FINANCIAL INSTITUTION RATING METHODOLOGY

CREDIT RATING AGENCY OF BANGLADESH LIMITED

Presentation Outline

FI's Risk – A bird's eye-view

Rating Methodology

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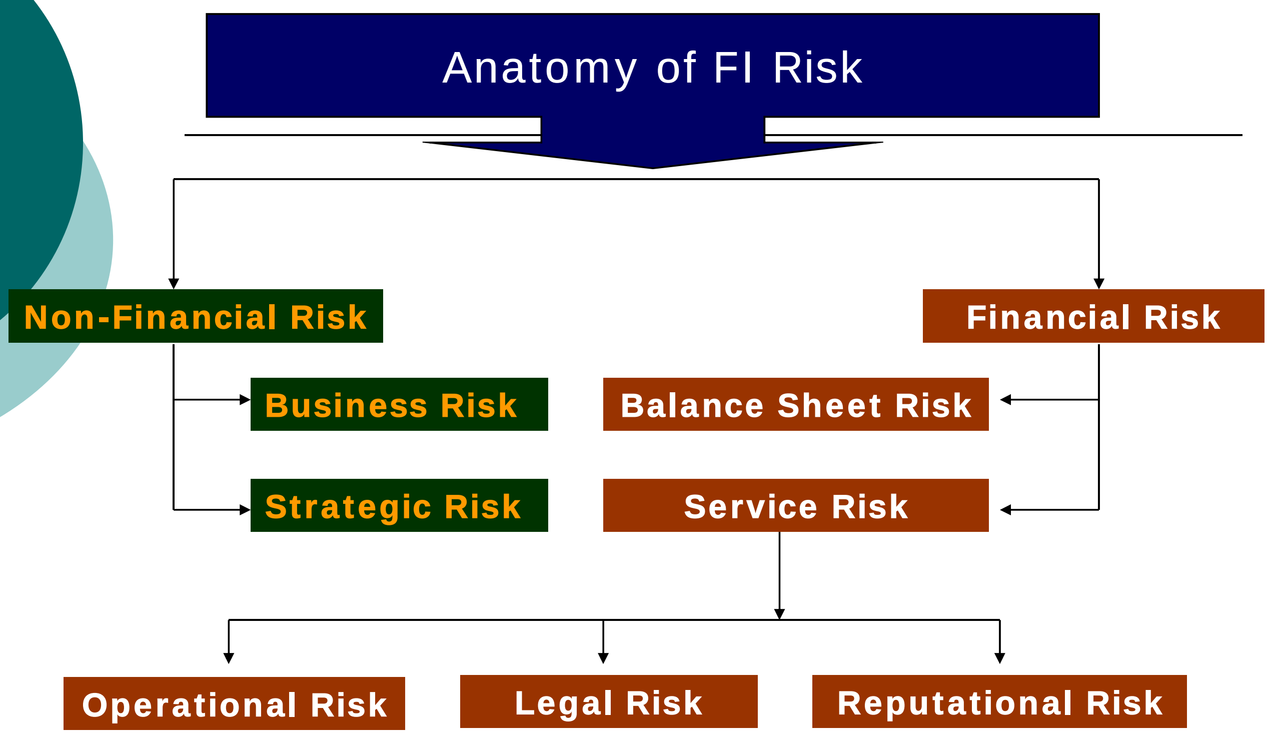
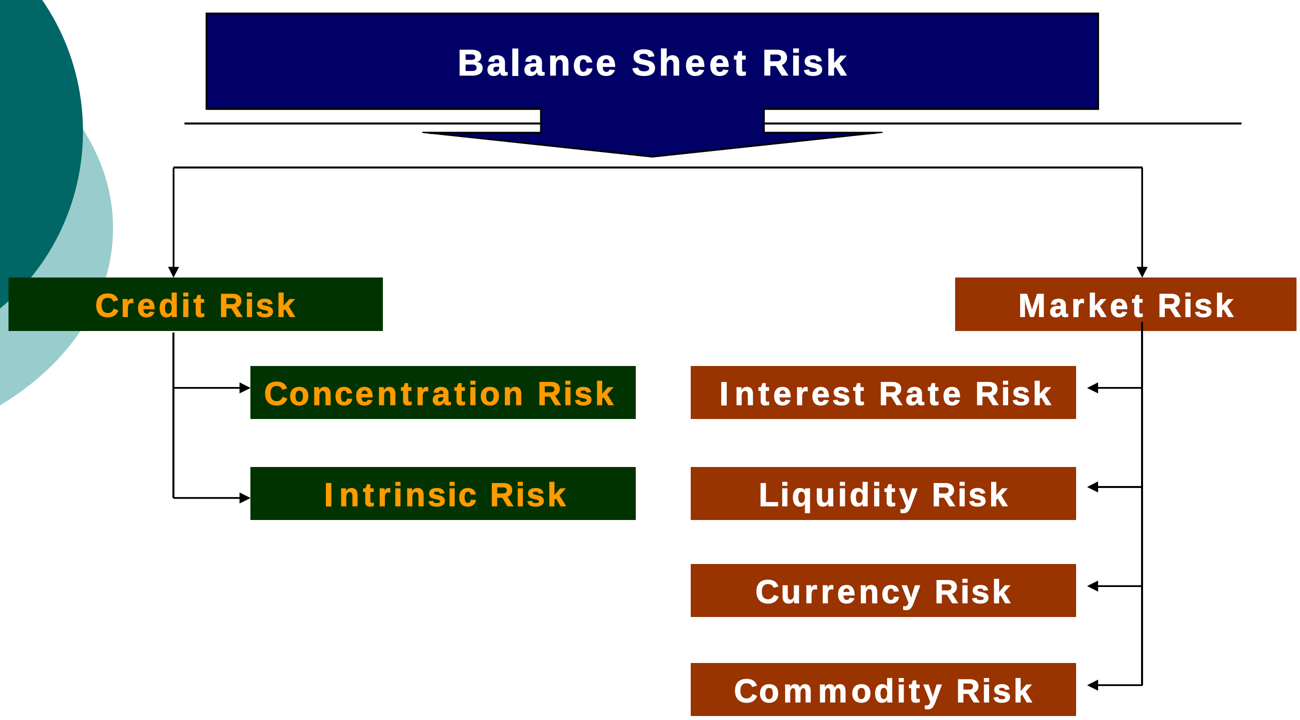
FI's Risk – A bird's eye-view

