# GUIDELINES ON INTERNAL CREDIT RISK RATING SYSTEM FOR BANKS



BANGLADESH BANK Version 2.0

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### 1.1 Introduction

The aim of credit risk management is to maximize a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable levels. Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual borrower transaction. The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization.

Since exposure to credit risk continues to be the leading source of problems in banks, banks should have a keen awareness of the need to identify, measure, monitor and control credit risk as well as to determine that they hold adequate capital against these risks and they are adequately compensated for risks incurred. The Internal Credit Risk Rating System describes the creditworthiness of the borrower of a particular sector based on the assessment criteria set for that sector. Since the leverage, liquidity, profitability, as well as other quantitative and qualitative indicators vary significantly from sector to sector, the ICRRS is developed to calibrate such diversities into the rating system. Moreover, the relevant and appropriate numbers of financial ratios are used in Internal Credit Risk Rating System for assessing the financial and credit strength of the borrowers. The set of the qualitative questionnaires used in the process is also more robust. This will effectively ensure that the borrowers from different sectors and industries are assessed based on the unique characteristics of those sectors.

### 1.2 Definition of Internal Credit Risk Rating System and Internal Credit Risk Rating

1.2.1 Internal Credit Risk Rating System refers to the system to analyze a borrower's repayment ability based on information about a customer's financial condition including its liquidity, cash flow, profitability, debt profile, market indicators, industry and operational background, management capabilities, and other indicators.

1.2.2 The summary indicator derived from the system will be called Internal Credit Risk Rating (ICRR) - a key reference for credit risk assessment and decision making.

### **1.3** Use of Internal Credit Risk Rating System (ICRRS)

Internal Credit Risk Rating System will be an integral part of credit risk management for the banks. The key uses of this guideline are as follows:

- a) To provide a granular, objective, transparent, consistent framework for the measurement and assessment of borrowers' credit risk.
- b) To facilitate the portfolio management activities.
- c) To assess the quality of individual borrower to help the banks to determine the quality of the credit portfolio, line of business of the branch or the Bank as a whole.
- d) To be used for individual credit selection, credit pricing, and setting credit limit and terms & conditions.

### 1.4 Functions of Internal Credit Risk Rating System

- a) Internal Credit Risk Rating System is a fully automated credit risk scoring system that calibrates the characteristics of different sectors and industries in one single model;
- b) To get the appropriate rating and score, the analyst shall select the appropriate sector or industry from the drop down list given in the top page of the template. If the right sector or industry is not selected, the rating will not reflect the unique characteristics of the particular sector or industry.
- c) If the borrower is in multiple lines of business, the sector should be used assessing the lines of business generating the highest portion of the revenue &/or profit. If no particular line of business can be singled out, the ICRRS should be conducted using "other industry" if manufacturing, or "other service" if service.

### **1.5** General Instructions

- a) Banks shall strictly follow this guidelines and rating system issued by Bangladesh Bank without making any change, extension, modification or deletion.
- b) The ICRRS shall be applicable for all exposures (irrespective of amount) except consumer loans, small enterprises having total loans exposures less than BDT 50 (fifty) lac and small enterprises in manufacturing having total loans exposures less than BDT 1 (one) crore, short-term agri loans, micro-credit and lending to bank, NBFI and Insurance.
- c) The quantitative part of the ICRRS exercise shall be conducted by a credit officer/an analyst. The Relationship Manager/Branch Manager shall complete the qualitative assessment part to generate the total scores.
- d) ICRRS shall be an integral part of the credit approval process.
- e) The credit risk function of the bank is responsible for the accuracy and integrity of the rating as the second line of defense.
- f) The executive summary report of the ICRR score of the borrower shall be approved and signed by the Chief Risk Officer (CRO) and for those loans that are approved below the CRO level e.g. zonal office or branch office, the executive summary report of the ICRR score shall be approved and signed by the final approval authority at that level.
- g) Banks shall use the latest audited financial statements of the borrower for generating the quantitative rating under ICRRS.
- h) All credit proposals whether new, renewal or enhancement shall be gone through the ICRR process and the ICRRS report shall be retained in the loan file.

- i) The Relationship Manager shall pass the approved ICRRS report to the related department for updating its MIS/record.
- j) Banks shall conduct the routine internal audit to check whether the Internal Credit Risk Rating System is functioning as per the instructions laid down in the guidelines.

### 1.6 Frequency of Credit Risk Scoring

- ICRRS shall be conducted for all credit proposals including new, renewal and enhancement of the existing proposal;
- For existing credit relationship, the ICRRS shall be reviewed at least annually at the time of annual/regular credit review.

