Transition & Default Study

CY16-CY25

The Pakistan Credit Rating Agency Limited

31st January 2026

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SECTION I: CONCEPT OF TRANSITION & DEFAULT STUDY

Concept of Transition and Default Study

What is a Transition & Default Study?

A Set of Standardized Tools & Analyses for a Credit Rating Company's (CRC) ratings' performance appraisal.

## Need for a Transition & Default Study

- Self-assessment of CRC

- Peer Analysis with other CRCs

- Regulatory Requirement:

  "A credit rating company shall.- publish annually, within one month of the calendar year, a comprehensive default and transition study developed in line with methodologies practiced by credit rating agencies globally. The annual default and transition study must contain cumulative default rates (CDRs) and transitions for each rating grade for periods 1, 3 and 5 years."

  Credit Rating Companies Regulations, 2016 Chapter III, Section 11-A-(l)

Schematic – A Typical Transition & Default Study

PACRA's Transition and Default Study assesses the accuracy and stability of its entity ratings by analyzing historical rating changes and default rates across one, three, five, and ten-year horizons. This enhances the credibility and transparency of its rating process.
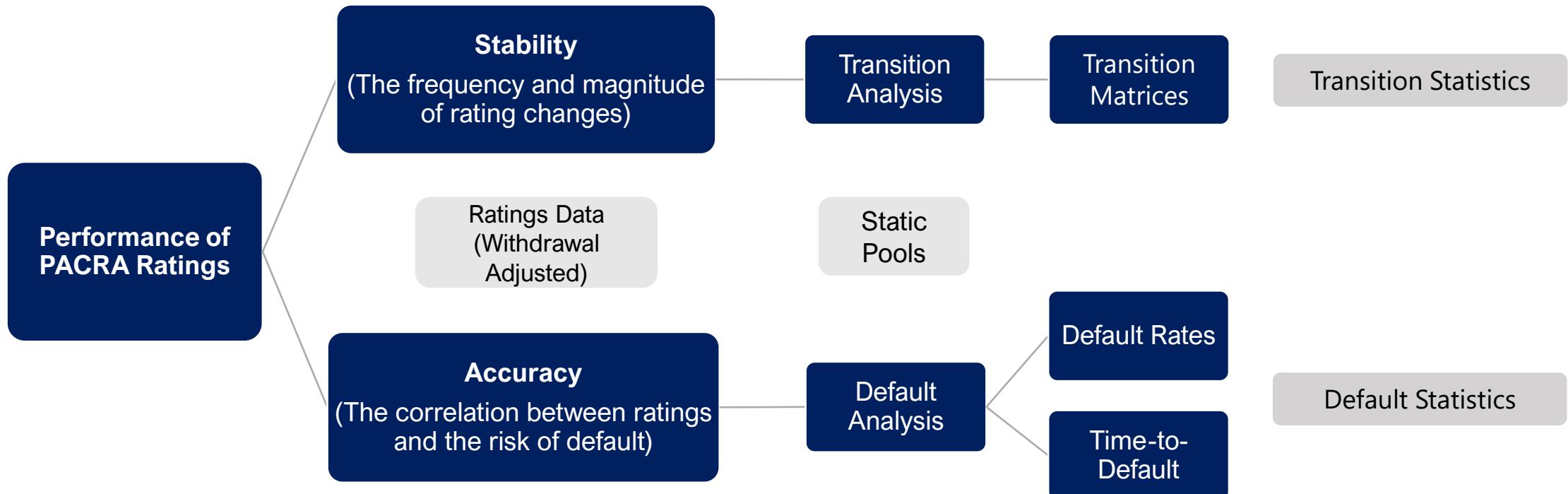
SECTION II: PACRA TRANSITION & DEFAULT TRENDS

NOTE: PACRA's ongoing enhancement of the database used to generate the results contained in this study may lead to some differences compared to previous studies.
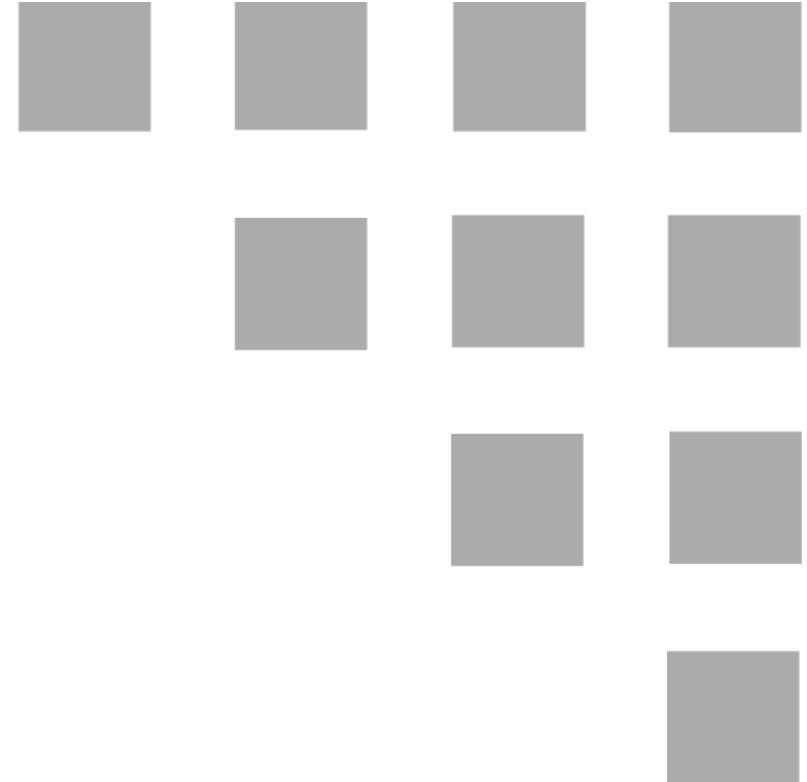
Rating Distribution

PACRA Original Static Pools Composition (CY16-CY25)

