

The Pakistan Credit Rating Agency Limited

### **Rating Report**

# **Liberty Mills Limited**

Report Contents

1. Rating Analysis 2. Financial Information

3. Rating Scale

4. Regulatory and Supplementary Disclosure

Rating History						
Dissemination Date	Long Term Rating	Short Term Rating	Outlook	Action	Rating Watch	
05-Jul-2024	A+	A1	Stable	Maintain	-	
07-Jul-2023	A+	A1	Stable	Maintain	-	
09-Jul-2022	A+	A1	Stable	Maintain	-	
10-Jul-2021	A+	A1	Stable	Maintain	-	
10-Jul-2020	A+	A1	Stable	Maintain	-	
12-Jul-2019	A+	A1	Stable	Maintain	-	
11-Jan-2019	A+	A1	Stable	Maintain	-	

### **Rating Rationale and Key Rating Drivers**

The rating of Liberty Mills Limited ("the Company" or "LML") emanates from the prominent profile of the Company in the textile industry of Pakistan. The Company is a family-owned truly vertically integrated textile unit that operates under the umbrella of Liberty Group and is considered a flagship Company. LML product slate vest in three business segments which include Home Textile, Health Care Textiles & Apparel. Home Textile is LML's top-performing business segment in terms of revenue contribution followed by Health Care Textile and Apparel. The Company has generated a revenue of PKR 53.92bln as of 9MFY24 (FY23: PKR 62.7bln) mainly supplemented by a volumetric surge in the Home Textile and Health Care Textile products category. The Company's emphasis on the well-defined niche of quality-conscious institutional purchasers has resulted in customer concentration, long-lasting relationships with high-profile clients, and consistent quality that aids in risk management. Over the years, the company has executed CAPEX to enhance the capacities of its spinning and weaving segments, creating a buffer in the supply chain management framework. Additionally, the company has installed a Wind Turbine Solar Hybrid Project for Nooriabad Complex. The installed capacity of this project is 9MW Wind, 3.56MW Solar and 4MW Battery. These systems are the best choice for renewal energy to ensure sustainability because of higher generation capacity compare to singly installed system. It is vital for any large scale manufacturing industry to ensure availability of sustainable power sources at competitive prices. The financial risk profile of the company is considered moderate as the company maintains comfortable cashflows and adequate coverages. The working capital requirements are mainly fueled through short-term borrowings followed by internally generated cashflows. The trade receivables have slightly stretched the working capital management of the company. The company has maintained a leverage capital structure dominated by subsidized borrowing from SBP. LML gradually expanded its footprint through strategic investments in the power sector to beef up its business diversity. Further, other group companies Pakistan Aluminum Beverages Can Limited and Oncogen Pharma (Pvt.) Limited are fully operational. Furthermore, the Company is committed to staying at the forefront of technology and to achieve this, Management has decided to obtain the license for Oracle Fusion Cloud ERP Application.

The ratings are dependent on the Company's ability to sustain its product diversity and volumetric growth while maintaining margins and profitability matrix at an optimal level. The maintenance of the debt matrix and sustainability of coverages coupled with continuity in generating cashflows from core operations has supplemented the assigned ratings.

Disclosure			
Name of Rated Entity	Liberty Mills Limited		
Type of Relationship	Solicited		
Purpose of the Rating	Entity Rating		
Applicable Criteria	Methodology   Correlation Between Long-term & Short-term Rating Scales(Jul-23),Methodology   Rating Modifiers(Apr-24),Methodology   Corporate Rating(Jul-23)		
Related Research	Sector Study   Composite and Garments(Dec-23)		
Rating Analysts	Muhammad Harris Ghaffar   harris.ghaffar@pacra.com   +92-42-35869504		



#### The Pakistan Credit Rating Agency Limited

Profile

Legal Structure Liberty Mills Limited ('the Company' or 'LML') is an unlisted, public limited concern incorporated in 1964.

Background The Company commenced operations in 1964 as a private limited company. Later, in 1969, its legal status was changed to a public, listed company. In Dec'13, the company was delisted from the stock exchange.

**Operations** The Company is in the business of manufacturing and processing textile fabrics and made-ups. It operates in two main segments: processing (dyeing and printing) and home textile. The company has set up its backward integration units of spinning and weaving which are fully in operation and these will enhance efficiency along with limited dependency, going forward. The Company generates electricity for its in-house use through captive power generation. Its manufacturing facility is located at Sindh Industrial and Trading Estate in Karachi and Nooriabad.