### 1.7 Selected Sectors

To ensure the current system useful, the following sectors are selected considering the size of exposures of banks in these industries:

### A. Industry

- 1. Ready Made Garments (RMG)
- 2. Textile (including spinning, knitting, weaving)
- 3. Food and Allied Industries
- 4. Pharmaceutical
- 5. Chemical
- 6. Fertilizer
- 7. Cement
- 8. Ceramic
- 9. Ship Building
- 10. Ship Breaking
- 11. Jute Mills
- 12. Steel Engineering
- 13. Power and Gas
- 14. Other Industry

### **B.** Trade and Commerce

### C. Agro Base and Agro Processing

### **D. Service**

- 1. Housing and Construction
- 2. Hospitals and Clinics

- 3. Telecommunication
- 4. Other Service

### 1.8 Internal Credit Risk Rating Scores

The ICRR consists of 4-notched rating system covering the Quantitative and Qualitative parameters. The ratings and scores are mentioned below:

Rating	Scores Aggregate
Excellent	≥80%
Good	≥70% to <80%
Marginal	≥60% to <70%
Unacceptable	<60%

### 1.9 Definitions of Credit Risk Rating

The features of the different categories of Credit Risk Ratings are given below:

### a) Excellent

- Aggregate score of 80 or greater in ICRR.
- Strong repayment capacity of the borrower evident by the high liquidity, low leverage, strong earnings, and adequate cash flow.
- Borrower has well established strong market share.
- Very good management skill & expertise.

### b) Good

- Aggregate score of 70 or greater but less than 80.
- These borrowers are not as strong as "Excellent" borrowers, but still demonstrate consistent earnings, adequate cash flow and have a good track record.
- Borrower is well established and has strong market share.
- Very good management skill & expertise.

### c) Marginal

- Aggregate score of 60 or greater but less than 70 and the quantitative score of at least 30.
- This grade has potential weaknesses that deserve management's close attention. If left uncorrected, these weaknesses may result in a deterioration of the repayment prospects of the borrower.

#### d) Unacceptable

- Aggregate score of less than 60.
- Financial condition is weak and no capacity or inclination to repay.
- Severe management problems exist.
- Facilities should be downgraded to this grade if sustained deterioration in financial condition is noted (consecutive losses, negative net worth, excessive leverage).

### **1.10** Management Action Triggers

- a) Banks are allowed lending to a borrower if the borrower's ICRR is "Excellent" or "Good". However, for the "Marginal" cases, the bank shall take cautionary measures in renewing the facilities or lending new money to the customers. While assessing credit proposals, banks must satisfy themselves on the future prospect of the business, additional collateral coverage, etc. Banks shall take heightened measures for monitoring these accounts including but not limited to regular client visits, monitoring of the improvement plans, close monitoring of the repayment performances, timely review of the facilities, oversight on the improvement areas, etc.
- b) No loan shall be sanctioned to borrowers whose ICRR is "Unacceptable" unless the loan is 100% cash covered or fully guaranteed by the Government or Multilateral Development Banks (MDBs) or the loan is for any state-owned organization or state-owned project. If the credit facility of the borrower is 100% cash covered or covered by government guarantee or bank guarantee, whatever rating the borrower gets, the rating will be "Excellent".
- c) For the quantitative and qualitative risk analysis, if the ICRR falls under "Marginal" or "Unacceptable" for any risk criteria (among 16 quantitative and 18 qualitative); whatever the aggregate score is, the relationship manager shall evaluate what would be the impacts of such risk on loan repayment and justify how those risks are mitigated; and in loan proposal the approval authority should review that justifications thoroughly and make necessary evaluations on it and should be documented in the loan file.
- d) In deriving ICRR, whatever score a borrower gets in the qualitative part, if the score in the quantitative part is less than 50%, the borrower's ICRR shall be "Unacceptable".

- e) Bank can make renewal and enhancement of existing loans for maximum 2 (two) times if the borrower's ICRR is "Unacceptable".
- f) In conducting qualitative analysis, justifications for all criteria are required to be documented.
- g) Bank must maintain portfolio level data base for the asset base with "Excellent", "Good", "Marginal" and "Unacceptable" category and maintain risk appetite/tolerance level for portfolio.