	CY16	CY17	CY18	CY19	CY20	CY21	CY22	CY23	CY24	CY25
Original Static Pool	93	102	135	193	239	253	280	344	357	354
Withdrawals	7	5	8	10	10	13	11	18	20	12
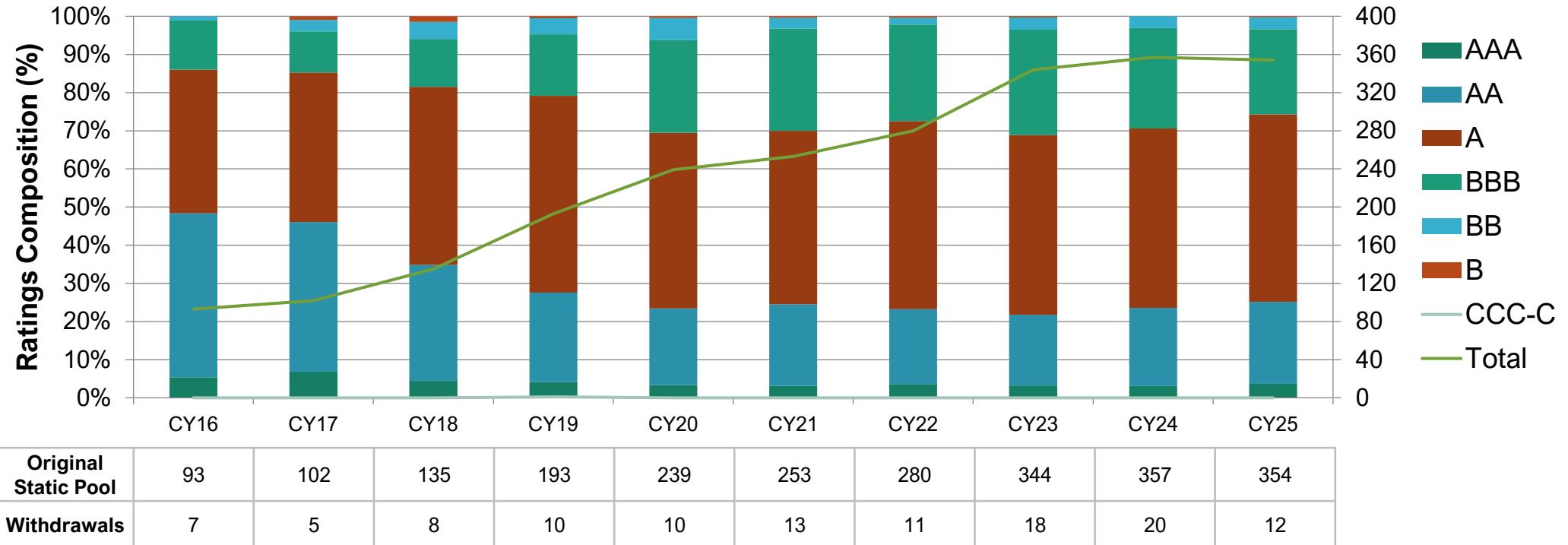
- PACRA's rating universe was limited in size until CY17 which posed limitations to the interpretation of study results.
- Significant growth in rating opinions over the past 6 years has made the results of the study statistically more meaningful.

Rating Distribution – Continued

PACRA Ratings' Composition (CY16-CY25)
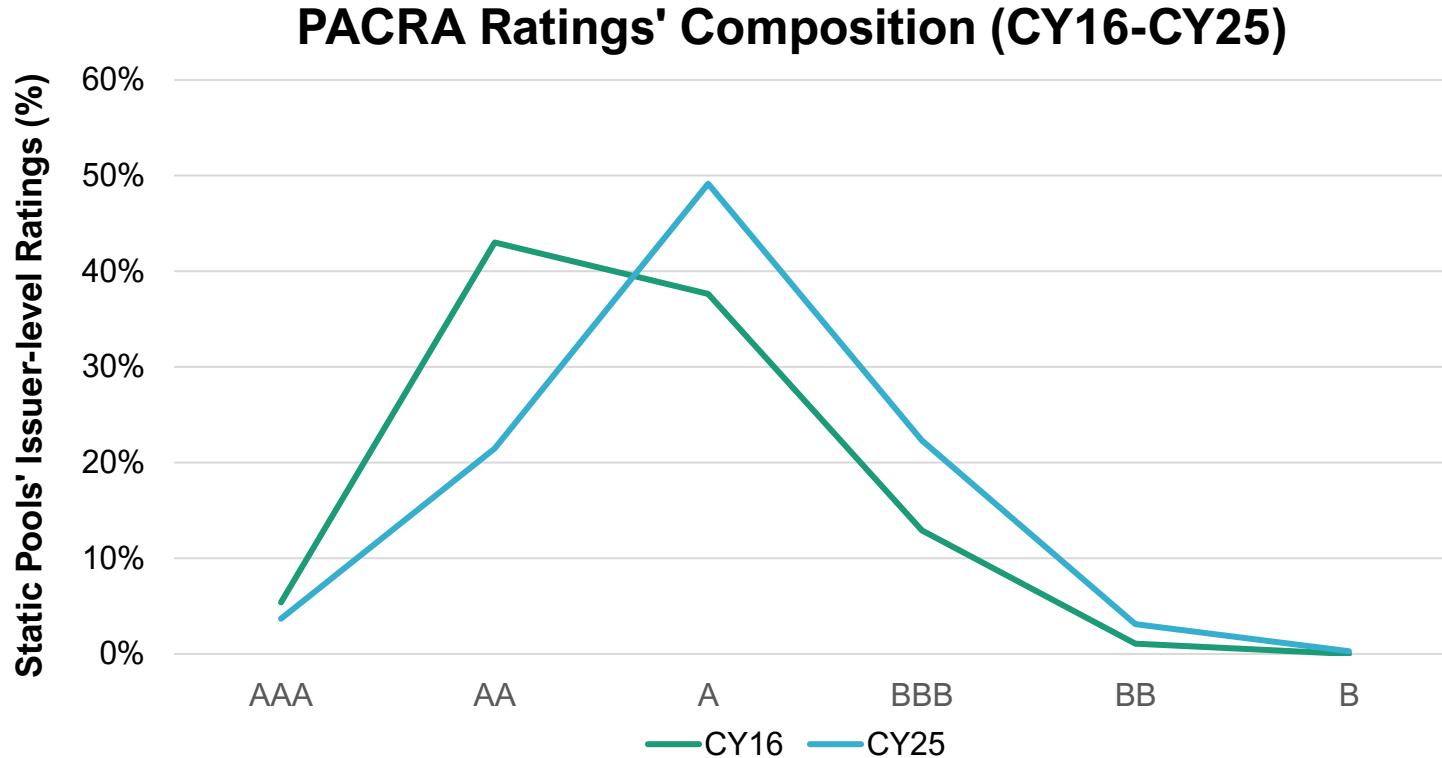
- The mean rating for PACRA has shifted from "AA" to "A" category between CY16 and CY25 while the median rating category during CY25 has largely remained unchanged at "A".
- The decline in the mean rating is attributable to the rating universe having expanded threefold over the decade and addition of relatively lower rated clients, resulting in a more balanced rating mix.

