



Default and Recovery Statistics

**SOVEREIGN AND SOVEREIGN-GUARANTEED
LENDING 1984-2025**

Multilateral development banks and development finance institutions default and recovery statistics:

Sovereign and sovereign-guaranteed lending
1984-2025

06 October 2026

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Preface

The Global Emerging Markets Risk Database (GEMs) Consortium is a joint initiative of the European Investment Bank and the International Finance Corporation. It was established in 2009 to pool credit risk data. This database is a unique example of a tangible common good and is designed to catalyse investments in emerging markets and support technical cooperation between international institutions.

GEMs serves as a discussion and collaboration forum for building technical alignment and sharing best practices among member institutions through working-level meetings. GEMs comprises multilateral development banks (MDBs) and development finance institutions (DFIs) with business activities in emerging markets and developing economies.

GEMs collects de-identified data from MDBs and DFIs on their performing and non-performing exposures across emerging markets and developing economies. Based on this data, output statistics are produced, encompassing default and recovery rates categorised by various dimensions, such as geography, sector and income group, among others. Compiling GEMs risk statistics relies on a robust and shared methodological framework, bringing together data and expertise from leading public institutions.

GEMs offers:

- A risk data hub of contract-level information for private and public lending and sovereign and sovereign-guaranteed lending – one of the largest such datasets for emerging markets and developing economies.
- A trusted data collection and processing platform hosting a scalable data model, which could be expanded to cover other contract-level data related to investment projects.
- A statistical platform for member MDBs and DFIs, with the ability to calculate GEMs outputs, default rates, recovery rates and rating migrations, facilitating better-informed investment decisions in emerging markets and developing economies.
- A public good data source for aggregated statistics, with the reported default and recovery rates for private, public and Sovereign and sovereign-guaranteed lending providing an anchor for risk perceptions.
- A framework for collaboration among member MDBs and DFIs to improve risk management practices across the industry.

More private investment is needed to create much needed jobs in emerging markets and achieve sustainable development goals. Global institutions need to work together to address some of the current barriers to these private investments. Some key barriers include, for instance, insufficient support for preparing well-designed projects; minimal coordination between countries and institutions to facilitate the use of public resources to mitigate risks; a lack of an appropriate legal and contractual environment; and a shortage of standardisation, transparency and data availability. The scarcity of data around emerging markets and developing economies, coupled with the tightening of regulatory requirements, calls for sophisticated risk management practices and more reliable metrics.

Through GEMs, member MDBs and DFIs address the investment gap by sharing their experience and market knowledge among themselves and with investors and the broader public. These banks and institutions pool their data using a harmonised template and generate more valuable statistics than those available to any individual lending institution. GEMs is thus a comprehensive data source for current and potential investors in emerging markets, one that helps refine risk perceptions and inform better decision-making.

The scarcity of accessible, standardised, transparent and high-quality information on investment projects in emerging markets can skew risk perceptions and lead to suboptimal investment decisions. Institutions with little or no experience in such markets must rely on risk assumptions based on limited public information. By anchoring risk perceptions with actual statistics, GEMs aims to help unlock capital that can fill such investment gaps.

The statistics produced by GEMs enable the calibration and benchmarking of internal models, leading to efficient provisioning, greater accuracy in setting capital requirements and better-informed investment decisions. In other words, GEMs statistics provide an objective, reliable and statistically significant basis for discussing regulatory compliance, capital adequacy and risk management practices with auditors, rating agencies and supervisors.

Furthermore, the statistics can be a powerful tool for transparent assessment of portfolio risks when third parties engage in risk transfer or co-financing operations with MDBs or DFIs, or in

any other balance sheet optimisation initiatives, thus supporting the crowding-in of additional funding for emerging markets.

Since 2021, GEMs has shared its aggregated statistics publicly, recognising the potential value for various stakeholders, ranging from academics to regulators and commercial entities. This report builds on past publications, combining and offering default and recovery statistics in greater detail and reflecting the contributing institutions' lending profiles in emerging markets and developing economies.

The report discloses statistics derived from pooled GEMs data from 1984 to 2025, provided by 13 member institutions. It also encompasses niche features and unique insights and covers the methodological framework for generating GEMs statistics.

Specific applications of GEMs statistics may vary across institutions. GEMs welcomes feedback from readers of this report and looks

forward to working with financial stakeholders to improve the focus and content of future publications, aiming to support new and sustainable investment where it is most needed.