### 1.11 Exceptions to Credit Risk Rating

- a) For a newly established company with no meaningful financial statements, the bank can apply a rating based on the projected financial statements and the rating of the borrower shall not be better than Marginal. However, the bank must run the rating module once the full year audited financial statements become available reflecting customer's full-fledged business operation.
- b) For the companies under large business conglomerate, rating substitution is allowed based on the rating of Corporate Guarantor of the performing concern of the same group or holding company. In case of rating substitution based on the corporate guarantor, the guarantee must be legally enforceable, irrevocable and unconditional. In this regard, a full-fledged ICRRS shall be conducted on the guarantor to determine whether the guarantor has the ability to support the borrower at the time of need. However, the rating substitution will no longer be required if borrowing entity's rating becomes eligible for acceptable grading. If corporate guarantee is required to continue then the ICRRS of both corporate guarantor of performing concern and the borrowing entity will be done.
- c) Rating generation is discouraged using outdated financial statements (i.e. available audited financial statements are more than 18 months old). In exceptional cases where there is valid reason for delay in audited financial publication, out dated financial statements can be accepted only if up to date unaudited financial statement is submitted, but the rating shall not be better than "Marginal". In this case, the condition mentioned in para 1.10(a) is to be followed.
- d) Rating shall be downgraded if there is any internal/external factors or information that have not been captured in the rating/financial statements (because they are post balance sheet events) having the material impact on the customer's business operation and loan repayment. A conservative and consistent approach should be used in employing judgments in the case of events like the death of key sponsor, prolonged factory shut down, deteriorating financial profile reported in interim financial statements, change in tax structure/duty, large expansions funded by debt, excessive leverage ratio, merger-acquisition, etc.

- e) For the proprietorship & partnership concern where preparation of the audited financial statements is not mandatory, an unaudited financial statement can be used for rating generation but due diligence should be conducted on the accuracy of the financial statements with high-level checking of the bank statements recording the sales collection, stock/receivable position, peer analysis, bank liabilities, etc.
- f) If the customer is in multiple lines of business, the most appropriate sector/industry shall be the line of business generating the highest portion of total revenue.
- g) This guideline and enclosed model will be the minimum standard of risk rating; and banks may adopt more sophisticated risk rating model in line with the size and complexity of their business.

### **Chapter 2: Credit Risk Rating Components**

### 2.1 Components of Credit Risk Rating

In the previous version of Credit Risk Grading Manual, 50 percent weights were assigned for quantitative indicators (financial risk) while 50 percent weights were for subjective judgment. In the ICRR, these weights have been revised; 60 percent weights are assigned for quantitative indicators while 40 percent are assigned for qualitative indicators.

### 2.2 Quantitative indicators and associated weights

Quantitative indicators in ICRR fall into six broad categories: leverage, liquidity, profitability, coverage, operational efficiency, and earning quality. Details indicators under these categories and associated weights are furnished below:

Quanti	tative Indicators	Weight	Definition
1. Leverage (10%)	a) Debt to Tangible Net Worth (DTN)	7	Total Interest Bearing Liabilities or Financial Debt/Total Tangible Net Worth
	b) Debt to Total Assets (DTA)	3	Total Interest-Bearing Liabilities or Financial Debt/Total Assets
2. Liquidity (10%)	a) Current Ratio (CR)	7	Current Assets/Current Liabilities
1 , ( ,	b) Cash Ratio (Cash)	3	Cash and Easily Marketable Securities/Current Liabilities
	a) Net Profit Margin (NPM)	5	Net Profit after Tax/Net Sales
3. Profitability (10%)	b) Return on Assets (ROA)	3	Net Profit after Tax/Total Assets
(1070)	c) Operating Profit to Operating Assets (OPOA)	2	Operating Profit/Average Operating Assets
	a) Interest Coverage (IC)	3	Earnings Before Interest and Tax/Interest Expense
4. Coverage (15%)	b) Debt Service Coverage Ratio (DSCR)	5	Earnings Before Interest Tax Depreciation Amortization/Debts to be Serviced
	c) Operating Cash Flow to Financial Debt Ratio (OCDR)	4	Operating Cash Flow/Financial Debt
	d) Cash Flow Coverage Ratio (CCR)	3	Cash Flow from Operation/Debts to be Serviced
5. Operational Efficiency	a) Stock Turnover Days (STD)	4	(Total Inventory/Cost of Goods Sold)*360
(10%)	b) Trade Debtor Collection Days (TDCD)	3	(Total Accounts Receivable/Sales)*360

	c) Asset Turnover (AT)	3	Sales/Total Assets
6. Earning Quality	a) Operating Cash Flow to Sales (OCFS)	3	Operating Cash Flow/Sales
(5%)	b) Cash Flow based Accrual Ratio (CFAR)	2	NI-(CFO+CFI)/Average Net Operating Assets