Overview of Economy

- Pakistan posted a positive real GDP growth of ~2.68% during FY25 (FY24: ~2.38%) due to an increase in agriculture income and the services sector. In 1QFY26, real GDP grew by ~3.7%, whereas the expected FY26 real GDP growth rate has been revised to 3.75%-4.75%. The headline inflation dropped significantly to ~0.3% in Apr'25; however, it gradually increased to ~5.6% in Dec'25 on a YoY basis. The policy rate reduced by 150 bps during CY25, ending the year at 10.5%.

- Meanwhile, Pakistan posted a current account deficit of $244mln at the end of CY25 (CY24: $454mln-profit) due to faster growth of imports relative to exports.

- The official exchange rate increased slightly to PKR 280.1 per USD at the end of CY25 (Year-end CY24: PKR 278.6 per USD).

Trend in Key Policy Indicators (CY25)

Legend:
- Current Account Balance (USD mln) (LHS)
- Total Liquid FX Reserves (USD mln) (LHS)
- Avg National CPI (%) (RHS)
- MPR (period end) (%) (RHS)

Impact on PACRA Ratings

Annual Multi-notch Rating Activity (CY16-CY25)

Annual Single-notch Rating Activity (CY16-CY25)
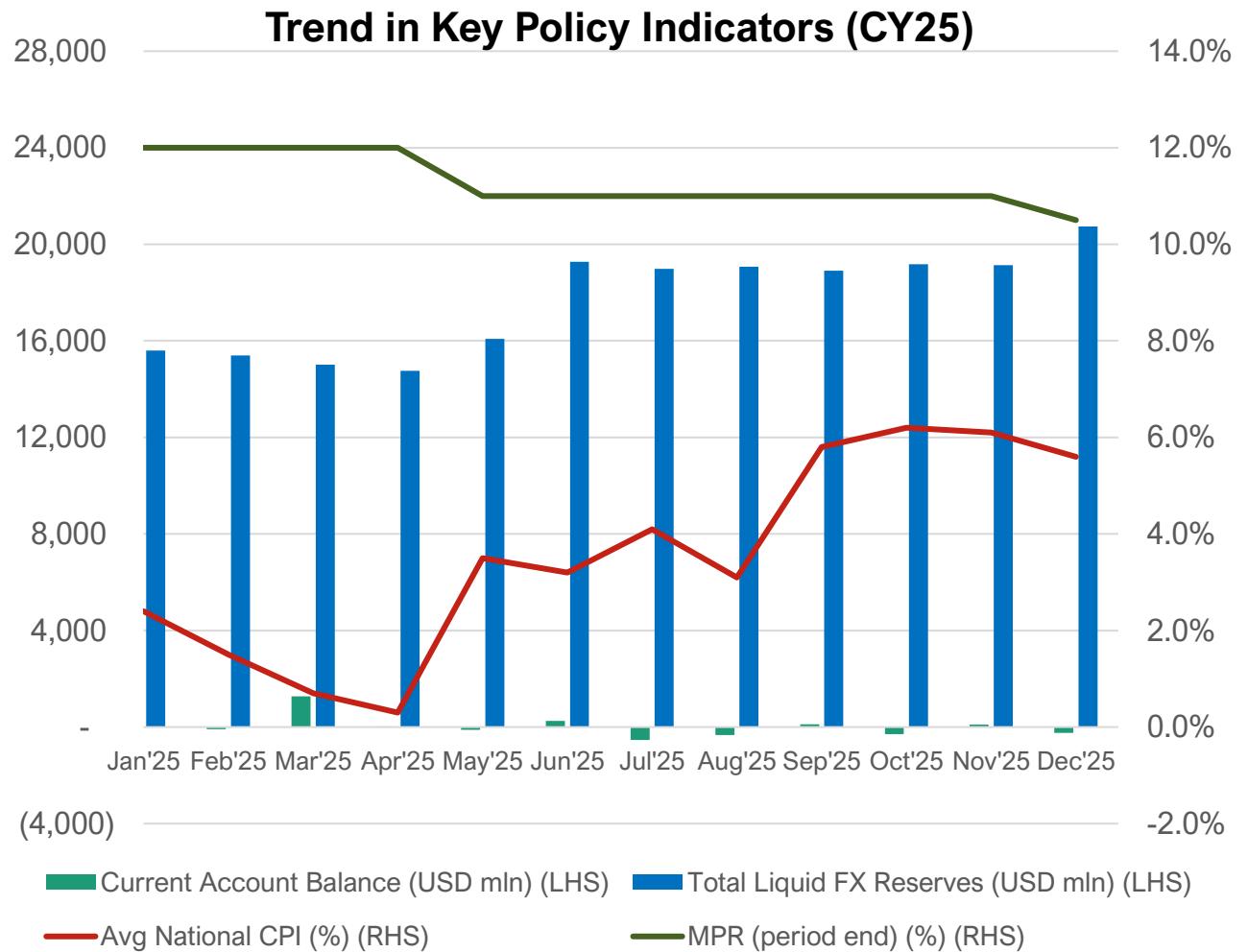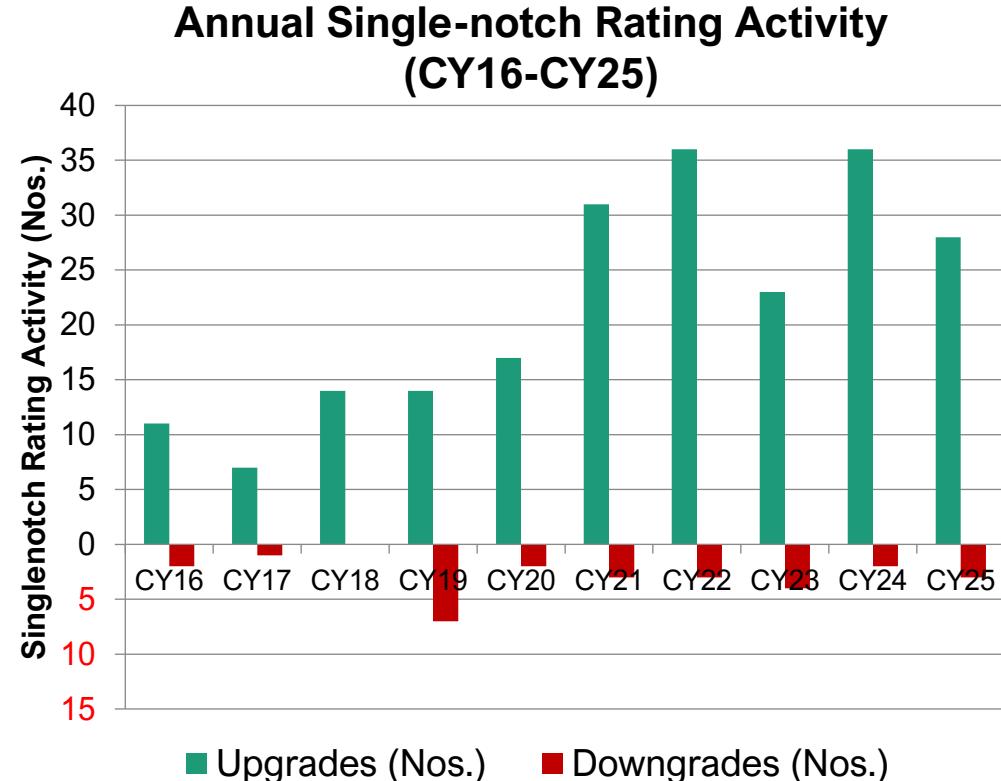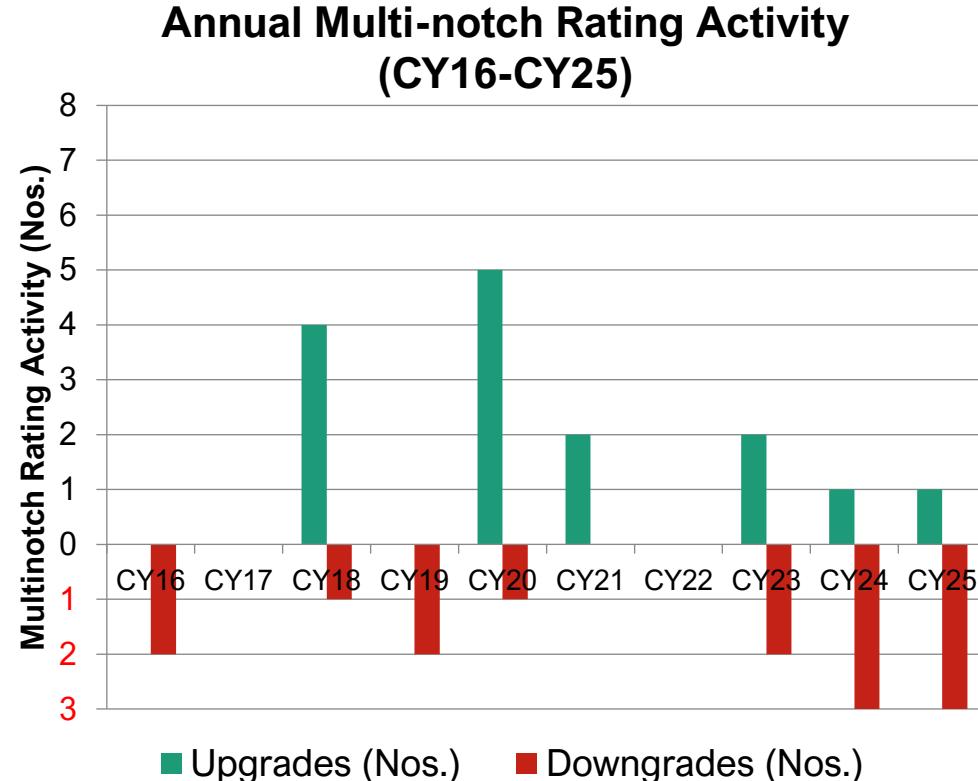
- Amid gradual macroeconomic stabilization during CY25, PACRA recorded an entity rating upgrade rate of ~8.5% (29 total upgrades), while the downgrade rate remained low at ~1.8% (6 total downgrades), indicating a broadly stable credit environment with limited downside pressure.