The GEMs Data Aggregator (DA) is a contracted party responsible for managing the end-to-end data submission process, validating the data and ensuring their quality. The DA is also responsible for hosting of the database platform in a secure and anonymized manner, and for managing the central engine that facilitates the publication, marketing, and dissemination of the GEMs statistics to the public. In 2025, the GEMs Consortium appointed Galytix (GX), a U.K.-based specialised AI firm for financial institutions, in collaboration with PricewaterhouseCoopers Tax and Advisory, Société cooperative, as the new DA. The Consortium tasked the DA with delivering a next-generation AI Agent to modernize GEMs data collection and management, scale the platform's functionality, and provide aggregated insights into GEMs credit risk statistics.

GEMs Member Institutions Participating in this Publication



1. Highlights

This GEMs publication on sovereign and sovereign-guaranteed lending provides statistics based on a dataset covering a 42-year period, from 1984 to 2025. As GEMs membership expanded, the number of institutions that provided data for the publication increased from 11 to 13 in comparison to the previous year's publication. In addition, for the first time this year, the publication includes estimates for recovery rates of unresolved default events.

Statistical metrics are provided on the underlying distributions of the results, enabling readers to assess the statistical significance of the average default and recovery rates. As default rate

distributions generally follow a normal distribution, 90% confidence intervals are presented for averages. In contrast, recovery rate distributions are heavily skewed, so percentiles are provided instead.

Figure 1 illustrates sovereign and sovereign guaranteed lending to the 169 countries included in the dataset, along with the default events they experienced. Over the 42-year observation period, 40 countries defaulted, some more than once. Sixteen countries had ongoing default events at the end of 2025.

Figure 1: Exposures and Default Events for Countries by Year

ISO code and ISO country name	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
AF-Afghanistan																					
AG-Antigua and Barbuda																					
AI-Anguilla																					
AL-Albania																					
AM-Armenia																					
AO-Angola																					
AR-Argentina																					
AZ-Azerbaijan																					
BA-Bosnia and Herzegovina																					
BB-Barbados																					
BD-Bangladesh																					
BF-Burkina Faso																					
BG-Bulgaria																					
BH-Bahrain																					
BI-Burundi																					
BJ-Benin																					
BN-Brunei																					
BO-Bolivia																					
BR-Brazil																					
BS-Bahamas																					
BT-Bhutan																					
BW-Botswana																					
BY-Belarus																					
BZ-Belize																					
CD-Congo, Democratic Republic of																					
CF-Central African Republic																					
CG-Congo																					
CI-Cote D'Ivoire																					
CK-Cook Islands																					
CL-Chile																					
CM-Cameroon																					
CN-China																					
CO-Colombia																					
CR-Costa Rica																					
CU-Cuba																					
CV-Cape Verde																					
CY-Cyprus																					
CZ-Czech Republic																					
DJ-Djibouti																					
DM-Dominica																					
DO-Dominican Republic																					
DZ-Algeria																					
EC-Ecuador																					
EE-Estonia																					
EG-Egypt																					
ER-Eritrea																					
ET-Ethiopia																					
FJ-Fiji																					
FM-Micronesia, Federated States of																					
GA-Gabon																					
GD-Grenada																					
GE-Georgia																					
GH-Ghana																					
GM-Gambia																					
GN-Guinea																					
GQ-Equatorial Guinea																					
GT-Guatemala																					

ISO code and ISO country name	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
AF-Afghanistan																					
AG-Antigua and Barbuda																					
AI-Anguilla																					
AL-Albania																					
AM-Armenia																					
AO-Angola																					
AR-Argentina																					
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CI-Cote D'Ivoire																					
CK-Cook Islands																					
CL-Chile																					
CM-Cameroon																					
CN-China																					
CO-Colombia																					
CR-Costa Rica																					
CU-Cuba																					
CV-Cape Verde																					
CY-Cyprus																					
CZ-Czech Republic																					
DJ-Djibouti																					
DM-Dominica																					
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DZ-Algeria																					
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ISO code and ISO country name	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GW-Guinea-Bissau																					
GY-Guyana																					
HN-Honduras																					
HR-Croatia																					
HT-Haiti																					
HU-Hungary																					
ID-Indonesia																					
IL-Israel																					
IN-India																					
IQ-Iraq																					
IR-Iran, Islamic Republic of																					
JM-Jamaica																					
JO-Jordan																					
KE-Kenya																					
KG-Kyrgyzstan																					
KH-Cambodia																					
KI-Kiribati																					
KM-Comoros																					
KN-Saint Kitts and Nevis																					
KR-Korea, Republic of																					
KZ-Kazakhstan																					
LA-Laos																					
LB-Lebanon																					
LC-Saint Lucia																					
LK-Sri Lanka																					
LR-Liberia																					
LS-Lesotho																					
LT-Lithuania																					
LV-Latvia																					
MA-Morocco																					
MD-Moldova																					
ME-Montenegro																					
MG-Madagascar																					
MH-Marshall Islands																					
MK-Macedonia, Former Yugoslav Republic of																					
ML-Mali																					
MM-Myanmar																					
MN-Mongolia																					
MR-Mauritania																					
MU-Mauritius																					
MV-Maldives																					
MW-Malawi																					
MX-Mexico																					
MY-Malaysia																					
MZ-Mozambique																					
NA-Namibia																					
NC-Nouvelle Calédonie																					
NE-Niger																					
NG-Nigeria																					
NI-Nicaragua																					
NP-Nepal																					
NR-Nauru																					
OM-Oman																					
PA-Panama																					
PE-Peru																					
PF-French Polynesia																					
PG-Papua New Guinea																					
PH-Philippines																					