### 2.3 Qualitative indicators and associated weights

Qualitative indicators cover six broad aspects of the firms/institutions to be rated, namely business/industry risk, credit quality enhancement, performance behavior, management risk, relationship risk, and compliance risk. Noteworthy that aggregate weights against the qualitative indicators stands at 40 percent. Detail indicators and associated weights are appended below in details:

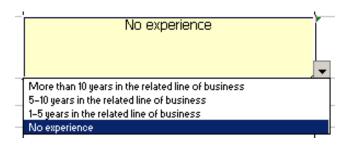
Indicators	Weights
1. Performance Behavior	10
Performance Behavior with Banks Borrowings	
Regarding Classification	5
Regarding Rescheduling/Restructuring	4
Performance Behavior with Suppliers/Creditors	1
2. Business and Industry Risk	7
Sales Growth	2
Age of Business	2
Industry Prospects	1
Long-Term External Credit Rating of the Borrower	2
3. Management Risk	7
Experience of the Management	2
Existence of Succession Plan	2
Auditing Firms	2
Change of Auditors in Last 4 Years	1
4. Security Risk	11
Primary Security	2
Collateral	2
Eligible Collateral Coverage	5
Type of Guarantee	2
5. Relationship Risk	3
Account Conduct	3
6. Compliance Risk	2
Compliance with Environmental Rules, Regulations and Covenants	1
Corporate Governance	1
Total	40

### **Chapter 3: Internal Credit Risk Rating Process**

After the risk identification & weight assignment process (as mentioned in chapter 2), the next step will be to give input of actual parameters in the score sheet to arrive at the scores corresponding to the actual parameters.

These guidelines also provide a well programmed MS Excel-based credit risk scoring system to arrive at a total score on each borrower. The excel program requires data accurately in particular cells for input and will automatically calculate the risk grade for a particular borrower based on the total score obtained. The following steps are to be followed while using the MS Excel program.

- a) Open the MS XL file named, **ICRRS**
- b) The entire XL model named, **ICRRS** is protected except the particular cells to input data.
- c) Some input cells contain **DROP DOWN LIST** for some criteria corresponding to the Key Parameters. Click to the input cell and select the appropriate parameters from the **DROP DOWN LIST** as shown below:



e) All the cells provided for input must be filled in order to arrive at accurate risk rating.

The following step-wise activities outline the detail process for arriving at Credit Risk Rating.

D 11 M		
Bank's Name	:	ABC Bank Limited
Branch's Name	:	Gulshan
File/Reference No	:	10000/100/10/1
Borrower's Name	:	XYZ Limited
Group's Name, if any	:	PQR
Type of Industry/ Sector	:	1. RMG
Industry Code	:	101
Ownership Type	:	Sole Proprietorship
Registration No/Trade License No	:	123

### 3.1 Input primary information of borrower and select sector/industry of the borrower:

CIB Status	:	Standard
Financials Audit Status	:	Audited
Name of Audit Firm	:	MNO
Analyst Name, Designation	:	PQR
Verifier Name, Designation	:	UBW
Date of Financials		04-01-2018
Date of Analysis (DD-MM-YYYY)	:	04-01-2018
Date of Verification (DD-MM-YYYY)	:	04-01-2018

### 3.2 Input data of balance sheet, profit and loss statement and cash flow statement

In the input sheet of the balance sheet, profit and loss statement, and cash flow statement, inputs must be given to all cells that are marked with yellow colors. Moreover, while providing inputs to the balance sheet, profit and loss statement and cash flow statement, following issues should be taken care of:

### a) Current Portion of Long-Term Borrowing/Loan

- Input must be given to this cell. This cell is crucial to calculate "debt service coverage ratio". If "Current Portion of Long-Term Borrowing/Loan" is not found in the balance sheet, the analyst shall communicate this to the borrower and determine the amount based on other material information including notes and communication with the borrower.
- If the amount is already added with the total loans in the balance sheet then "Current Portion of Long-Term Borrowing/Loan" must be deducted from the total loans and the split figures must be inserted in related cells.
- If the figure is still zero, it means the borrower has no existing long-term borrowings; which is unusual. If found so, the analyst should interview the borrower.
- If the analyst becomes certain that the borrower has no existing borrowings, then **0.01** shall be inserted in the corresponding cell.

### b) Other Current Liabilities

• To make the balance sheet balanced i.e. assets = liabilities + equity, deduct amount **0.01** in this cell, if the same is inserted in row 56: Current Portion of Long-Term Borrowing/Loan.

