



The Pakistan Credit Rating Agency Limited

## Rating Report

### Mumtaz Feeds & Allied Industries (Pvt.) 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
22-Oct-2022	BBB-	A2	Positive	Maintain	-
22-Oct-2021	BBB-	A2	Positive	Maintain	-
28-Oct-2020	BBB-	A2	Stable	Upgrade	-
12-Nov-2019	BB+	A3	Stable	Upgrade	-
27-May-2019	BB	A3	-	Initial	-

#### Rating Rationale and Key Rating Drivers

Pakistan has the capacity to produce ~10mln MT of feed annually. The industry generates an estimated annual turnover of ~PKR 350bln to PKR 450bln from local sales to poultry farms. Currently, an uptick in poultry prices has improved the dynamics of poultry and poultry feed segments. The cost of soybean oilseed and maize has seen a surge of ~50% till Dec-21. The cost of raw materials being higher relative to the price of poultry feed and products squeezed industry's margins. However, the industry is able to manage its working capital cycle in an efficient manner. Going forward, cashflows and liquidity are expected to improve contingent upon stable growth in margins. The FY22 floods have damaged livestock and crops. Overall, ~31% of livestock holders have lost animal/poultry due to floods and ~54% of affected households reportedly lost poultry feed. More than ~50% of animal shelters have been damaged. Consequently, livestock holders are facing a severe shortage of fodder/feed for livestock. This is expected to lead an increase in feed prices in FY23.

The ratings reflect Mumtaz Feeds & Allied Industries (Pvt.) Limited's ('Mumtaz Feeds' or 'the Company') growing business profile in the Poultry Feed Industry. The Company is a fresh entrant in the feed business, and is involved in manufacturing and selling broiler & layer feed. The Company has an increasing top-line and posted healthy margins. However, both are small in quantum when compared to industry peers. The utilization level remains low, though, has improved on timeline basis. The Company remains exposed to inherent risks in the feed industry emanating from raw material price changes and disease risks in poultry farms. The Company's working capital remains in check on account of procuring raw materials on a prolonged credit period and prudent debtor management. The Company enjoys synergies as it procures raw material (mainly soybean meal) from an associated concern. Mumtaz Feeds has nominal reliance on bank financing and intends to follow this practice, going forward. Financial support from Sponsors, in the form of loans, provides comfort to the ratings. The management has a good understanding of the supply chain and leverages this understanding in the procurement of raw materials. This enables them to produce good quality products while keeping the costs in check. Coverage position and leverage are strong.

The ratings are dependent on the management's ability to gain market share, improve margins, and, in-turn, profitability. Maintaining strict working capital discipline and adequate leveraging remains critical. Any significant deterioration in margins and/or coverage's will have negative impact on the ratings. Positive outcome of future projects remains imperative for the ratings.

#### Disclosure

<b>Name of Rated Entity</b>	Mumtaz Feeds & Allied Industries (Pvt.) Limited
<b>Type of Relationship</b>	Solicited
<b>Purpose of the Rating</b>	Entity Rating
<b>Applicable Criteria</b>	Methodology   Corporate Rating(Jun-22),Methodology   Correlation Between Long-term & Short-term Rating Scales(Jun-22),Methodology   Rating Modifiers(Jun-22)
<b>Related Research</b>	Sector Study   Poultry Feed(Jan-22)
<b>Rating Analysts</b>	Faiqa Qamar   faiqa.qamar@pacra.com   +92-42-35869504

## Profile

**Legal Structure** Mumtaz Feeds & Allied Industries (Pvt.) Limited ("the Company" or "Mumtaz Feeds") was incorporated as a private limited company in Mar-16.

**Background** The sponsors have been associated with the poultry feed industry for fifteen years in different capacities. In 2016, they collaborated to incorporate Mumtaz Feeds. A year later, the Company started commercial production of poultry feed. Recently, the Company changed its name to 'Mumtaz Feeds & Allied Industries (Pvt.) Limited'.

**Operations** Mumtaz Feed is primarily involved in the manufacturing and sale of poultry feed in sixteen variants. The Company has an installed annual production capacity of 144,000MT, or 40 MT per hour (FY21: Annual 116,460MT, or 25 MT per hour), with capacity utilization of 51% during FY22 (FY21: 48%). The Company's head office and production plant are located in Multan.