ISO code and ISO country name	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
GW-Guinea-Bissau																					
GY-Guyana																					
HN-Honduras																					
HR-Croatia																					
HT-Haiti																					
HU-Hungary																					
ID-Indonesia																					
IL-Israel																					
IN-India																					
IQ-Iraq																					
IR-Iran, Islamic Republic of																					
JM-Jamaica																					
JO-Jordan																					
KE-Kenya																					
KG-Kyrgyzstan																					
KH-Cambodia																					
KI-Kiribati																					
KM-Comoros																					
KN-Saint Kitts and Nevis																					
KR-Korea, Republic of																					
KZ-Kazakhstan																					
LA-Laos																					
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LR-Liberia																					
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LV-Latvia																					
MA-Morocco																					
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NE-Niger																					
NG-Nigeria																					
NI-Nicaragua																					
NP-Nepal																					
NR-Nauru																					
OM-Oman																					
PA-Panama																					
PE-Peru																					
PF-French Polynesia																					
PG-Papua New Guinea																					
PH-Philippines																					

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PK-Pakistan																					
PL-Poland																					
PS-Palestinian Territory (West Bank and Gaza)																					
PW-Palau																					
PY-Paraguay																					
QA-Qatar																					
RO-Romania																					
RS-Serbia																					
RU-Russian Federation																					
RW-Rwanda																					
SA-Saudi Arabia																					
SB-Solomon Islands																					
SC-Seychelles																					
SD-Sudan, Republic of																					
SI-Slovenia																					
SK-Slovakia																					
SL-Sierra Leone																					
SN-Senegal																					
SO-Somalia																					
SR-Suriname																					
SS-South Sudan, Republic of																					
ST-Sao Tome and Principe																					
SV-El Salvador																					
SX-Sint Maarten (Dutch)																					
SY-Syrian Arab Republic																					
SZ-Swaziland																					
TC-Turks and Caicos Islands																					
TD-Chad																					
TG-Togo																					
TH-Thailand																					
TJ-Tajikistan																					
TL-East Timor																					
TM-Turkmenistan																					
TN-Tunisia																					
TO-Tonga																					
TR-Turkey																					
TT-Trinidad and Tobago																					
TV-Tuvalu																					
TZ-Tanzania																					
UA-Ukraine																					
UG-Uganda																					
UY-Uruguay																					
UZ-Uzbekistan																					
VC-Saint Vincent and The Grenadines																					
VE-Venezuela																					
VG-Virgin Islands, British																					
VN-Vietnam																					
VU-Vanuatu																					
WS-Samoa																					
XK-Kosovo																					
YE-Yemen, Republic of																					
ZA-South Africa																					
ZM-Zambia																					
ZW-Zimbabwe																					

No MDB Exposure
 MDB Exposure, No default
 Partial Default to MDBs
 Default to all MDBs

ISO code and ISO country name	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
PK-Pakistan																					
PL-Poland																					
PS-Palestinian Territory (West Bank and Gaza)																					
PW-Palau																					
PY-Paraguay																					
QA-Qatar																					
RO-Romania																					
RS-Serbia																					
RU-Russian Federation																					
RW-Rwanda																					
SA-Saudi Arabia																					
SB-Solomon Islands																					
SC-Seychelles																					
SD-Sudan, Republic of																					
SI-Slovenia																					
SK-Slovakia																					
SL-Sierra Leone																					
SN-Senegal																					
SO-Somalia																					
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TG-Togo																					
TH-Thailand																					
TJ-Tajikistan																					
TL-East Timor																					
TM-Turkmenistan																					
TN-Tunisia																					
TO-Tonga																					
TR-Turkey																					
TT-Trinidad and Tobago																					
TV-Tuvalu																					
TZ-Tanzania																					
UA-Ukraine																					
UG-Uganda																					
UY-Uruguay																					
UZ-Uzbekistan																					
VC-Saint Vincent and The Grenadines																					
VE-Venezuela																					
VG-Virgin Islands, British																					
VN-Vietnam																					
VU-Vanuatu																					
WS-Samoa																					
XK-Kosovo																					
YE-Yemen, Republic of																					
ZA-South Africa																					
ZM-Zambia																					
ZW-Zimbabwe																					