Rating Methodology


Anatomy of FI Risk
Non-Financial Risk
Financial Risk
Business Risk
Strategic Risk
Balance Sheet Risk
Service Risk
Operational Risk
Legal Risk
Reputational Risk


Balance Sheet Risk
Credit Risk
Market Risk
Concentration Risk
Intrinsic Risk
Interest Rate Risk
Liquidity Risk
Currency Risk
Commodity Risk

Presentation Outline

FI's Risk – A bird's eye-view

Rating Methodology

RATING PROCESS FLOW

Rating Frame Work

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Analysis and Evaluation

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Rating Committee Meeting

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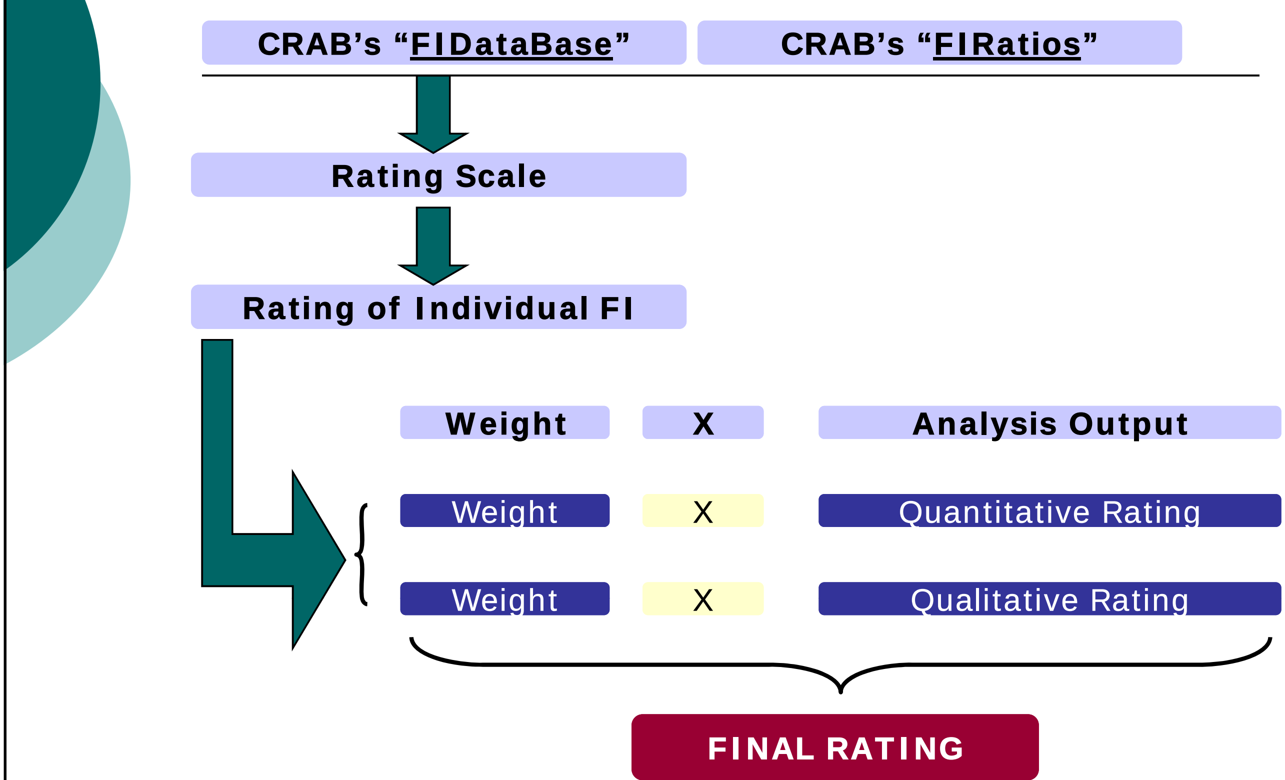
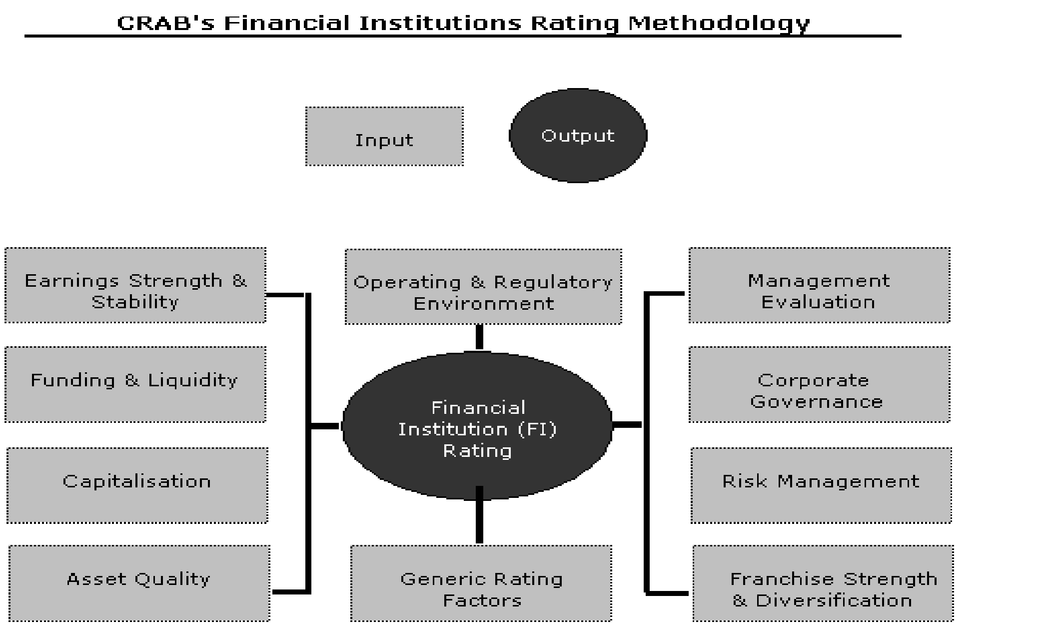
Final Rating