#### Ownership

**Ownership Structure** The Company is the flagship company of the Liberty Group. It is owned wholly by the Mukaty Family, mainly through the family members. **Stability** In the absence of a group holding company and the personal relationship that exists between the sponsors, there is no formal succession plan, which may have implications for the stability of the Company.

Business Acumen With almost four decades of experience, the Liberty Group has expertise in the textile and energy sectors of Pakistan. The sponsors carry extensive diversified industrial experience.

Financial Strength Apart from its presence in textile, and energy including wind power projects and aluminum, the Group also has interests in the pharmaceutical sector. The sponsors have shown a willingness and ability to support the company in times of need.

Governance

**Board Structure** The Board of Directors comprises seven members of the Mukaty family. The Board is Chaired by Mr. Muhammad Ashraf who also holds the CEO office. The absence of independent oversight indicates a need for improvement in the governance structure of the company.

**Members' Profile** Chairman, Mr. Muhammad Ashraf, brings with him over 30 years of experience in the local textile industry. Meanwhile, all board members have significant industry-related as well as diversified experience and have a long association with the Liberty Group.

Board Effectiveness Board meetings are conducted at regular intervals. However, documentation of discussion in meetings needs improvement. To ensure proper oversight, the company has also formed two committees – Audit, and Human Resource & Remuneration – to assist the board on relevant matters.

**Financial Transparency** M/s Kreston Hyder Bhimji & Co. Chartered Accountants is the external auditor of the company. They are classified by the State Bank of Pakistan in "Category A" on its panel of auditors. The auditor gave an unqualified opinion on the company's financial statements for the year ended June 30, 2023.

#### Management

**Organizational Structure** The structure of the Company is currently divided into ten functional departments, with the Head of each department reporting directly to CEO, Mr. Muhammad Ashraf.

Effectiveness Liberty Mills maintains adequate IT infrastructure and related controls. The company has a comprehensive reporting system for the management to keep track of activities.

**MIS** Oracle based ERP system has been deployed which provides an integrated view of business processes, facilitating comprehensive MIS reporting. Further, the Company is committed to staying at the forefront of technology in areas related to its business, finance, MIS and HR, among others. To achieve this, the Management has decided to obtain the license for Oracle Fusion Cloud ERP Application. These technologies will be available to the broader organization, ensuring a systematic and controlled adoption process that aligns with our strategic goals.

**Control Environment** The Company has a well-trained quality control department. The company is ISO 9001 certified. It also has an internal audit department that reports directly to the CEO, while it should report to the Audit Committee of the Board, to ensure the effectiveness of the function.

#### **Business Risk**

**Industry Dynamics** The size of the textile industry in Pakistan is estimated to be PKR 2.62Trn  $\sim$ 3.0% of the total GDP as of FY23. The composite & garment segment in the textile sector has a contribution of  $\sim$  PKR 1.6Trn mainly dominated by knitwear, readymade garments, bedwear and towels followed by PKR 775bln from spinning and PKR 637bln from weaving. The escalation in energy tariffs & finance costs, PKR devaluation, and ensuring the availability of optimum quality raw materials are prime challenges specific to the industry to assess the international market and stay price-wise competitive.

Relative Position The Company is placed among the major value-added textile exporters of Pakistan. The company faces competition from other large players such as Yunus Textile Mills, Kohinoor Textile Mills, Gul Ahmed and Nishat Mills.

**Revenues** The Company's topline has recorded a sizable growth of ~24.7% and clocked in at ~PKR 62.7bln during FY23 increased from ~PKR 50.29bln during FY22 (9MFY24: ~PKR 53.91bln) mainly attributable to enhanced exports and rupee depreciation. The Company's sales have remained tilted towards exports (FY23: 93%). During FY23, export sales were recorded at ~PKR 56.2bln increased from ~PKR 46.9bln during FY22 (9MFY24: PKR 49.9bln). Sales are moderately diversified in several geographical regions.

**Margins** In FY23, the gross margin and operating profit margin both increased as compared to FY22. The GP margin increased from ~ 13.9% in FY22 to ~ 19.3% in FY23 (9MFY24: ~21.4%) while the OP margin increased from ~ 6.2% in FY22 to ~ 13.1% in FY23 (9MFY24: ~15.6%). As result, the net profit margin of the Company increased from ~ 0.5% in FY22 to ~ 12.2% in FY23 (9MFY24: ~10.8%).