No MDB Exposure
 MDB Exposure, No default
 Partial Default to MDBs
 Default to all MDBs

Figure 2 shows the number of countries in default with at least one MDB for each year of the 42-year observation period. The relatively high number of countries in default during the late

1980s and 1990s was followed by a significant decline throughout the 2000s and 2010s. However, an upward trend has been observed since 2022.

Figure 2: Number of Countries in Default by Year

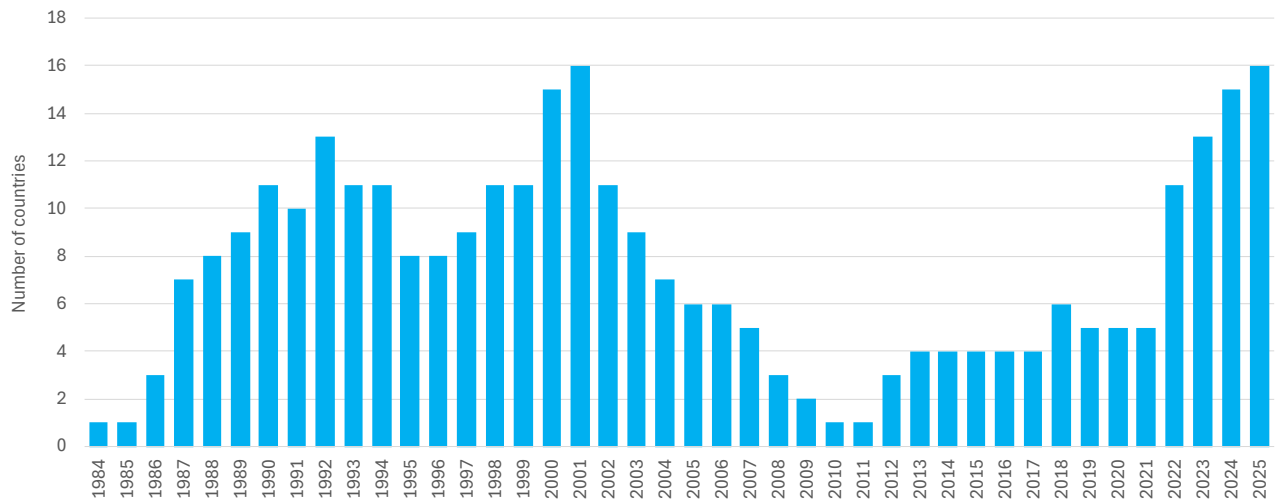
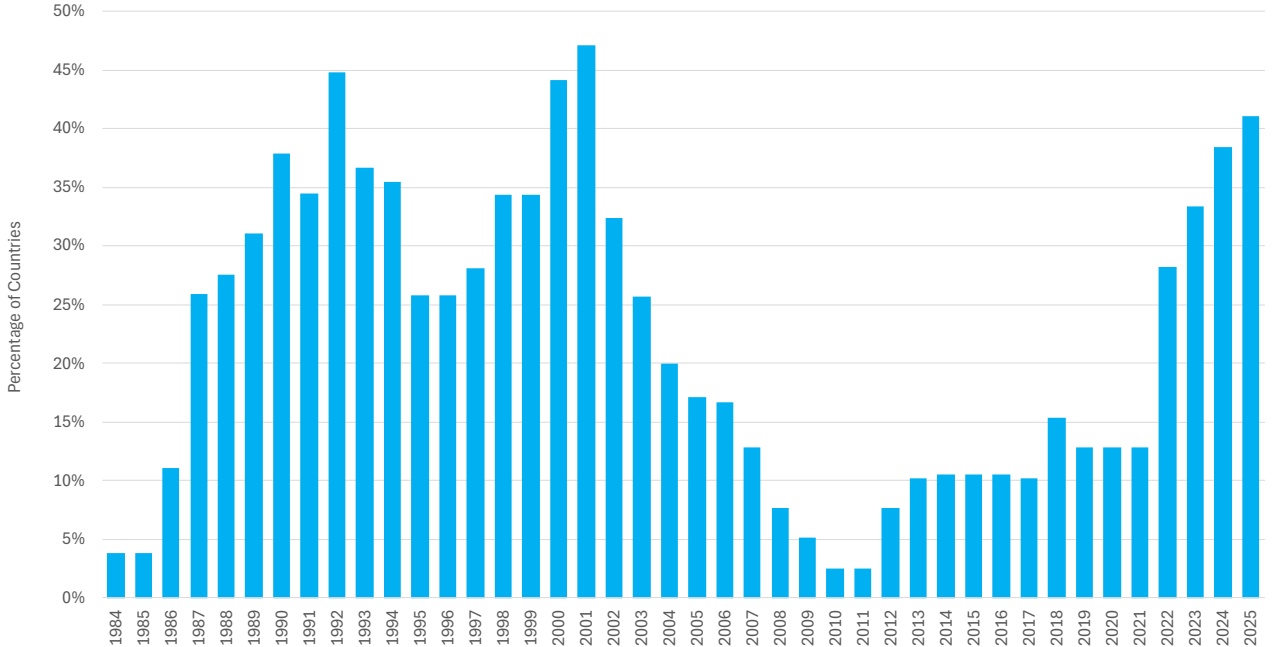