### c) Financial/Interest Expenses

• Input must be given to this cell. If not found in the profit and loss statement, the analyst shall look into the notes of financial statement and communicate with the borrower to determine the amount.

- If the figure is zero, it means the borrower has no existing borrowings; which is unusual.
- If the analyst becomes certain that the borrower has no existing borrowings, then **amount 1** must be inserted in the corresponding cell.

### **3.3** Qualitative Analysis

After providing input to the balance sheet, profit and loss statement and cash flow statement, the rigorous qualitative analysis shall be conducted. The qualitative analysis shall be conducted by the relationship manager. The details of qualitative analysis are as follows:

G	Performance Behavior		10
G.1	Performance Behavior with Lending Banks		
G.1.1	How many times the borrower was adversely classified in last 3 years		
	[ Adversely classified means the	0 time	5
	borrower's loans classified as per BB	1 time	4
	loan classifications policy i.e. SS, DF,	2 times	3
	BL]	3 times	1
		>3 times	0
G1.2	How many times the borrower's loans was rescheduled/restructured in last 3 years		
		0 time	4
		1 time	3
		2 times	2
		3 times	1
		>3 times	0
G.2	Performance Behavior with Suppliers/Creditors		
	Did The Borrower Pay Its Suppliers/ Creditors Regularly in Last 1 Year	Yes	1
		No	0
Н	Business and Industry Risk		7
<b>H.1</b>	Sales Growth		
	Sales growth means annual sales growth. The formula for calculating	>10%	2
	sales growth is [(current year sales - previous year sales)/ previous year sales]*100.	5%-10%	1
		Less than 5%	0

H.2	Age of Business		
	The number of years the borrower	>10 years	2
	engaged in this line of business	7 to 10 years	1.5
	(The lower limit in the interval is	5 to 7 years	1
	excluded)	4 to 5 years	0.5
		<4 years	0
Н.3	Industry Prospects		
	Critical assessment of 5 (five) years	Growing and Low Volatility	1
	prospect of industry and borrower's	Stable	0.75
	sales volatility. Volatility denotes sales	Growing but High Volatility	0.5
	volatility	Declining	0
H.4	Long-Term External Credit Rating		
	of the Borrower		
	Rating Grade should be assigned in	1	2
	line with BB Rating Mapping as per	2&3	1.5
	BRPD circular 18/2014 on Risk-Based	>3	0.5
	Capital Adequacy in line with Basel III (see annex 2)	Unrated	0
Ι	Management Risk		7
I.1	Experience of the Management		
	Quality of the management based on	More than 10 years in the related	2
	total number of years of experience of	line of business	
	the senior management in the Industry. Senior Management means MD and	5–10 years in the related line of business	1
	next two tiers	Less than 5 years	0
I.2	Existence of Succession Plan	Less than 5 years	0
1.42		Yes, with good capability of	_
		successor	2
		Yes, but questionable capacity of	1
		successor	1
		No successor	0
I.3	Auditing Firms		
	BSEC listed auditors are considered as	Recognized Auditors	2
	recognized	Other Auditors	1
	8	Un audited	0
I.4	Change of External Auditors in Last 3 Years		
		Yes	1
		No	0
J			
	Security Risk		11
J.1	Security Risk Primary Security		1

	07: Eligible Collateral) (Annex 3) (The lower limit in the interval is excluded)	<50%	0
J.4	Type of Guarantee		
	Strong Corporate Guarantee means the credit rating of the guarantor should be	Government Guarantee and/or Bank Guarantee	2
	at least 1 or 2 as per BB rating	Strong Corporate Guarantee	1.5
	mapping mentioned in BRPD circular 18/2014 on Risk Based Capital Adequacy in line with Basel III. (see	Personal Guarantees or Corporate Guarantee without Strong Financial Strength	1
	annex 2)	No support/guarantee	0
17		No support/guarantee	
K	Relationship Risk	Mana than 2 mana Assaunts having	3
K.1	Account Conduct	More than 3 years Accounts having faultless record	3
		Less than 3 years Accounts having faultless record	2
		Accounts having satisfactory	1
		dealings with some late payments.	
		Frequent past dues & irregular dealings in Account	0
L	Compliance Risk		2
	Compliance with environmental rules,		
L.1			
L.1	regulations and covenants	Yes	1

L.2	Corporate Governance		
	Independence of Management	Non Questionable Corporate Governance	1
		Questionable Corporate Governance	0
	Total		40
·			

### **3.4 Generating Score:**

After providing inputs to the balance sheet, profit and loss statement, cash flow statement and qualitative analysis, the detail management report and executive summary report will automatically be generated. In the detail management report and executive summary report, four color coding is used. The detail of the color coding is as follows:

Color	Rating
Green	Excellent
Blue	Good
Yellow	Marginal
Red	Unacceptable

The analyst should meticulously review all color coding and rating. For the quantitative and qualitative risk analysis, if the ICRR falls under "Marginal" or "Unacceptable" for any risk criteria (among 16 quantitative and 18 qualitative); whatever the aggregate score is, the relationship manager shall evaluate what would be the impacts of such risk on loan repayment and justify how those risks are mitigated; and in loan proposal the approval authority should review that justifications thoroughly and make necessary evaluations on it and should be documented in the loan file.