## Ownership

**Ownership Structure** Major shareholding of Mumtaz Feeds resides with Mr. Aamir Ali Khan (~35%), followed by Mr. Muhammad Umer (~20%). The remaining stake is equally divided between Mr. Nasir Malik and his brother Mr. Yasir Malik own an equal stake (~17.5%) in the Company.

**Stability** Ownership of the Company vests among five sponsors with no formal succession plan.

**Business Acumen** The sponsors have been part of the poultry industry for more than a decade and are well aware about the industry's business cycles.

**Financial Strength** The Company's financial strength is represented through the support of its sponsors and associated entities having vested interest in the poultry feed industry.

## Governance

**Board Structure** The Company's Board of Directors comprises two Executive Directors and two Non-Executive Directors. Lack of independent oversight signifies a weak governance structure.

**Members' Profile** The Chief Executive Officer, Mr. Aamir Ali Khan has been associated with the sale of poultry feed and trading Soybean meal for more than two decades.

**Board Effectiveness** To ensure effectiveness, the Board has formed two sub-committees, Audit & Risk Management and Procurement & Development. During FY22, several BoD and sub-committee meetings were held with high participation. The minutes of these meetings are not formally documented, indicating room for improvement.

**Financial Transparency** The Company has appointed Mudassar Ehtisham & Co., Chartered Accountants, as its external auditors. The firm is QCR rated and is in category 'B' of SBP panel of auditors. The firm has expressed an unqualified opinion on the financial statements of the Company ending in Jun-21.

## Management

**Organizational Structure** The Company has a horizontal organizational structure that is based on seven main departments, namely, Production, Marketing, Procurement, Head Office, Audit & Tax, Accounts, and Imports. All departmental heads report to the CEO.

**Management Team** The management comprises experienced individuals with relevant technical know-how. Mumtaz Feed's CEO, Mr. Aamir Ali Khan, has been associated with the sale of poultry feed and trading soybean meal for more than two decades. General Manager Production has an overall experience of more than a decade in poultry feed manufacturing and formulation. General Manager Sales and Logistics also has over 16 years of experience in the feed industry.

**Effectiveness** There are no management committees in place to monitor management's effectiveness.

**MIS** The Company developed in-house software with three modules - Financial Accounting, Sale Purchase, and Software Security - designed to meet the need for accounting and inventory management. Financial statements are prepared on a quarterly basis, while production, sales, receivables, and stock reports are prepared on a weekly and monthly basis.

**Control Environment** The internal audit function is not in place at the Company leading to operational risk concerns. However, the Company emphasizes quality control measures with strict policies to comply with the food authority's regulatory framework.

## Business Risk

**Industry Dynamics** Pakistan has the capacity to produce ~10mln MT of feed annually. The industry generates an estimated annual turnover of ~PKR 350bln to PKR 450bln from local sales to poultry farms. Currently, an uptick in poultry prices has improved the dynamics of poultry and poultry feed segments. The cost of soybean oilseed and maize has seen a surge of ~50% till Dec-21. The cost of raw materials being higher relative to the price of poultry feed and products squeezed industry's margins. However, the industry is able to manage its working capital cycle in an efficient manner. Going forward, cashflows and liquidity are expected to improve contingent upon stable growth in margins. The FY22 floods have damaged livestock and crops. Overall, ~31% of livestock holders have lost animal/poultry due to floods and ~54% of affected households reportedly lost poultry feed. More than ~50% of animal shelters have been damaged. Consequently, livestock holders are facing a severe shortage of fodder/feed for livestock. This is expected to lead an increase in feed prices in FY23.

**Relative Position** Mumtaz Feed holds a market share of ~1% market in terms of revenue.

**Revenues** The Company generates revenue by selling sixteen poultry feed variants from the Southern (~64%) and Central (~36%) regions of the country. The top six products make up a significant portion (~94%) of the total revenue. The Company posted growth of (~52%) in revenues (FY22: PKR 5,234mln, FY21: PKR 3,448mln). This increase was mainly backed by higher volumes (FY22: 73,244 MT, FY21: 55,798 MT) as well as improved feed prices.

**Margins** Mumtaz Feeds has registered increasing margins since inception. During FY22, the Company's gross margins stood at ~13% (FY21: ~12%) owing to an increase in feed prices and operational efficiencies gained from higher production levels. Resultantly, operating margins stood at ~9% (FY21: ~8%). Finance cost increased to PKR 19mln, (FY21: PKR 8mln) as a result of higher interest rates. Bottom-line closed in at PKR 403mln (FY21: PKR 233mln), translating into an improved net margin of 7.7% (FY21: 6.8%)

**Sustainability** The management has lately vertically integrated by setting up a solvent extraction facility of 100MT per day, as they foresee an increased market share and focuses on improved quality at better prices.