Figure 3 displays the number of countries in default as a percentage of total countries in the GEMs dataset. The graph closely mirrors the

shape of Figure 2 but shows a lower peak in the later years, since the dataset includes more countries during those years.

Figure 3: Percentage of Countries in Default by Year



Based on observed defaults for countries over the 1984-2025 period, Table 1 shows an average annual default rate of 0.79%. This represents a slight increase from the 0.77% reported in the

2025 publication, as additional defaults were not fully offset by additional observations. The table presents the range of annual observations and the 90% confidence interval for the average.

Table 1: Overall Default Rates

Counterparts	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
169	1,707,389	39.5 / 4,999	0.79% (0.53%–1.05%)

The shown results cannot be directly compared to default rates published by rating agencies for sovereign borrowers as those statistics only include sovereigns that had obtained credit ratings. A substantial number of defaults and observations in the GEMs statistics are for sovereigns during time periods when they did not

have such ratings. For a GEMs data subset that only includes defaults and observations for sovereigns when they had credit ratings from at least one of the main three rating agencies, the overall average default rate decreases to only 0.3%, which is based on 8.3 defaults and 2,580 observations.

Table 2: Overall Default Rates for CRA-Rated Countries

Counterparts	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
122	1,679,383	8.33 / 2,580	0.32% (0.14%–0.51%)

Figure 4 displays the 42 individual annual default rates, with further detail provided in Table 11. Some of the annual default rates are 0%, while others are relatively high, reflecting the uneven distribution of defaults across the years. The range and 90% confidence interval shown in Table 1, 0.00% to 4.8% and 0.5% to 1.1%, respectively, are relatively wide because of the overall scarcity of default events.

Figure 4 also provides a 10-year moving average default rate starting in 1993. Relatively high annual default rates are observed in the late 1980s and, to a lesser extent, in the 1990s, followed by lower rates through 2021. However, an increase in default rates since 2022 has reversed this downward trend.