Rating Framework



CRAB's Rating Methodology



FACTOR : EARNINGS STRENGTH AND STABILITY

Pre-Tax Earnings (BDT Million)

- The strength and persistency of FIs pre-tax earnings is a direct function of its franchise strength and competitive position within its various lines of business.
- Weighted average pre-tax earnings of last three years, with the most recent year receiving 60% of the overall weight, and the remaining two years receiving 20% each.

Pre-Tax Margin

Pre-Tax Earning Volatility

- For bondholders, a company's earnings stability is arguably more important than growth.
- One simple ratio that CRAB believes provides a measure of a firm's earnings volatility relative to its level of earnings is the coefficient of variation, which compares the standard deviation of a firm's pre-tax earnings in the trailing 12 quarters to the mean of population.
- CRAB examines the coefficient of variation for pre-tax margins from various perspectives, including over many different time periods and/or by excluding extraordinary events.
- Review of recurring "cash-based" earnings, principally net interest, lease and fee income, as opposed to non-recurring gains/losses, non-cash gains or mark-to-market gains on derivatives or investments.

Efficiency

- Look into the current year efficiency level
- Last Five Years Trend
- Trend Analysis Relative to Industry and Peer

Key Indicator

- Cost to Income Ratio : Non Interest Expenses relative to Revenue [Net Interest Income + Non Interest Income + Net Gain or Losses on Securities Sales]
- Cost Per Branch
- Cost Per Employee

This is a measure of FI's efficiency and its ability to generate incremental profits with added revenue

Ratio is judged in terms of business growth, management quality and operating performance

FACTOR: Asset Quality

- Main Driver of Future Earnings
- Delinquent Loan position
- Non Performing Loan Status and Trend
- Causes behind non performing loan
- Grading of NPL i.e. Special Mention Account, Substandard, Doubtful and Bad Loss
- Reschedule Status
- Write off Status
- Fresh NPL Generation
- Reserve Position
- Provision Status

Asset Quality – Key Indicators

Asset Quality	
Delinquent Loans / Period End Loans or Leases	Loans or leases classified as past due at least 30 days relative to period end gross loans/leases.
Non-performing Loans / Period-end Loans or Leases	Loans or leases where income has either stopped accruing or collectability is impaired to period end loans/leases.
Gross Charge-offs / Avg. Loans	Gross loan principal losses versus average loans during the period
Net Charge-offs / Avg. Loans	Gross principal losses less recoveries versus average loans during the period
Reserves / Non-performing Assets	Loan loss reserves to non performing assets.
Provisions / Net Charge-offs	Provision expense to net credit losses.

Asset Quality

Trends in Asset Quality (Templete)

Amount in Million BDT

	2007	2006	2005	2004	2003	2002
Gross NPLs	504.3	494.8	391.5	142.9	81.6	0.4
As % of Gross Loans	2.27%	2.77%	3.30%	1.75%	1.50%	0.01%
Fresh NPL	108.1	166.6	328.2	61.4	81.2	0.4
Fresh NPL as % of Gross NPL	21%	34%	84%	43%	99%	98%
Loan Loss Reserves (LLR)	545.2	351.8	231.1	139.0	62.8	21.6
LLR to GNPLs	108.1%	71.1%	59.0%	97.2%	77.0%	5030.5%
Net NPL	127.6	140.2	190.0	127.9	75.4	0.3
Net NPLs to Equity (%)	6.5%	8.9%	16.1%	14.4%	20.1%	0.1%
Net NPL to Net Loans (%)	0.6%	0.8%	1.6%	1.6%	1.4%	0.0%
Grading of Gross NPLs (%):						
Substandard	10%	13%	41%	1%	1%	50%
Doubtful	0%	13%	3%	42%	0%	50%
Bad	90%	74%	57%	58%	99%	0%
Number of NPL accounts	83	81	68	31		
Recovery Pattern:						
Recovery	98.60	63.3	78.1	-	-	-
Recovery as % of Gross NPL	20%	13%	20%	-	-	-
Write-off:						
Write-off	-	-	1.49	-	-	-
Write-off as % of Gross Loans	-	-	0.01%			
Reschedule:						
Reschedule of Loans	234.00	217.5	365.5	-	-	-
Reschedule as % of Gross Loans	1.05%	1.22%	3.08%	-	-	-