## Financial Risk

**Working Capital** The Company's working capital management is a function of high inventories and payables. In a bid to purchase raw materials at lower prices and to maintain sufficient stock levels, the Company keeps around 60 days of inventory. Average inventory days stood at 88 days as of FY22 (FY21: 86days). Prudent management of debtors is reflected in average debtor days of 12 days (FY21: 16days). Payable days have decreased to 41 days (FY21: 54days). Therefore, the effective working capital days remained stable at 59 days (FY21: 48days).

**Coverages** The Company's cash flows increased based on better profitability. Free cash flow as of FY22 stood at PKR 492mln (FY21: PKR 309mln). Despite obtaining interest free loans from the sponsors, high-interest rates led to a decrease in the coverage ratios, as the finance cost increased to PKR 19mln (FY21: PKR 8mln). As of FY22, interest coverage stood at ~26x (FY21: 39x). Core and Total Operating coverage ratio decreased to ~26x (FY21: 39x), due to increased utilization of short-term borrowings.

**Capitalization** The Company's capital structure remains modest and comprises long-term borrowings (~52%), which mainly comprises loan from Sponsors (PKR ~272mln) and short-term borrowings (~48%), in the form of running finance (PKR ~252mln), required to fulfill the working capital requirements. Leveraging increased to ~33% in FY22 (FY21: ~31%).



Mumtaz Feeds & Allied Industries (Pvt.) Limited Poultry Feed	Jun-22 12M	Jun-21 12M	Jun-20 12M	Jun-19 12M
---	---------------	---------------	---------------	---------------

**A BALANCE SHEET**

1 Non-Current Assets	394	356	308	178
2 Investments	5	5	5	-
3 Related Party Exposure	-	-	-	-
4 Current Assets	1,808	1,233	837	546
<i>a Inventories</i>	1,496	1,018	605	382
<i>b Trade Receivables</i>	196	146	158	85
<b>5 Total Assets</b>	<b>2,207</b>	<b>1,594</b>	<b>1,150</b>	<b>724</b>
6 Current Liabilities	614	641	437	189
<i>a Trade Payables</i>	563	607	409	165
7 Borrowings	256	19	12	52
8 Related Party Exposure	272	272	272	272
9 Non-Current Liabilities	2	2	2	2
<b>10 Net Assets</b>	<b>1,064</b>	<b>661</b>	<b>428</b>	<b>210</b>
<b>11 Shareholders' Equity</b>	<b>1,064</b>	<b>661</b>	<b>428</b>	<b>210</b>

**B INCOME STATEMENT**

1 Sales	5,234	3,448	2,525	1,527
<i>a Cost of Good Sold</i>	(4,550)	(3,040)	(2,275)	(1,412)
<b>2 Gross Profit</b>	<b>684</b>	<b>408</b>	<b>249</b>	<b>115</b>
<i>a Operating Expenses</i>	(222)	(141)	(109)	(62)
<b>3 Operating Profit</b>	<b>462</b>	<b>267</b>	<b>140</b>	<b>54</b>
<i>a Non Operating Income or (Expense)</i>	-	-	-	1
<b>4 Profit or (Loss) before Interest and Tax</b>	<b>462</b>	<b>267</b>	<b>140</b>	<b>54</b>
<i>a Total Finance Cost</i>	(19)	(8)	(18)	(8)
<i>b Taxation</i>	(39)	(26)	(19)	(14)
<b>6 Net Income Or (Loss)</b>	<b>403</b>	<b>233</b>	<b>104</b>	<b>33</b>

**C CASH FLOW STATEMENT**

<i>a Free Cash Flows from Operations (FCFO)</i>	492	309	150	64
<i>b Net Cash from Operating Activities before Working Capital</i>	492	309	150	64
<i>c Changes in Working Capital</i>	(600)	(215)	(45)	(243)
<b>1 Net Cash provided by Operating Activities</b>	<b>(108)</b>	<b>94</b>	<b>105</b>	<b>(179)</b>
<b>2 Net Cash (Used in) or Available From Investing Activities</b>	<b>(88)</b>	<b>(98)</b>	<b>(47)</b>	<b>(133)</b>
<b>3 Net Cash (Used in) or Available From Financing Activities</b>	<b>237</b>	<b>7</b>	<b>(40)</b>	<b>311</b>
<b>4 Net Cash generated or (Used) during the period</b>	<b>42</b>	<b>2</b>	<b>18</b>	<b>(1)</b>

