none"><li>- Liquidity position</li><li>- Capital Position</li><li>- Strength of Earnings</li></ul>



# Discovery

---

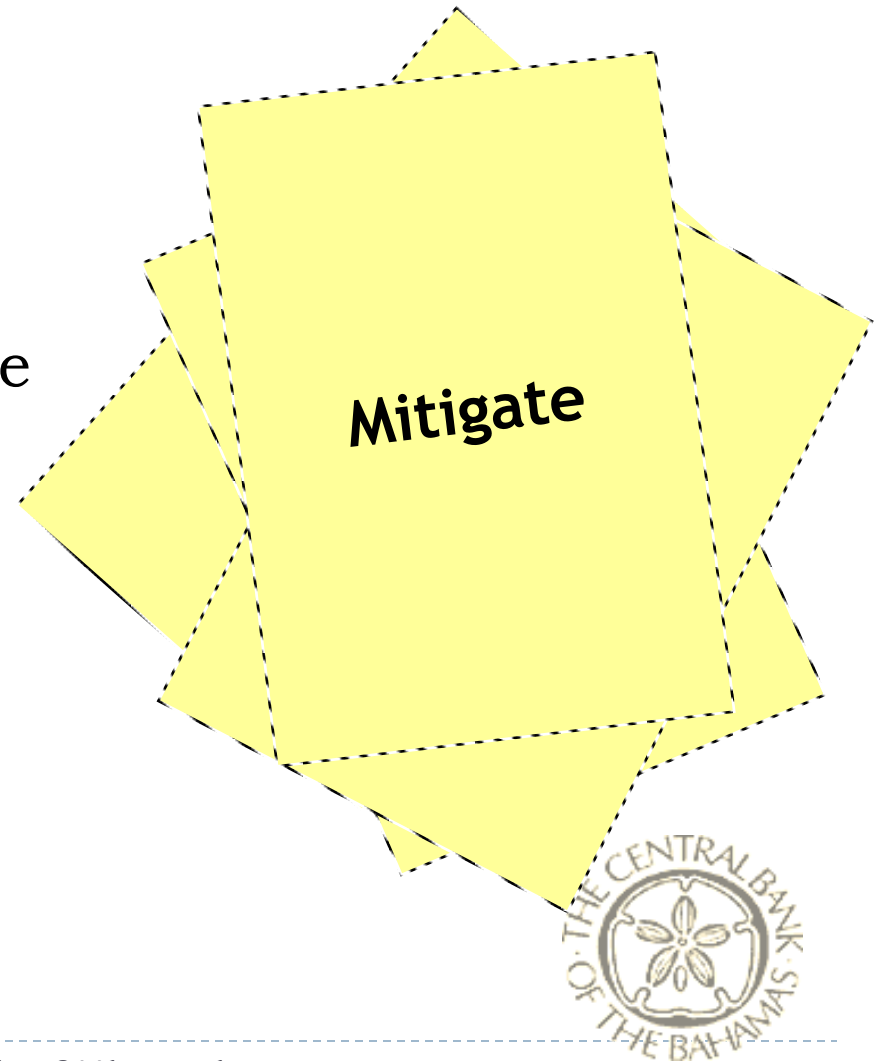
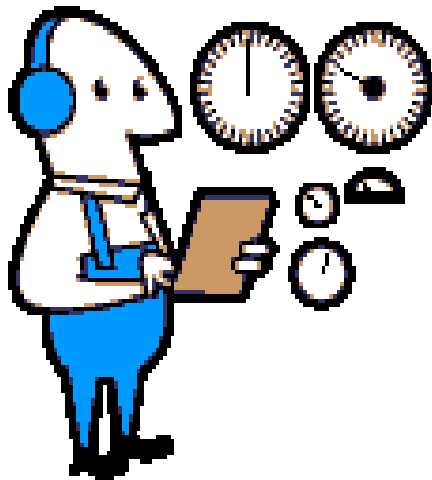
- ▶ Extended meetings to discuss risk profile of the firm will allow supervisors to:
  - ▶ Fill gaps in existing knowledge
  - ▶ Investigate any specific areas that have emerged in the off-site review
- ▶ Meetings with Senior I and II will include follow-up questions from the risk assessment questionnaire.
- ▶ In future 3-4 days for high impact firms?

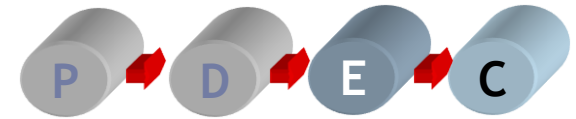




# Evaluation

- ▶ Finalising
- ▶ Recording
- ▶ Validating
- ▶ Risk Mitigation Programme





# Risk Mitigation

---

- ▶ Actions in response to issues raised may be:
  - ▶ for the firm themselves to perform
  - ▶ for the Central Bank to undertake
  - ▶ for a third party, e.g.
    - ▶ overseas regulators
    - ▶ the firm's external & internal auditors
- ▶ Clear timescale and intended outcomes
- ▶ Choice of tools depend on severity of risk



# Communication

- ▶ 2-part final communication
  - ▶ Letter setting out key findings from our work to include:
    - ▶ Overall view of main risks and controls
    - ▶ A summary of the rating of the firm
    - ▶ Key issues and points of the risk mitigation programme
  - ▶ Risk mitigation programme
    - ▶ Issues identified
    - ▶ Outcomes we seek for each issue
    - ▶ Action to be taken to achieve the outcome
    - ▶ Timetable for actions



"We've considered every potential risk except the risks of avoiding all risks."



# Issues for Further Discussion

---

- ▶ Integration of risk assessment process and on-site examination
- ▶ Simplified probability risk assessment for lower impact firms





Thank You

**QUESTIONS**