- During CY25, PACRA undertook one multi-notch upgrade alongside three multi-notch downgrades, reflecting selective stress in weaker credits. Additionally, 28 single-notch upgrades were recorded against only four single-notch downgrades.

Impact on PACRA Ratings – Continued

- Within multi-notch rating movements, one entity experienced a two-notch upgrade, while two entities were downgraded by two notches. Additionally, one entity was downgraded by a cumulative five notches.

- Out of the 29 total upgrades, the sectors that witnessed the highest number of upgrades were Energy, Banks, Infrastructure, Consumer Goods & Services.

- PACRA upgraded 6 entities in the Energy cluster in CY25, particularly within the Oil Marketing Companies sector. This was primarily driven by a recovery in volumetric demand and stable exchange rate conditions, which improved earnings visibility and strengthened credit profiles.

- All 5 upgrades in the Banking sector were concentrated within the microfinance segment, with the upgrades driven by improving operating performance, capitalization, and asset quality, supported by a more stable macro environment.

- Both Infrastructure and Consumer Goods & Services sectors witnessed 3 upgrades respectively, with no particular trend in their sub-segments.

- Unlike the upgrade trends, downgrades did not exhibit any clear sector-wise concentration. The sample size for downgrades remained limited, with only six downgrades recorded within the withdrawal-adjusted static pool.

Sector	Energy	Banks	Infrastructure	Consumer Goods & Services	Others
Number of Upgrades	6	5	3	3	12