**Sustainability** Currently, the company is operating a spinning unit with 11,160 rotors/spindles with a production capacity of 1,700 bags per day and Air Jet weaving unit of 145 looms having a production capacity of 100,000 meters of fabric per day in Nooriabad location. In addition to this the company is also operating another weaving unit of 110 Sulzer looms in Karachi having a capacity of 30,000 meters of fabric per day. The total number of machines in finishing mill / wet processing are 128 having a final production capacity of 368,000 meters per day and made-ups (stitching machines: 2,995 machines). Liberty Wind Power 1 Limited and Liberty Wind Power 2 Limited (of 50 MW each) are wholly owned subsidiaries of the company and are operational. Both the projects are supplying electricity to the National Grid.

#### Financial Risk

**Working Capital** The Company has reduced the working capital requirement by efficiently managing the inventory. During FY23, the Company's net inventory days decreased to  $\sim$ 130 days from  $\sim$ 148 days in FY22 but inventory days are still on higher side because LML has imported raw materials in huge quantities due to the rise in raw material prices and currency rate fluctuations. Meanwhile, trade receivable days also increased to  $\sim$ 57 days from  $\sim$ 50 days during the same period. During FY23 the trade payable days decreased to  $\sim$ 33 days from  $\sim$ 35 days during FY22. Consequently, the Company's net working capital days decreased to  $\sim$ 154 days during FY23 from  $\sim$ 163 days at the end of FY22.

**Coverages** In FY23, the Company's FCFOs stood at ~PKR 11,016mln significantly increasing from ~PKR 4,132mln in FY22 (9MFY24: ~PKR 8,588mln). As result during FY23, interest coverage stood at ~ 3.0x (increased from ~ 2.6x of coverage during FY22, 9MFY24: ~2.1x) despite of significant increase in the finance cost. The finance cost stood at ~PKR 3,943mln (increased from ~PKR 1,724mln, 9MFY24: ~PKR 4,183mln); however, this is still a healthy coverage level for the Company.

**Capitalization** The Company has a high leveraged capital structure. Long-term debt is related to expansion activities, whereas short-term debt is related to working capital management. Liberty Mills Limited's gearing ratio has decreased from ~ 59.4% at the end of Jun-22 to ~51.3% at the end Jun-23 (Mar-24: ~52.7%) due to decrease in short term borrowings. As result the total borrowing decreased from PKR 38,074mln at the end of Jun-22 to PKR 35,923mln at the end of Jun-23 (Mar-24: ~PKR 44,435mln). Short-term borrowing decreased from PKR 27,937mln at the end of Jun-22 to PKR 25,301mln at the end of Jun-23 (Mar-24: ~PKR 31,769mln). During 9MFY24, the equity base of the company has also sizably improved to PKR 40.2bln (end-Jun23: PKR 34.4bln).