In the executive summary report, the movement of the key quantitative indicators for last three years is also disclosed.

The details of the executive summary are as follows:

File / Reference No:	10000/100/10/1		
Borrower's Name	XYZ Limited	Total Score	85.5%
Group Name (if any)	PQR		Excellent
Industry's Name	1. RMG		
Latest CIB Status	Standard	Quantitative Score	88.3%
Audit Status	Audited	Quanutanie opore	Excellent
Auditor's Name	MNO		
Analyst's Name, Designations	nbv	•	
Verifier's Name, Designation	hjt		
Date of Analysis	1/4/2018	Qualitative Score	81.3%
Date of Financials	1/4/2018	Quantauve Score	Good

Assessment Criteria: Greater than or equal to 80%= Excellent; 70%-80% = Good; 60% to 70% = Marginal; Less than 60% = Unacceptable ------



### LEVERAGE & LIOUIDITY

PROFITABILITY

1 L	LEVERAGE & LIQUIDITI	TROTT			CUVERAGE
		Score Obtained	Scale	Percentage	ICRR
Qı	uantitative Assessments	53	60	88.3%	Excellent
Α	Leverage	10	10	100.0%	Excellent
В	Liquidity	3	10	30.0%	Unacceptable
С	Profitability	10	10	100.0%	Excellent
D	Coverage	15	15	100.0%	Excellent
Е	Operational Efficiency	10	10	100.0%	Excellent
F	Earning Quality	5	5	100.0%	Excellent
Q	ualitative Assessments	32.5	40	81.3%	Good
G	Performance behavior	6	10	60.0%	Marginal
Н	Business and Industry Risk	6.5	7	92.9%	Excellent
Ι	Management Risk	7	7	100.0%	Excellent
J	Security Risk	10	11	90.9%	Excellent
Κ	Relationship Risk	1	3	33.3%	Unacceptable
L	Compliance Risk	2	2	100.0%	Excellent
	Aggregate	85.5	100	85.5%	Excellent

Annex 1.

### **1. Detail Management Report**

File / Reference No:	10000/100/10/1				
Borrower Name	XYZ Limited	Assessment Criteria: Greater than or equal to 80%= Excellent; 70% to<80% = Good; 60% to <70% = Marginal; Less			
Group Name (if any)	PQR	than 60% > Unaccepta		S, 2000	
Industry's Name	1. RMG	1			
Latest CIB Status	Standard	Indicators	Score Obtained	Risk Rating	
Audit Status	Audited	Quantitativa	56	Evacillant	
Auditor's Name	MNO	Quantitative	93.3%	Excellent	
Analyst's Name, Designations	nbv	Qualitativa	31.5	Good	
Varifiarda Nama Danimatian	h:+	Qualitative	78.8%	GUUU	
Verifier's Name, Designation	hjt		87.5	Excellent	
Date of Analysis	1/4/2018	Aggregate	87.5%	Excellent	
Date of Financials	1/4/2018				

		Outcome	Score Obtained	Scale	Percentage	Risk Rating
	Quantitative Assessments		56	60	93.3%	Excellent
А	Leverage		10.00	10.00	100.0%	Excellent
A.1	1. Financial Debt to Tangible Net Worth (DTN)	0.58	7.00	7	100.0%	Excellent
B.2	2. Financial Debt to Total Assets (DTA)	0.31	3.00	3	100.0%	Excellent
В	Liquidity		8	10	80.0%	Good
B.1	1. Current Ratio (CR)	5.43	7.00	7	100.0%	Excellent
B.2	2. Cash Ratio (Cash)	0.10	1.00	3	33.3%	Unacceptable
С	Profitability		10	10	100.0%	Excellent
C.1	1. Net Profit Margin (NPM)	0.70	5.00	5	100.0%	Excellent
C.2	2. Return on Assets (ROA)	0.52	3.00	3	100.0%	Excellent
С.3	3. Operating Profit to Operating Assets (OPOA)	0.62	2.00	2	100.0%	Excellent
D	Coverage		15	15	100.0%	Excellent
D.1	1. Interest Coverage (IC)	8.00	3.00	3	100.0%	Excellent