Annual Rating Activity Trend

Annual Rating Activity Trends (CY16-CY25)
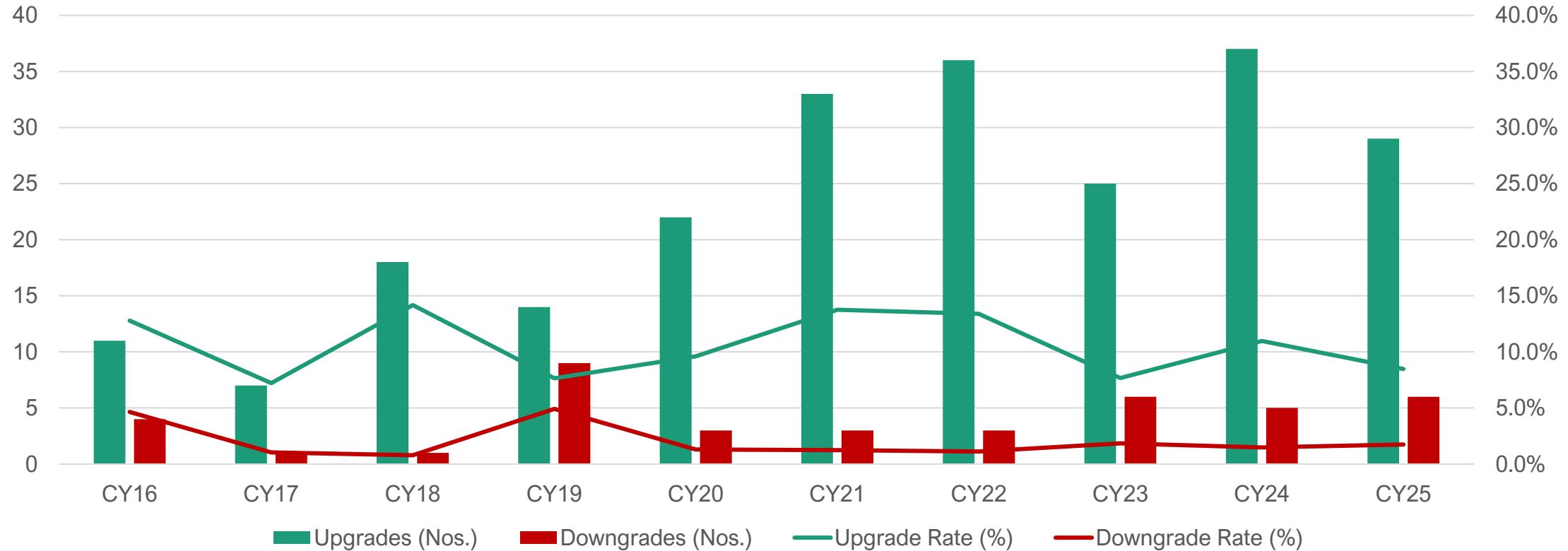
- The default rate has remained unchanged at 0% for entity ratings after CY16.
- Upgrade rate slowed down in CY25 while the downgrade rate remained stable.

CY25 Transition Matrix

Transition (Years) : 1	Withdrawal Adjusted Static Pool	End of Year (CY25)																		Withdrawals
		AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC-C	D	
AAA	13.00	100.0%																		0.00
AA+	12.00		100.0%																	1.00
AA	29.00		3.4%	96.6%																2.00
AA-	31.00			6.5%	93.5%															1.00
A+	37.00			2.7%		97.3%														0.00
A	46.00					10.9%	89.1%													1.00
A-	86.00						7.0%	93.0%												4.00
BBB+	26.00								92.3%	3.8%	3.8%									1.00
BBB	32.00								18.8%	78.1%	3.1%									0.00
BBB-	18.00									27.8%	66.7%		5.6%							2.00
BB+	5.00										20.0%	60.0%	20.0%							0.00
BB	6.00											33.3%	50.0%			16.7%				0.00
BB-	0.00													-						0.00
B+	0.00														-					0.00
B	1.00															100.0%				0.00
B-	0.00																-			0.00
CCC-C	0.00																	-		0.00

Beginning of Year (CY25)

- In CY25, rating transitions were largely stable, with a higher incidence of upgrades concentrated within the "A" (Single-A) and "BBB" (Triple-B) rating categories, while higher-rated and lower-rated segments largely exhibited rating stability.

CY25 Transition Matrix - Corporates

End of Year (CY25)

Transition (Years) : 1	Withdrawal Adjusted Static Pool	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC-C	D	Withdrawals
AAA	3.00	100.0%																		0.00
AA+	7.00		100.0%																	1.00
AA	22.00		4.5%	95.5%																2.00
AA-	28.00			3.6%	96.4%															1.00
A+	32.00			3.1%		96.9%														0.00
A	42.00					9.5%	90.5%													1.00
A-	70.00						5.7%	94.3%												4.00
BBB+	23.00								95.7%	4.3%										1.00
BBB	29.00								17.2%	79.3%	3.4%									0.00
BBB-	16.00									25.0%	75.0%									2.00
BB+	4.00										25.0%	75.0%								0.00
BB	5.00											40.0%	40.0%					20.0%		0.00
BB-	0.00													-						0.00
B+	0.00														-					0.00
B	1.00															100.0%				0.00
B-	0.00																-			0.00
CCC-C	0.00																	-		0.00

(Beginning of Year (CY25))

- One-year average rating transition of Corporates is consistent with its overall trend of migration to higher rating categories.

CY25 Transition Matrix – Financial Institutions

Transition (Years) : 1	Withdrawal Adjusted Static Pool	End of Year (CY25)																		Withdrawals
		AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC-C	D	
AAA	10.00	100.0%																		0.00
AA+	5.00		100.0%																	0.00
AA	7.00			100.0%																0.00
AA-	3.00			33.3%	66.7%															0.00
A+	5.00					100.0%														0.00
A	4.00					25.0%	75.0%													0.00
A-	16.00						12.5%	87.5%												0.00
BBB+	3.00								66.7%		33.3%									0.00
BBB	3.00								33.3%	66.7%										0.00
BBB-	2.00									50.0%	0.0%		50.0%							0.00
BB+	1.00											0.0%	100.0%							0.00
BB	1.00												100.0%							0.00
BB-	0.00													-						0.00
B+	0.00														-					0.00
B	0.00															-				0.00
B-	0.00																-			0.00
CCC-C	0.00																	-		0.00

Beginning of Year (CY25)

- One-year average rating transition of Financial institutions reveals a positive trajectory with six FI's being upgraded and three being downgraded.

One-year Average Transition Matrix

Transition Period (1-Year)	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC-C	D	Withdrawal-Adjusted Static Pool	Data Counts
AAA	100.0%																		8.60	86.00
AA+	2.8%	96.3%	0.9%																10.90	109.00
AA		4.3%	95.7%																20.90	209.00
AA-			8.8%	90.7%	0.5%														20.50	205.00
A+			0.5%	6.9%	89.8%	2.8%													21.60	216.00
A				1.0%	11.3%	86.4%	1.0%					0.3%							30.90	309.00
A-				0.4%	0.2%	6.6%	91.1%	0.9%	0.6%			0.2%							54.20	542.00
BBB+							17.5%	78.9%	3.0%	0.6%									16.60	166.00
BBB							0.5%	13.5%	83.9%	1.6%		0.5%							19.30	193.00
BBB-							1.6%	0.8%	20.2%	75.0%	0.8%	1.6%							12.40	124.00
BB+									6.4%	31.9%	59.6%	2.1%							4.70	47.00
BB							4.8%				23.8%	57.1%		9.5%		4.8%			2.10	21.00
BB-												100.0%	0.0%						0.10	1.00
B+														50.0%	50.0%				0.20	2.00
B															60.0%	20.0%	20.0%		0.50	5.00
B-																100.0%			0.10	1.00
CCC-C																	-		0.00	0.00

Average Annual Transition (CY16-CY25)

Beginning of Year (Average CY16-CY25)

- PACRA's higher rating categories have generally witnessed stronger stability rate than the lower rating categories.