The Pakistan Credit Rating Agency Limited				Financial Summary PKR mln
Liberty Mills Limited	Mar-24	Jun-23	Jun-22	Jun-21
Textile   Composite	9M	12M	12M	12M
BALANCE SHEET				
1 Non-Current Assets	18,399	18,109	16,339	10,300
2 Investments	15,980	14,502	10,922	10,648
3 Related Party Exposure	8,348	6,625	6,208	8,424
4 Current Assets	54,282	41,022	40,503	28,719
a Inventories	25,942	20,209	24,472	16,349
b Trade Receivables	16,868	11,820	7,741	5,919
5 Total Assets	97,009	80,259	73,973	58,092
6 Current Liabilities	11,425	9,067	9,346	5,178
a Trade Payables	5,824	4,796	6,393	3,197
7 Borrowings	44,435	35,923	38,074	27,621
8 Related Party Exposure	258	212	53	230
9 Non-Current Liabilities	702	702	466	450
10 Net Assets	40,189	34,354	26,035	24,613
11 Shareholders' Equity	40,189	34,354	26,035	24,613
INCOME STATEMENT				
1 Sales	53,919	62,700	50,290	34,125
a Cost of Good Sold	(42,383)	(50,568)	(43,320)	(30,747
2 Gross Profit	11,536	12,131	6,970	3,378
a Operating Expenses	(3,114)	(3,896)	(3,852)	(2,311
3 Operating Profit	8,422	8,235	3,118	1,067
a Non Operating Income or (Expense)	2,600	4,394	(924)	3,080
4 Profit or (Loss) before Interest and Tax	11,022	12,629	2,193	4,147
a Total Finance Cost	(4,183)	(3,943)	(1,724)	(1,031
b Taxation	(1,004)	(1,063)	(210)	(922
6 Net Income Or (Loss)	5,835	7,622	259	2,194
CASH FLOW STATEMENT				
a Free Cash Flows from Operations (FCFO)	8,588	11,016	4,132	411
b Net Cash from Operating Activities before Working Capital Changes	4,382	7,786	2,754	(447
c Changes in Working Capital	(9,839)	(427)	(8,190)	(5,275
1 Net Cash provided by Operating Activities	(5,457)	7,359	(5,436)	(5,722
2 Net Cash (Used in) or Available From Investing Activities	(559)	(3,974)	(5,891)	(2,601
3 Net Cash (Used in) or Available From Financing Activities	8,019	(1,892)	11,574	8,215
4 Net Cash generated or (Used) during the period	2,002	1,493	247	(108
RATIO ANALYSIS				
1 Performance				
a Sales Growth (for the period)	14.7%	24.7%	47.4%	20.5%
b Gross Profit Margin	21.4%	19.3%	13.9%	9.9%
c Net Profit Margin	10.8%	12.2%	0.5%	6.4%
d Cash Conversion Efficiency (FCFO adjusted for Working Capital/Sales)	-2.3%	16.9%	-8.1%	-14.3%
e Return on Equity [ Net Profit Margin * Asset Turnover * (Total Assets/Sh 2 Working Capital Management	20.9%	25.2%	1.0%	9.9%
a Gross Working Capital (Average Days)	190	187	198	246
b Net Working Capital (Average Days)	163	154	163	213
c Current Ratio (Current Assets / Current Liabilities)	4.8	4.5	4.3	5.5
3 Coverages a EBITDA / Finance Cost	2.3	3.3	2.9	1.1
a EBITDA / Finance Cost b FCFO / Finance Cost+CMLTB+Excess STB	2.3 1.7	3.5 2.1		0.2
c Debt Payback (Total Borrowings+Excess STB) / (FCFO-Finance Cost)	2.1	1.5	1.7 4.0	-15.1
4 Capital Structure	2.1	1.J	ע.ד	-13.1
	52.7%	51.3%	59.4%	53.1%
a Total Borrowings / (Total Borrowings+Shareholders' Equity)			57.170	
a Total Borrowings / (Total Borrowings+Shareholders' Equity) b Interest or Markup Payable (Days)	74.0	107.8	103.7	85.4

## Corporate Rating Criteria

Scale

Short-term Rating

Definition The highest capacity for timely repayment.

A strong capacity for timely

repayment. A satisfactory capacity for timely repayment. This may be susceptible to

adverse changes in business. economic, or financial conditions An adequate capacity for timely repayment.

Such capacity is susceptible to adverse changes in business, economic, or financial The capacity for timely repayment is more susceptible to adverse changes in business,

economic, or financial conditions. Liquidity may not be sufficient. Short-term Rating **A1** 

A1+

AAA AA+AA AA- $\mathbf{A}$ + A

A-BBB-BBB BBB-BB+ BB BB  $\mathbf{R}$ + В B-CCC CC С

A2

A3

**Credit Rating** 

Credit rating reflects forward-looking opinion on credit worthiness of underlying entity or instrument; more specifically it covers relative ability to honor financial obligations. The primary factor being captured on the rating scale is relative likelihood of default.

	Long-term Rating		
cale	Definition		
AAA	Highest credit quality. Lowest expectation of credit risk. Indicate exceptionally strong capacity for timely payment of financial commitments		
<b>A</b> +			
AA	Very high credit quality. Very low expectation of credit risk. Indicate very strong capacity for timely payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events.		
AA-			
A+			
A	High credit quality. Low expectation of credit risk. The capacity for timely payment of financial commitments is considered strong. This capacity may, nevertheless, be vulnerable to changes in circumstances or in economic conditions.		
<b>A-</b>			
BB+			
BBB	<b>Good credit quality.</b> Currently a low expectation of credit risk. The capacity for timely payment of financial commitments is considered adequate, but adverse changes in circumstances and in economic conditions are more likely to impair this capacity.		
BBB-			
BB+	Moderate risk. Possibility of credit risk developing. There is a possibility of credit risk		
BB	developing, particularly as a result of adverse economic or business changes over time; however, business or financial alternatives may be available to allow financial commitments to be met.		
BB-			
B+			
В	<b>High credit risk.</b> A limited margin of safety remains against credit risk. Financial commitments are currently being met; however, capacity for continued payment is contingent upon a sustained, favorable business and economic environment.		
B-			
CCC	Very high credit risk. Substantial credit risk "CCC" Default is a real possibility.		
CC	Capacity for meeting financial commitments is solely reliant upon sustained, favorable business or economic developments. "CC" Rating indicates that default of some kind		
С	appears probable. "C" Ratings signal imminent default.		
D	Obligations are currently in default.		