Figure 4: Annual Default Rates

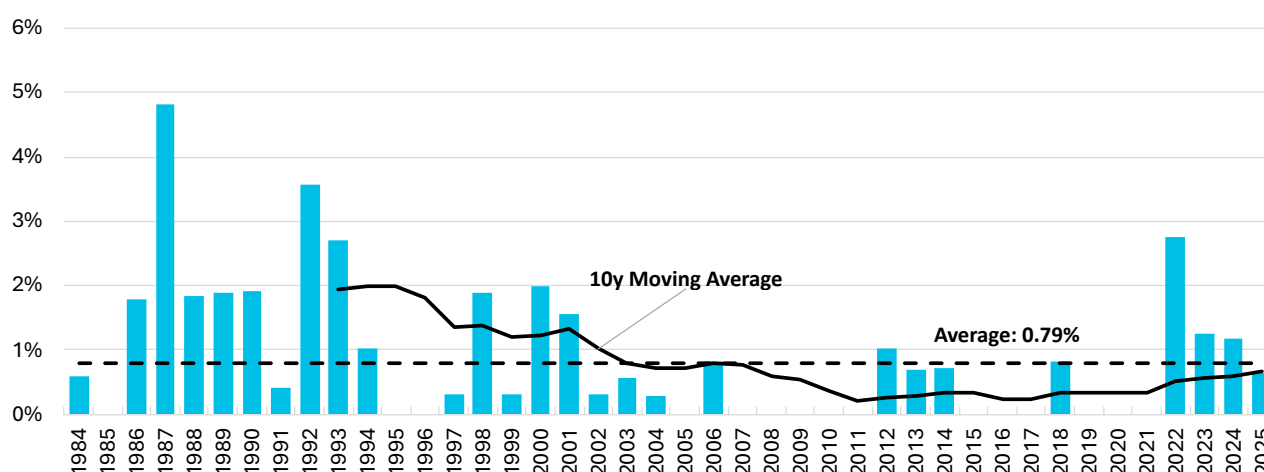


Figure 5 displays default rates by GEMs credit rating, with further details provided in Section 3.5. These rates are significantly lower than those observed by credit rating agencies for sovereign borrowings from non-MDB lenders.

This includes the Selective Default (SD) rating, which indicates that a country is already in default with other lenders. The observed default rate for MDBs is only about 10%.

Figure 5: One-Year Default Rates by Credit Rating

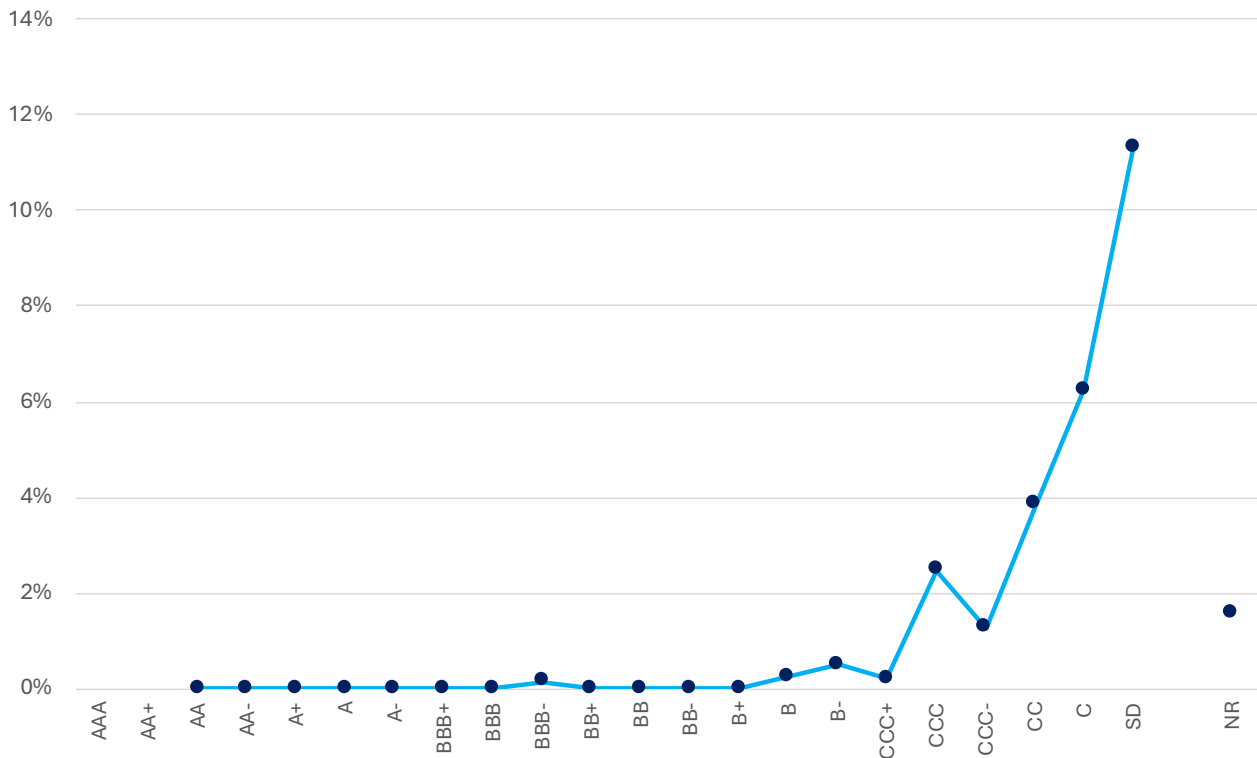


Table 3 shows the overall statistics for recovery rates. An average recovery rate of 95.0% is observed based on 55 default events in 40 unique countries. The table also breaks the total down into results for resolved and unresolved events. Recovery rates for unresolved default events are included for the first time in this year's publication. They reflect the interest-on-interest

loss on the outstanding loans that lenders have already incurred as of the reporting date of this publication, i.e., December 31, 2025. These incurred losses will increase over time until the resolution of the events with the expected full repayment of all overdue amounts. The table also shows the range of results and the recovery levels for different percentiles of the distributions.