NOTE: Withdrawal-adjusted static pool and data counts appear in decimal places as a result of averaging the number of periods from CY16 to CY25.

Three-year Average Transition Matrix

Transition Period (3-Year)	Average Annual Transition (CY16-CY25)																		Withdrawal-Adjusted Static Pool	Data Counts
	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC-C	D		
AAA	100.0%																		7.75	62.00
AA+	10.1%	87.3%	2.5%																9.88	79.00
AA		11.4%	88.6%																18.63	149.00
AA-		1.5%	24.6%	73.1%	0.7%														16.75	134.00
A+			1.5%	18.2%	73.7%	6.6%													17.13	137.00
A			0.5%	5.4%	29.3%	59.0%	3.4%	1.0%			0.5%				1.0%				25.63	205.00
A-			2.0%	0.6%	19.9%	73.4%	2.0%	1.5%			0.3%					0.3%			42.75	342.00
BBB+							47.4%	45.4%	4.1%	2.1%	1.0%								12.13	97.00
BBB							8.2%	34.0%	52.6%	3.1%	2.1%								12.13	97.00
BBB-						1.5%	7.7%	4.6%	46.2%	40.0%									8.13	65.00
BB+									23.3%	60.0%	16.7%								3.75	30.00
BB							20.0%		20.0%	10.0%	20.0%	20.0%					10.0%		1.25	10.00
BB-									100.0%				0.0%						0.13	1.00
B+														0.0%	50.0%	50.0%			0.25	2.00
B														0.0%	100.0%				0.13	1.00
B-																-			0.00	0.00
CCC-C																	-		0.00	0.00

Beginning of Year (Average CY16-CY25)

➢ The three-year average rating stability manifests that rating categories above A+ show greater stability as compared to the lower investment grade rating categories. The lowest rating categories show a tendency to migrate towards lower ratings.

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Five-year Average Transition Matrix

Transition Period (5-Year)	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC-C	D	Withdrawal-Adjusted Static Pool	Data Counts
AAA	100.0%																		6.83	41.00
AA+	18.2%	78.2%	3.6%																9.17	55.00
AA		17.6%	82.4%																17.00	102.00
AA-		3.6%	36.9%	58.3%	1.2%														14.00	84.00
A+			2.4%	33.3%	54.8%	7.1%						1.2%		1.2%					14.00	84.00
A			2.6%	9.6%	42.6%	35.7%	7.0%	1.7%					0.9%						19.17	115.00
A-				1.6%	4.8%	27.8%	59.9%	3.7%	1.1%			0.5%				0.5%			31.17	187.00
BBB+						8.7%	56.5%	21.7%	6.5%	4.3%		2.2%							7.67	46.00
BBB						3.0%	12.1%	48.5%	33.3%			3.0%							5.50	33.00
BBB-						6.9%	20.7%	10.3%	55.2%	6.9%									4.83	29.00
BB+							5.3%	10.5%	31.6%	52.6%	0.0%								3.17	19.00
BB							66.7%		33.3%			0.0%							0.50	3.00
BB-							100.0%						0.0%						0.17	1.00
B+														0.0%	100.0%				0.17	1.00
B															-				0.00	0.00
B-																-			0.00	0.00
CCC-C																	-		0.00	0.00

Average Annual Transition (CY16-CY25)

Beginning of Year (Average CY16-CY25)

- Analysis of five-year average transition matrices reveals a consistent trend, characterized by higher migration rates among issuers in the lower investment-grade ratings. Conversely, issuers with AA and higher rating categories exhibit significantly higher stability.

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Ten-year Average Transition Matrix

Transition Period (10-Year)	Average Annual Transition (CY16-CY25)																		Withdrawal-Adjusted Static Pool	Data Counts
	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC-C	D		
AAA	100.0%																		5.00	5.00
AA+	28.6%	57.1%	14.3%																7.00	7.00
AA	9.1%	27.3%	63.6%																11.00	11.00
AA-		27.3%	45.5%	27.3%															11.00	11.00
A+			20.0%	60.0%	20.0%														10.00	10.00
A				16.7%	83.3%	0.0%													6.00	6.00
A-			14.3%			57.1%	28.6%												7.00	7.00
BBB+					25.0%		50.0%	0.0%			25.0%								4.00	4.00
BBB								0.0%	100.0%										1.00	1.00
BBB-							100.0%		0.0%										1.00	1.00
BB+											-								0.00	0.00
BB												-							0.00	0.00
BB-													-						0.00	0.00
B+														-					0.00	0.00
B															-				0.00	0.00
B-																-			0.00	0.00
CCC-C																	-		0.00	0.00

Beginning of Year (Average CY16-CY25)

- Ten-year average rating transition exhibits an overall trend of migration to higher rating categories.

Transition Rates – Financial Institutions vs. Corporates

	Transition Rates	CY16	CY17	CY18	CY19	CY20	CY21	CY22	CY23	CY24	CY25
Financial Institutions	Upgrade Rate (%)	13.2%	7.9%	9.8%	-	2.4%	4.3%	8.0%	2.0%	9.1%	10.0%
	Downgrade Rate (%)	5.3%	2.6%	2.4%	7.3%	-	2.1%	4.0%	8.0%	3.6%	5.0%
	Maintain Rate (%)	81.6%	89.5%	87.8%	92.7%	97.6%	93.6%	88.0%	90.0%	87.3%	85.0%
	Default Rate (%)	-	-	-	-	-	-	-	-	-	-
Corporates	Upgrade Rate (%)	12.5%	6.8%	16.3%	9.9%	11.2%	16.1%	14.6%	8.7%	11.3%	8.2%
	Downgrade Rate (%)	4.2%	-	-	4.2%	1.6%	1.0%	0.5%	0.7%	1.1%	1.1%
	Maintain Rate (%)	83.3%	93.2%	83.7%	85.9%	87.2%	82.9%	84.9%	90.6%	87.6%	90.7%
	Default Rate (%)	-	-	-	-	-	-	-	-	-	-
Overall	Upgrade Rate (%)	12.8%	7.2%	14.2%	7.7%	9.6%	13.8%	13.4%	7.7%	11.0%	8.5%
	Downgrade Rate (%)	4.7%	1.0%	0.8%	4.9%	1.3%	1.3%	1.1%	1.8%	1.5%	1.8%
	Maintain Rate (%)	82.6%	91.8%	85.0%	87.4%	89.1%	85.0%	85.5%	90.5%	87.5%	89.8%
	Default Rate (%)	-	-	-	-	-	-	-	-	-	-

- Corporates demonstrated higher rating stability in CY25, while financial institutions exhibited relatively higher rating transition activity, characterized by both higher upgrade and downgrade rates.