CRA

\*The correlation shown is indicative and, in certain cases, may not hold.

Outlook (Stable, Positive, Negative, Developing) Indicates the potential and direction of a rating over the intermediate term in response to trends in economic and/or fundamental business/financial conditions. It is not necessarily a precursor to a rating change. 'Stable' outlook means a rating is not likely to change. 'Positive' means it may be raised. 'Negative' means it may be lowered. Where the trends have conflicting elements, the outlook may be described as 'Developing'.	Rating Watch Alerts to the possibility of a rating change subsequent to, or, in anticipation of some material identifiable event with indeterminable rating implications. But it does not mean that a rating change is inevitable. A watch should be resolved within foreseeable future, but may continue if underlying circumstances are not settled. Rating watch may accompany rating outlook of the respective opinion.	Suspension It is not possible to update an opinion due to lack of requisite information. Opinion should be resumed in foreseeable future. However, if this does not happen within six (6) months, the rating should be considered withdrawn.	Withdrawn A rating is withdrawn on a) termination of rating mandate, b) the debt instrument is redeemed, c) the rating remains suspended for six months, d) the entity/issuer defaults., or/and e) PACRA finds it impractical to surveill the opinion due to lack of requisite information.	Harmonization A change in rating due to revision in applicable methodology or underlying scale.
---	---	--	--	---

Surveillance. Surveillance on a publicly disseminated rating opinion is carried out on an ongoing basis till it is formally suspended or withdrawn. A comprehensive surveillance of rating opinion is carried out at least once every six months. However, a rating opinion may be reviewed in the intervening period if it is necessitated by any material happening.

**Note.** This scale is applicable to the following methodology(s):

- a) Broker Entity Rating
- b) Corporate Rating
  - c) Debt Instrument Rating d) Financial Institution Rating
- e) Holding Company Rating
- f) Independent Power Producer Rating
- g) Microfinance Institution Rating h) Non-Banking Finance Companies Rating

Disclaimer: PACRA has used due care in preparation of this document. Our information has been obtained from sources we consider to be reliable but its accuracy or completeness is not guaranteed. PACRA shall owe no liability whatsoever to any loss or damage caused by or resulting from any error in such information. Contents of PACRA documents may be used, with due care and in the right context, with credit to PACRA. Our reports and ratings constitute opinions, not recommendations to buy or to sell.

#### **Rating Team Statements**

(1) Rating is just an opinion about the creditworthiness of the entity and does not constitute recommendation to buy, hold or sell any security of the entity rated or to buy, hold or sell the security rated, as the case may be | Chapter III; 14-3-(x)

#### 2) Conflict of Interest

i. The Rating Team or any of their family members have no interest in this rating | Chapter III; 12-2-(j)

ii. PACRA, the analysts involved in the rating process and members of its rating committee, and their family members, do not have any conflict of interest relating to the rating done by them | Chapter III; 12-2-(e) & (k)

iii. The analyst is not a substantial shareholder of the customer being rated by PACRA [Annexure F; d-(ii)] Explanation: for the purpose of above clause, the term "family members" shall include only those family members who are dependent on the analyst and members of the rating committee

#### Restrictions

(3) No director, officer or employee of PACRA communicates the information, acquired by him for use for rating purposes, to any other person except where required under law to do so. | Chapter III; 10-(5)

(4) PACRA does not disclose or discuss with outside parties or make improper use of the non-public information which has come to its knowledge during business relationship with the customer | Chapter III; 10-7-(d)

(5) PACRA does not make proposals or recommendations regarding the activities of rated entities that could impact a credit rating of entity subject to rating | Chapter III; 10-7-(k)

#### **Conduct of Business**

(6) PACRA fulfills its obligations in a fair, efficient, transparent and ethical manner and renders high standards of services in performing its functions and obligations; | Chapter III; 11-A-(a)

(7) PACRA uses due care in preparation of this Rating Report. Our information has been obtained from sources we consider to be reliable but its accuracy or completeness is not guaranteed. PACRA does not, in every instance, independently verifies or validates information received in the rating process or in preparing this Rating Report | Clause 11-(A)(p).