Table 3: Overall Recovery Rates

Resolution Status	Number of Defaulted Contracts	Signed Amount (€m)	Average RR		Median RR (IQR)	P10-P90 Range
Resolved	41	114,985	94.8%	98.2%	(96.2%–99.9%)	90.4%–100.0%
Unresolved	14	18,839	95.7%	99.6%	(98.0%–100.0%)	95.2%–100.0%
Combined	55	133,824	95.1%	98.8%	(96.6%–99.9%)	90.7%–100.0%

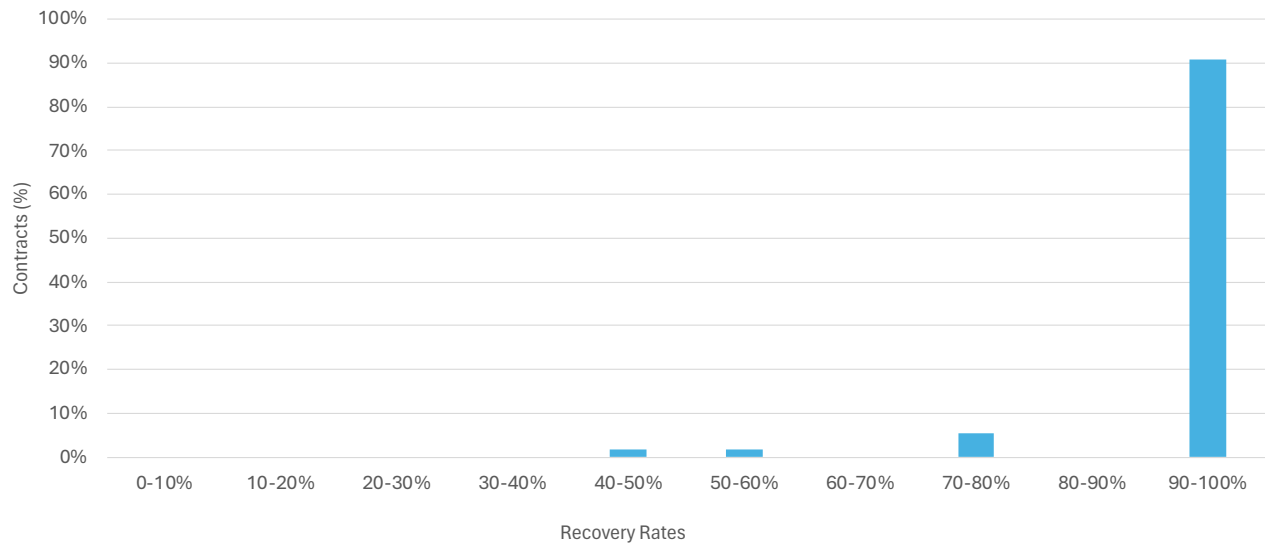
Table 4 and Figure 6 provide additional insight into the distribution of recovery rates by showing how many individual observations fall with-

in each 10-percentage-point range. Most of the results (90.9%) fall within the 90% to 100% range.

Table 4: Distribution of Recovery Rates

Recovery Rate	0-10%	10-20%	20-30%	30-40%	40-50%	50-60%	60-70%	70-80%	80-90%	90-100%
Defaulted contracts	0	0	0	0	1	1	0	3	0	50
% Defaulted contracts	0.0%	0.0%	0.0%	0.0%	1.8%	1.8%	0.0%	5.5%	0.0%	90.9%

Figure 6: Distribution of Recovery Rates



Further insight into the distribution of recovery rates within the 90% to 100% range is provided by breaking this interval into 1 percentage point increments, as shown in Table 5 and Figure 7.

This analysis reveals that 12.7% of default events have recovery rates between 98% and 99% and that 47.3% have recovery rates exceeding 99%.