FACTOR : CAPITALIZATION

- CRAB's assessment of capital encompasses many views, not just point in time measures, but also management's leverage targets encapsulated in capital management plans.
- In evaluating capital, CRAB at first look into the regulatory requirement.
- Core capital in the context of asset risk.
- Considers dividend policies, internal capital generation rate, and asset growth rates.
- While CRAB calculates traditional leverage measures such as debt/tangible equity, CRAB prefers risk-adjusted measures of capital since these better align capital with risk.

CRAB often compares internal capital generation rates to asset growth. If the internal capital generation rate is well below asset growth, a FI will become more leveraged and could result in negative rating actions unless new equity is raised.

KEY INDICATORS

Capitalization	
Tangible Equity / Managed Assets	Total Shareholder's equity less goodwill & intangibles to managed assets.
Core Capital / Managed Assets	Core capital to period end managed assets.
Core Capital + Reserves / Assets	Core capital plus loan loss reserves to period end managed assets.
Managed Debt / Core Capital	Reported interest bearing liabilities plus off-balance sheet funding to core capital.
Dividend Payout Ratio	Dividends as a percentage of reported net income.
Internal Capital Generation	Net income less dividends and net share repurchases to prior period equity.
Adjusted EBITDA / Debt (x)	Earnings before interest taxes depreciation and amortization less capital expenditures to interest bearing liabilities.

FACTOR : LIQUIDITY & FUNDING

- ***Liquidity Management***
  - Liquidity risks as a function of the unique structure of a FI's asset and liabilities
  - Degree to which illiquid assets (primarily loans) are funded by core liabilities that are stable (primarily customer deposits, long term debts and equity)
  - Asset Liability matching in light of interest rate dynamics
  - Liquidity monitoring and control system
  - Diversification of its funding
  - Contingent planning and liquidity stress testing
- ***Market Risk Appetite***
  - Sensitivity of both trading and non trading books to major changes in interest rates, equity prices, foreign exchange rates and credit spreads.

Key Indicators

Liquidity and Funding	
Net Cash Capital (NCC)/ Liquid Net Assets (LNA)	Surplus of Common Equity plus long term debt over illiquid assets plus haircuts on security inventories as percentages of net assets less illiquid assets
Short-term Debt / Total Interest Bearing Liab.	Debt with an original maturity of less than one year to total interest bearing liabilities.
Short- term Debt + CPLTD / Total Interest Bearing Liab.	Short-term debt plus current portion of long-term debt to total interest bearing liabilities.
Secured Debt / Total Interest Bearing Liab.	Debt secured by corporate assets to total interest bearing liabilities.
Committed Funding Facilities / Total Funding	Committed and undrawn funding facilities to total interest bearing liabilities.
Unencumbered Assets / Unsecured Debt	Amount of assets free and clear of any encumbrance relative to unsecured debt.

RATIOS

- **Current + Savings Deposit as % of Total Deposit**

  Current and Savings Deposit is low cost funding sources compare to its fixed term deposit. Fixed term deposit is highly interest rate sensitive. Current and Savings Deposit is less interest rate sensitive. These sources also indicate the franchise value, customer confidence, networking efficiency of the bank.