(8) PACRA prohibits its employees and analysts from soliciting money, gifts or favors from anyone with whom PACRA conducts business | Chapter III; 11-A-(q)

(9) PACRA ensures before commencement of the rating process that an analyst or employee has not had a recent employment or other significant business or personal relationship with the rated entity that may cause or may be perceived as causing a conflict of interest; | Chapter III; 11-A-(r) (10) PACRA maintains principal of integrity in seeking rating business | Chapter III; 11-A-(u)

(11) PACRA promptly investigates, in the event of a misconduct or a breach of the policies, procedures and controls, and takes appropriate steps to rectify any weaknesses to prevent any recurrence along with suitable punitive action against the responsible employee(s) | Chapter III; 11-B-(m)

#### Independence & Conflict of interest

(12) PACRA receives compensation from the entity being rated or any third party for the rating services it offers. The receipt of this compensation has no influence on PACRA's opinions or other analytical processes. In all instances, PACRA is committed to preserving the objectivity, integrity and independence of its ratings. Our relationship is governed by two distinct mandates i) rating mandate - signed with the entity being rated or issuer of the debt instrument, and fee mandate - signed with the payer, which can be different from the entity

(13) PACRA does not provide consultancy/advisory services or other services to any of its customers or to any of its customers' associated companies and associated undertakings that is being rated or has been rated by it during the preceding three years unless it has adequate mechanism in place ensuring that provision of such services does not lead to a conflict of interest situation with its rating activities; | Chapter III; 12-2-(d)

(14) PACRA discloses that no shareholder directly or indirectly holding 10% or more of the share capital of PACRA also holds directly or indirectly 10% or more of the share capital of the entity which is subject to rating or the entity which issued the instrument subject to rating by PACRA; | Reference Chapter III; 12-2-(f)

(15) PACRA ensures that the rating assigned to an entity or instrument is not be affected by the existence of a business relationship between PACRA and the entity or any other party, or the non-existence of such a relationship | Chapter III; 12-2-(i)

(16) PACRA ensures that the analysts or any of their family members shall not buy or sell or engage in any transaction in any security which falls in the analyst's area of primary analytical responsibility. This clause shall, however, not be applicable on investment in securities through collective investment schemes. | Chapter III; 12-2-(1)

(17) PACRA has established policies and procedure governing investments and trading in securities by its employees and for monitoring the same to prevent insider trading, market manipulation or any other market abuse | Chapter III; 11-B-(g)

#### Monitoring and review

(18) PACRA monitors all the outstanding ratings continuously and any potential change therein due to any event associated with the issuer, the security arrangement, the industry etc., is disseminated to the market, immediately and in effective manner, after appropriate consultation with the entity/issuer; | Chapter III | 17-(a)

(19) PACRA reviews all the outstanding ratings periodically, on annual basis; Provided that public dissemination of annual review and, in an instance of change in rating will be made; | Chapter III | 17-(b)

(20) PACRA initiates immediate review of the outstanding rating upon becoming aware of any information that may reasonably be expected to result in downgrading of the rating; | Chapter III | 17-(c)

(21) PACRA engages with the issuer and the debt securities trustee, to remain updated on all information pertaining to the rating of the

#### entity/instrument;| Chapter III | 17-(d)

#### **Probability of Default**

(22) PACRA's Rating Scale reflects the expectation of credit risk. The highest rating has the lowest relative likelihood of default (i.e., probability). PACRA's transition studies capture the historical performance behavior of a specific rating notch. Transition behavior of the assigned rating can be obtained from PACRA's Transition Study available at our website. (www.pacra.com). However, actual transition of rating may not follow the pattern observed in the past; | Chapter III | 14-3(f)(vii)

#### **Proprietary Information**

(23) All information contained herein is considered proprietary by PACRA. Hence, none of the information in this document can be copied or, otherwise reproduced, stored or disseminated in whole or in part in any form or by any means whatsoever by any person without PACRA's prior written consent