1		1		I		
D.2	2. Debt Service Coverage Ratio (DSCR)	6.15	5.00	5	100.0%	Excellent
D.3	3. Operating Cashflow to Debt Ratio (OCDR)	176.33	4.00	4	100.0%	Excellent
D.4	4. Cashflow Coverage Ratio (CCR)	122.08	3.00	3	100.0%	Excellent
E	<b>Operational Efficiency</b>		8	10	80.0%	Good
E.1	1. Stock Turnover Days (STD)	18.00	4.00	4	100.0%	Excellent
E.2	2. Trade Debtor Collection Days (TDCD)	3.64	3.00	3	100.0%	Excellent
E.3	3. Asset Turnover (AT)	0.74	1.00	3	33.3%	Unacceptable
F	Earning Quality		5.00	5	100.0%	Excellent
F.1	1. Operating Cash Flow to Sales (CFS)	16.03	3.00	3	100.0%	Excellent
F.2	2. Cash Flow based accrual ratio (CFAR)	-0.28	2.00	2	100.0%	Excellent
	Qualitative Assess	sments	31.5	40	78.8%	Good
G	Performance Behavior		6	10	60.0%	Marginal
G.1.1	How many times the borrower got adversely classified in last 3 years	0 time	5.00	5	100.0%	Excellent
G.1.2	How many times the borrower's loans got rescheduled/ restructured in last 3 years	>3 times	0.00	4	0.0%	Unacceptable
G.2	Did the borrower pay its Suppliers/ Creditors regularly in last 1 year	Yes	1.00	1	100.0%	Excellent
Н	Business and Industry Risk		6.5	7	92.9%	Excellent
H.1	Sales Growth	>10%	2.00	2	100.0%	Excellent
H.2	Age of Business	>10 years	2.00	2	100.0%	Excellent
Н.З	Industry Prospects	Growing but High Volatility	0.50	1	50.0%	Unacceptable
H.4	Long Term External Credit Rating of the Borrower	1.00	2.00	2	100.0%	Excellent
Ι	Management Risk		7	7	100.0%	Excellent
I.1	Experience of the Management	More than 10 years in the related line of business	2.00	2	100.0%	Excellent

I.2	Existence of Succession Plan	Yes, with good capability of successor	2.00	2	100.0%	Excellent
I.3	Auditing Firms	Recognized Auditors	2.00	2	100.0%	Excellent
I.4	Change in Auditors in last 3 years	Yes	1.00	1	100.0%	Excellent
J	Security Risk		9	11	81.8%	Good
J.1	Primary Security	Fully Pledged facilities	2.00	2	100.0%	Excellent
J.2	Collateral	Registered Mortgage on Municipal Corporation/Prime Area property	2.00	2	100.0%	Excellent
J.3	Collateral Coverage	>100%	5.00	5	100.0%	Excellent
J.4	Guarantee	Personal Guarantees or Corporate Guarantee without Strong Financial Strength	FALSE	2	0.0%	Unacceptable
K	Relationship Risk		1.00	3	33.3%	Unacceptable
K.1	Account Conduct	Accounts having satisfactory dealings with some late payments.	1.00	3	33.3%	Unacceptable
L	Compliance Risk		2.00	2	100.0%	Excellent
L.1	Compliance with environmental rules, regulations and covenants	Yes	1.00	1	100.0%	Excellent
L.2	Corporate Governance and CSR activities	Good Corporate Governance	1.00	1	100.0%	Excellent