  In the following table the mean, median, standard deviation, minimum and maximum value as well as percentiles of the industry are given:

Customer Deposit and Savings Deposit to Total Deposit: Industry Statistics

N	Valid	114
Mean		32.8651
Median		27.0700
Std. Deviation		18.41595
Minimum		4.58
Maximum		83.03
Percentiles	12.5	14.8400
	25	17.8275
	37.5	22.0463
	50	**27.0700**
	62.5	35.4563
	75	46.4900
	87.5	59.9950

- **Advance to Deposit Ratio**

FACTOR : FRANCHISE STRENGTH & DIVERSIFICATION

Why It Matters

- *Solidity of a FI's market standing*
- *Indicates the ability to generate and sustain earnings*

Key Analytical Area

- ***Market Share and Sustainability***
  - **Portfolio base**
  - **Trend over the Period**
  - **Business Tenure**
- ***Earnings Stability***
  - **Degree of predictability of main business lines**
  - **Focus area: Fund / Fee / Stock Market**
- ***Earnings Diversification***

FACTOR : MANAGEMENT EVALUATION

- Depth and breadth of experience
- Succession plans
- Turnover
- Quality of second tier of management
- How the management team fits into the organizational structure; and
- Quality of management information systems (MIS).

FACTOR : CORPORATE GOVERNANCE

Key Analytical Area

- ***Corporate Governance***
  - Relationship between the BoD, Management and Shareholders
  - Degree of relationship to balance effectively shareholders and creditors interest
  - Board Effectiveness
  - Board Independence
  - Ownership and Organizational Complexity
  - Management Compensation
  - Key Personnel Risk
  - Insider and Related Party Risk
  - Integrity of Accounting and Audit

FACTOR : CONTROLS AND RISK MANAGEMENT

- ***Controls and Risk Management***
  - Internal Checks and Balance System
  - Functionality of System in light of business mix
  - Technological advancement
  - Past Control issues and qualified Audit Reports
  - **Risk Management**
    - Risk Governance
    - Risk Management
    - Risk Measurement
    - Risk Infrastructure and Intelligence

Checks and balances between senior executives and Board,

Between risks and business line units,

Limit system, Regular use of stress tests, and Independence of CFO,CRO

Risk Management

- ***Risk Governance:***
  - Involvement of directors in reviewing risk appetites and control effectiveness, director's awareness of risks, relevance of their backgrounds to assess risks
  - Collective and individual responsibilities of and awareness by executive management on risk matters, integration of risk considerations in budgeting, capital allocation, and determination of capital adequacy
  - Organization, staffing, resources, enterprise –wide role of risk function(s)

- ***Risk Management:***
  - Risk control process- mandates of units controlling credit and operational risk, practices to ensure limit disciplines
  - Relationship of risk to earnings, capital, limit setting, portfolio mix and diversification
  - Risk mitigations

- ***Risk Analysis and Quantification:***
  - Quantification, measures used for setting of limits and running the business, stress testing, capital determination
  - Monitoring and Reporting- rigor, appropriateness and usefulness of reports and alert systems

- ***Risk Infrastructure and Intelligence:***
  - Risk infrastructure – information and knowledge systems
  - Risk intelligence – validity of scorecard/CRG and data used

RISK POSITIONING

- ***Financial Reporting Transparency***
  - Global Comparability of Reported Financial Information
  - Frequency and Timeliness of Reporting
  - Quality of Financial Information reported by FIs
- ***Credit Risk Concentration***
  - Large exposures to single obligor, industry or region
  - Good diversification across economic sectors enables the bank to ride through business cycles without undue harm to asset quality
  - Borrower Concentration: Large exposures relative to Core Capital and Pre-tax pre Provision Income
  - Industry Concentration: Aggregate exposures to a particular sector or industry relative to Core Capital
  - Regulatory Limit: Individual borrower limit as well as aggregate large loan exposure limit corresponding to its level of NPL relative to its paid up capital

FACTOR: OPERATING AND REGULATORY ENVIRONMENT

- ***Competitive Dynamics***

- ***Regulatory Environment***