**D RATIO ANALYSIS**

<b>1 Performance</b>				
<i>a Sales Growth (for the period)</i>	51.8%	36.6%	65.3%	--
<i>b Gross Profit Margin</i>	13.1%	11.8%	9.9%	7.5%
<i>c Net Profit Margin</i>	7.7%	6.8%	4.1%	2.2%
<i>d Cash Conversion Efficiency (FCFO adjusted for Working Capital) / (Gross Profit)</i>	-2.1%	2.7%	4.2%	-11.7%
<i>e Return on Equity [ Net Profit Margin * Asset Turnover * (Total Assets / Equity)]</i>	46.7%	42.8%	32.5%	15.8%
<b>2 Working Capital Management</b>				
<i>a Gross Working Capital (Average Days)</i>	100	102	89	112
<i>b Net Working Capital (Average Days)</i>	59	48	47	72
<i>c Current Ratio (Current Assets / Current Liabilities)</i>	2.9	1.9	1.9	2.9
<b>3 Coverages</b>				
<i>a EBITDA / Finance Cost</i>	25.6	39.0	8.8	8.6
<i>b FCFO / Finance Cost+CMLTB+Excess STB</i>	25.6	39.0	8.0	7.5
<i>c Debt Payback (Total Borrowings+Excess STB) / (FCFO-Financing Cost)</i>	0.6	0.9	2.1	4.8
<b>4 Capital Structure</b>				
<i>a Total Borrowings / (Total Borrowings+Shareholders' Equity)</i>	33.2%	30.5%	39.9%	60.7%
<i>b Interest or Markup Payable (Days)</i>	0.0	0.0	0.0	0.0
<i>c Entity Average Borrowing Rate</i>	4.3%	2.4%	4.7%	2.3%

**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.

Scale	Long-term Rating Definition
AAA	<b>Highest credit quality.</b> Lowest expectation of credit risk. Indicate exceptionally strong capacity for timely payment of financial commitments
AA+	
AA	<b>Very high credit quality.</b> 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	<b>High credit quality.</b> 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.
A-	
BBB+	
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+	<b>Moderate risk.</b> Possibility of credit risk developing. There is a possibility of credit risk 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	
BB-	
B+	
B	<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	
CC	<b>Very high credit risk.</b> Substantial credit risk “CCC” Default is a real possibility. Capacity for meeting financial commitments is solely reliant upon sustained, favorable business or economic developments. “CC” Rating indicates that default of some kind appears probable. “C” Ratings signal imminent default.
C	
D	Obligations are currently in default.

Scale	Short-term Rating Definition
A1+	The highest capacity for timely repayment.
A1	A strong capacity for timely repayment.
A2	A satisfactory capacity for timely repayment. This may be susceptible to adverse changes in business, economic, or financial conditions.
A3	An adequate capacity for timely repayment. Such capacity is susceptible to adverse changes in business, economic, or financial conditions.
A4	The capacity for timely repayment is more susceptible to adverse changes in business, economic, or financial conditions. Liquidity may not be sufficient.



\*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 surveil 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):

<p><b>Entities</b></p> <ul style="list-style-type: none"> <li>a) Broker Entity Rating</li> <li>b) Corporate Rating</li> <li>c) Financial Institution Rating</li> <li>d) Holding Company Rating</li> <li>e) Independent Power Producer Rating</li> <li>f) Microfinance Institution Rating</li> <li>g) Non-Banking Finance Companies (NBFCs) Rating</li> </ul>	<p><b>Instruments</b></p> <ul style="list-style-type: none"> <li>a) Basel III Compliant Debt Instrument Rating</li> <li>b) Debt Instrument Rating</li> <li>c) Sukuk Rating</li> </ul>
--	---

**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-(l)

(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 | 18-(a)

(19) PACRA reviews all the outstanding ratings on semi-annual basis or as and when required by any creditor or upon the occurrence of such an event which requires to do so; | Chapter III | 18-(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 | 18-(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 | 18-(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-(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