BB Rating Grade	Equivalent Rating of S&P and Fitch	Equivalent Rating of Moody	Equivalent Rating of CRISL	Equivalent Rating of CRAB	Equivalent Rating of NCRL	Equivalent Rating of ECRL	Equivalent Rating of ACRSL	Equivalent Rating of ACRL	Equivalent Rating of WASO
1	AAA to AA	Aaa to Aa	AAA, AA+, AA, AA-	AAA, AA1, AA2, AA3	AAA, AA+, AA, AA-	AAA, AA+, AA, AA-	AAA, AA+, AA, AA-	AAA, AA+, AA, AA-	AAA AA1, AA2, AA3
2	А	А	A+, A, A-	A1, A2, A3	A+, A, A-	A+, A, A-	A+, A, A-	A+, A, A-	A1, A2, A3
3	BBB	Baa	BBB+, BBB, BBB-	BBB1, BBB2, BBB3	BBB+, BBB, BBB-	BBB+, BBB, BBB-	BBB+, BBB, BBB-	BBB+, BBB, BBB-	BBB1, BBB2, BBB3
4	BB to B	Ba to B	BB+, BB, BB-	BB1, BB2, BB3	BB+, BB, BB-	BB+, BB, BB-	BB+, BB, BB-	BB+, BB, BB-	BB1, BB2, BB3
5	Below B	Below B	B+, B, B-, CCC+, CCC, CCC-, CC+, CC, CC-	B1, B2, B3, CCC1, CCC2, CCC3, CC	B+, B, B-	B+, B, B-	B+, B, B-, CC+,CC,CC-	B+, B, B-, CCC	B1, B2, B3, CCC
6	-		C+, C, C-, D	C, D	C+, C, C-, D	D	C+, C, C-, D	CC+,CC,CC-, C+, C, C-, D	CC1, CC2, CC3, C+, C, C-, D
	t-Term Rating Cat	tegory Mapping	e	·	·	·			
<b>S</b> 1	F1+	P1	ST-1	ST-1	N1	ECRL-1	ST-1	AR-1	P-1
S2	F1	P2	ST-2	ST-2	N2	ECRL-2	ST-2	AR-2	P-2
S3	F2	P3	ST-3	ST-3	N3	ECRL-3	ST-3	AR-3	P-3
S4	F3		ST-4	ST-4	N4	ECRL-4	ST-4	AR-4	P-4
S5,S6	B,C, D	NP	ST-5, ST-6	ST-5, ST-6	N5	D	ST-5, ST-6	AR-5, AR-6	P-5, P-6

### Annex 2: ECAI's Credit Rating Categories Mapped with BB's Rating Grade

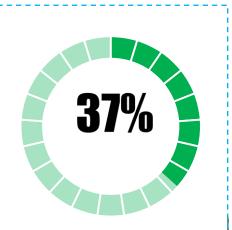
## Annex 3: List of Eligible Collateral (as per BRPD circular no 14/2012 on Loan Classification and Provisioning):

- 100% of deposit under lien against the loan.
- 100% of the value of government bond/savings certificate under lien.
- 100% of the value of guarantee given by Government or Bangladesh Bank
- 100% of the market value of gold or gold ornaments pledged with the bank.
- 50% of the market value of easily marketable commodities kept under control of the bank.
- Maximum 50% of the market value of land and building mortgaged with the bank.
- 50% of the average market value for last 06 months or 50% of the face value, whichever is less, of the shares traded in stock exchange.

### Annex 4: Detail Quantitative Analysis

## Quantitative Analysis

File / Reference No:	10000/100/10/1
Borrower Name	хух
Group Name (if any)	ABC
Industry Name	14. Other Industries
Latest CIB Status	Standard
Audit Status	Audited
Auditor Name	EFG
Analyst Name, Designations	NBV
Verifier Name, Designation	НЈТ
Date of Analysis	01/04/2018
Date of Financials	01/04/2018



### Quantitative Indicators (60)

Criteria	Parameter	Scale	Parameter	Score Obtained
A. Leverage		10	I al alletel	4.00
1. Financial Debt to Tangible Net Worth (DTN)		7	3.14	2.00
2. Financial Debt to Total Assets (DTA)		3	0.64	2.00
B. Liquidity		10		6
1. Current Ratio (CR)		7	1.08	6.00
2. Cash Ratio (Cash)		3	0.01	0.00
C. Profitability		10		1
1. Net Profit Margin (NPM)		5	0.46%	0.00
2. Return on Assets (ROA)		3	0.41%	0.00
3. Operating Profit to Operating Assets (OPOA)		2	5.59%	1.00
D. Coverage		15		5
1. Interest Coverage (IC)		3	1.26	1.00
2. Debt Service Coverage Ratio (DSCR)		5	0.84	1.00

3. Operating Cash Flow to Debt Ratio (OCDR)	4	0.04	1.00
4. Cash Flow Coverage Ratio	3	0.38	2.00
(CCR)	J	0.30	2.00
E. Operational Efficiency	10		5
1. Stock Turnover Days (STD)		260	0.00
2. Trade Debtor Collection		45	3.00
Days (TDCD)			
3. Asset Turnover (AT)		88.15%	2.00
F. Earning Quality	5		1
1. Operating Cash Flow to Sales (CFS)	3	2.82%	1.00
2. Cash Flow based Accrual ratio (CFAR)	2	0.03	0.00
Total	60		22
Percentage		37%	