Default Trends - CDRs

PACRA Average Cumulative Default Rates (CDRs) - CY16-CY25

|	1-Year	2-Year	3-Year	4-Year	5-Year	6-Year	7-Year	8-Year	9-Year	10-Year
AAA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AA+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AA-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
A+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
A	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
A-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
A	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BBB+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BBB	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BBB-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-
BBB	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BB+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-
BB	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-
BB-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-
BB	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-
B+	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	-	-
B	0.0%	0.0%	0.0%	-	-	-	-	-	-	-
B-	0.0%	-	-	-	-	-	-	-	-	-
B	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	-	-
CCC – C	-	-	-	-	-	-	-	-	-	-
Investment Grade (AAA-BBB)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

- No entity within PACRA's rated universe has experienced a default since the calendar year 2016.

NOTE: "-" notation appears in one of two situations: (i) if the CDR for a rating grade happens to be exactly zero, or, (ii) if there is absence of data to have undergone maturity or "seasoning" for the purpose of CDR calculation.

Default Trends – Time to Default (since inception)

| CY25	Time to default *(in months)*	
Rating Category	Initial Ratings	All Ratings
AAA	N/A	N/A
AA	N/A	81
A	53 (7)*	47
BBB	74 (3)*	41
BB	81 (2)*	17
* Default Counts		

- Since inception to Dec 31, 2025, there have been 12 entity defaults in PACRA's rated portfolio.
- There are no defaults in the "AAA" category.
- The "AA" category has one (1) default from an entity that attained its lifetime-high rating within this category that was re-affirmed twice.
- The 'A' category has an average time-to-default from the initial rating of 53 months and from all ratings of 47 months.
- For the BBB category, it is 74 months from initial ratings and 41 months from all ratings.
- The time-to-default for initial ratings is not representative at the BB category. This is so as PACRA has only two defaults emanating from this category widely varying in the time elapsed pre-default - One entity defaulting after 148 months and the other only after 14 months, hence skewing the data.

ANNEXURES
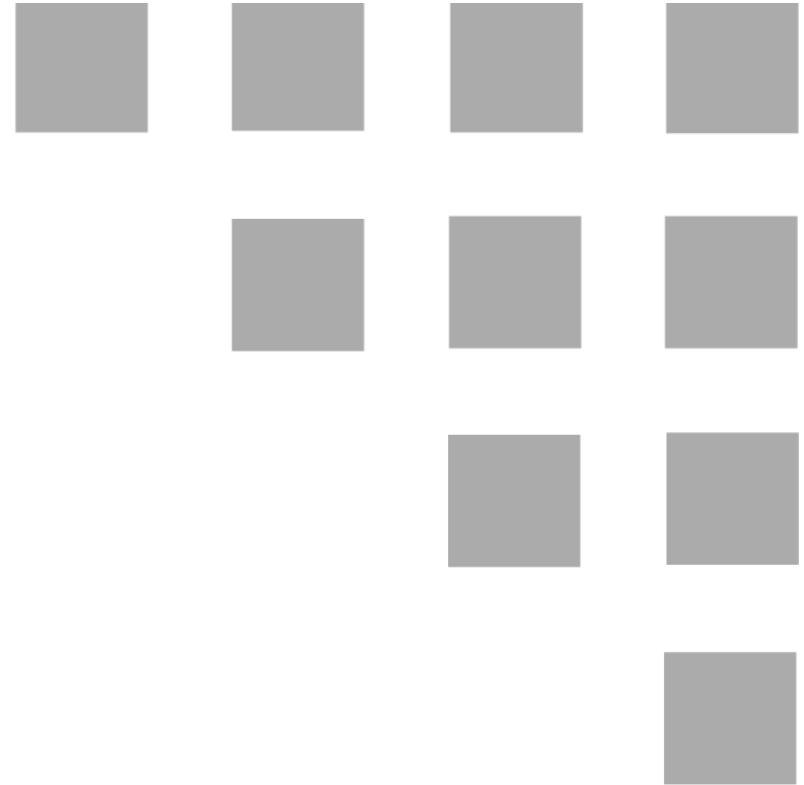
Glossary

Key Terms	Definition / Explanation
Static Pool	Groupings of data that stay together in the group for the entire length and breadth of the measurement period of the pool.
Upgrade Rate	The rate of upward rating transition (Ceiling: Triple A "AAA").
Downgrade Rate	The rate of downward rating transition (Floor: Single C "C").
Default Rate	Proportion of entities / issuers that have been assigned a Default "D" rating (As per PACRA Default Policy "How PACRA Recognizes Default") to the total number of entities / issuers over the measurement period.
Transition Rate	Statistics quantifying the transition of ratings on the rating scale between a certain time period.
Time-to-Default	A term denoting how far a rating lies from the time of its default.

Study Inputs

Long-term entity / issuer public ratings

+

Adjustments

—

DATA SET
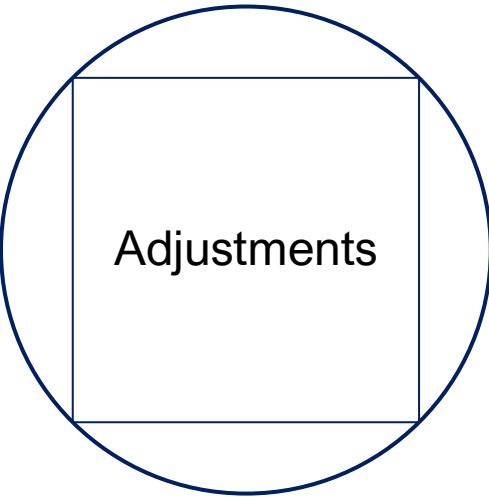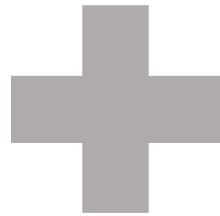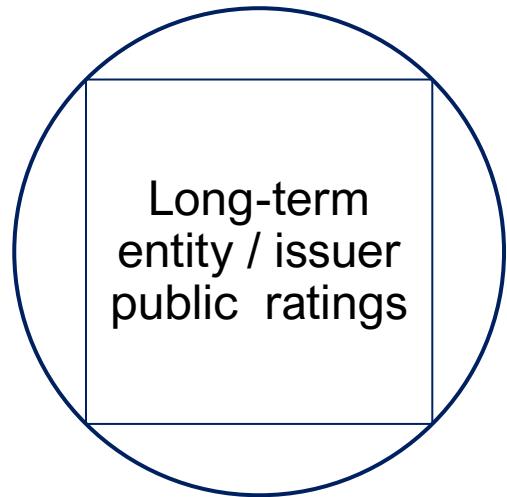
Including:

- Entity Ratings:
  - Corporate
  - Financial Institutions

- Multiple debt instruments of a single entity are consolidated into a single entity rating
- Instrument-only ratings (IOR) are used to derive entity ratings (ER) as per the security structure and other clauses
- Ratings emanating from one entity (credit substitution) are consolidated into one single data-entry

STATIC POOLS AT ISSUER LEVEL

Static Pools

Measurement period

- Annual (Single / Multiple)
- Monthly (Smallest measurement period)

Withdrawal Adjustment

Static Pools are adjusted for all withdrawals during a measurement period

Treatment of initial ratings

An initial rating of CY22 will form part of the next year (CY22) pool, if not withdrawn

Post-default withdrawals

A rating put in default & subsequently withdrawn is reported as "D" (Default) only

Understanding Rating Transition Analysis

End of Year (CY20)																		
Transition (Years) : 1	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC-C	D
AAA	75.0%	25.0%	-	-	-	-				-	-	-	-	-	-	-	-	-
AA+	50.0%	50.0%	-	-	-	-				-	-	-	-	-	-	-	-	-
AA	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-
AA-	30.0%	-	-	30.0%	-	-	-			40.0%	-	-	-	-	-	-	-	-
A+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0%
A-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0%
BBB+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BBB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BBB-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BB+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BB-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCC-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Beginning of Year (CY20)

Stability of ratings is measured along the diagonal of a transition matrix

Transition of ratings is measured on either side of the diagonal of a transition matrix

Understanding Default Analysis

ADRs and CDRs

- Annual Default Rates (ADRs) reflect the probability that an entity / issuer that has survived in a Static Pool in the beginning of a particular year will default by the end of the same year.

- Cumulative Default Rates (CDRs) reflects the probability that an entity / issuer that has survived in a Static Pool up to the beginning of each subsequent year of the Measurement Period underlying the CDR will default by the end of last year of such Measurement Period.

Time-to-default Statistics

- Time-to-Default from **Initial** ratings: Measures the time elapsed between the initial rating (as assigned by PACRA) and default.

- Time-to-Default from **All** ratings: Measures the rating path to default, tracking from the time of initial rating to all successive rating transitions on the rating scale prior to default.

SECP | Credit Rating Companies Regulations, 2016 | August 05, 2016 (As Amended September 19, 2022)

III-11-A-(I): A credit rating company shall, **-** publish annually, within one month of calendar year, a comprehensive default and transition study developed in line with methodologies practiced by credit rating agencies globally. The annual default and transition study must contain cumulative default rates (CDRs) and transitions for each rating grade for periods 1, 3 and 5 years.

Annexure H: Other information to be disseminated on the website of a credit rating company/agency

3: Detail of transitions/changes in the credit ratings reviewed during the last five years. The detail should contain the ratings upgraded, downgraded and those remained unchanged. For ease of comparison both the rating i.e. before and after the review and the number of notches upgraded or downgraded should be disclosed.

6: Definition of the term, "default".

7: Entity-wise list of defaults for all the outstanding issues and for all the issues redeemed during the last five years.

8: Rating scale-wise list of default for all the outstanding issues and for all the issues redeemed during the last five years separately for structured instruments and non-structured instruments.

https://www.secp.gov.pk/document/credit-rating-companiesregulation-2016/?wpdmdl=16929

SBP | Eligibility Criteria for recognition of External Credit Assessment Institutions (ECAIs), July 2005

a) Objectivity of the methodology: ECAI should have methodology of assigning credit rating that is rigorous, systematic, continuous and subject to validation. To establish that ECAI fulfills this primary component of eligibility criteria, it must demonstrate that it meets minimum standards given below:

5. ECAI should demonstrate that the rating methodologies are subject to quantitative back testing. For this purpose, ECAI should calculate and publish default studies, recovery studies and transition matrices. For the purpose, the ECAI should have a definition of default that is equivalent to international standard and is relevant to domestic market.

d) Disclosure: ECAI should demonstrate that it provide access to information that are sufficient to enable its stakeholders to make decision about the appropriateness of risk assessments. The purpose of this disclosure requirement is to promote transparency and bring in market discipline. ECAI is therefore expected to make public following information:

2. Definition of default

6. Actual default rates experienced in each assessment category

7. Transition matrices

http://www.sbp.org.pk/bsd/Criteria_Rating_Agencies.pdf

ACRAA | Code of Conduct Fundamentals for domestic Credit Rating Agencies – April 2011

ACRAA Explanation of Clause 3.8 -

1. Each rating agency should publish at least annually a default and transition study along with the methodology.
2. The default study should provide details of the following:

- Annual default rates for each rating category;
- 3-year average cumulative default rates;
- 1-year transition rates

http://acraa.com/images/pdf/DCRA.pdf

IOSCO CODE OF CONDUCT FUNDAMENTALS FOR CREDIT RATING AGENCIES - REVISED MARCH 2015

3.18: To promote transparency and to enable investors and other users of credit ratings to compare the performance of different CRAs, a CRA should disclose sufficient information about the historical transition and default rates of its credit rating categories with respect to the classes of entities and obligations it rates. This information should include verifiable, quantifiable historical information, organized over a period of time, and, where possible, standardized in such a way to assist investors and other users of credit ratings in comparing different CRAs. If the nature of the rated entity or obligation or other circumstances make such historical transition or default rates inappropriate, statistically invalid, or otherwise likely to mislead investors or other users of credit ratings, the CRA should disclose why this is the case.

https://www.iosco.org/library/pubdocs/pdf/IOSCOPD482.pdf

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DISCLAIMER

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