Table 5: Distribution of Recovery Rates

Recovery Rate	below 90%	90% - 91%	91% - 92%	92% - 93%	93% - 94%	94% - 95%	95% - 96%	96% - 97%	97% - 98%	98% - 99%	99% - 100%
Defaulted contracts	5	1	2	0	2	1	1	5	5	7	26
% Defaulted contracts	9.1%	1.8%	3.6%	0.0%	3.6%	1.8%	1.8%	9.1%	9.1%	12.7%	47.3%

Figure 7: Distribution of Recovery Rates – Detail for 90% to 100%

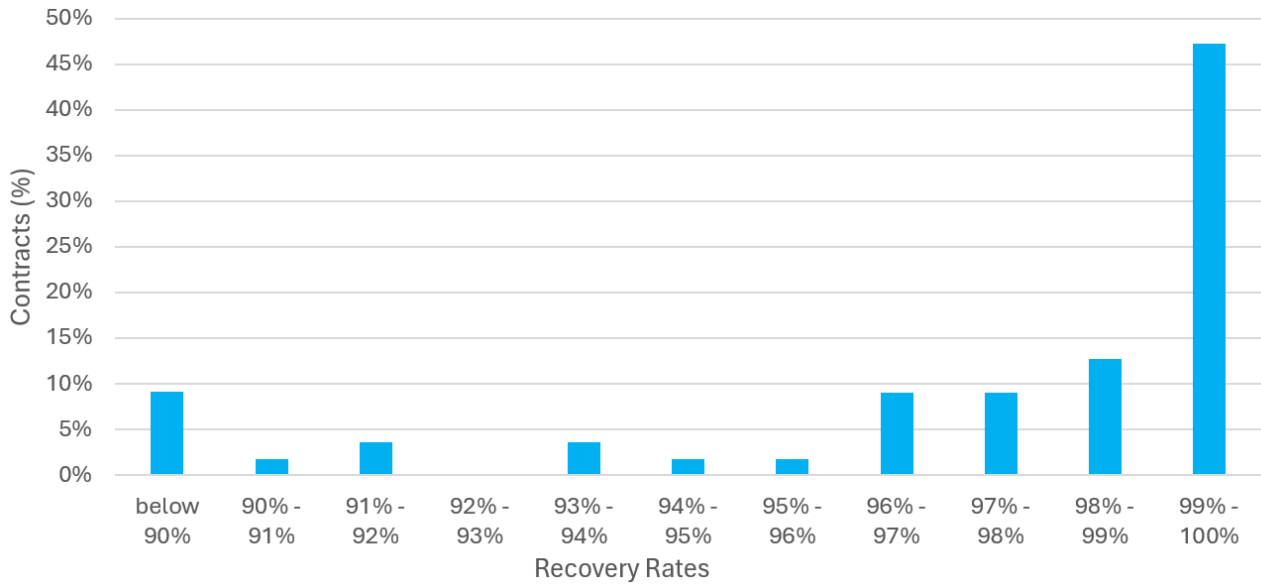


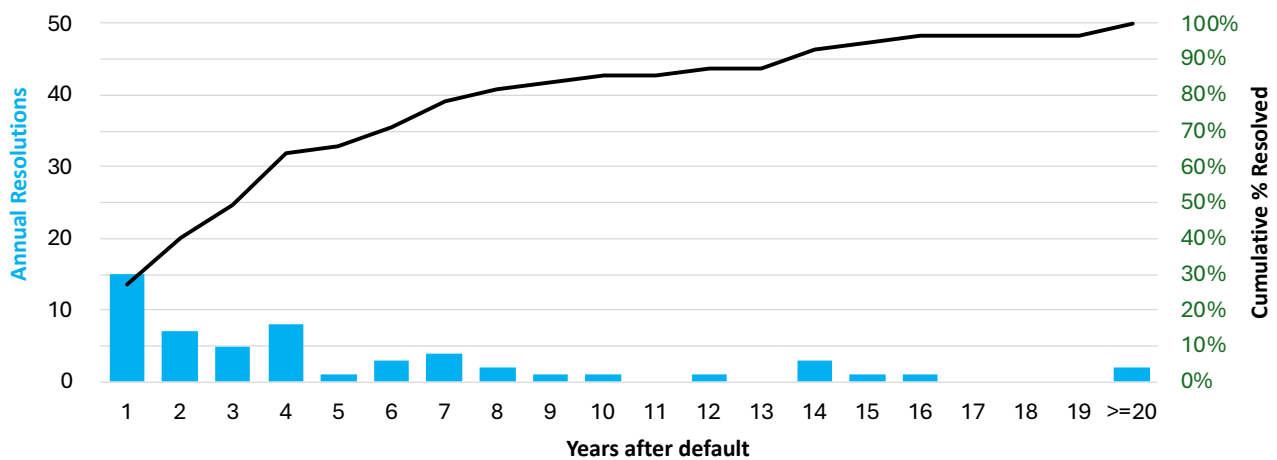
Table 6 and Figure 8 present data on the duration of default events. While about one-third of default events last one year or less, and nearly two-thirds are concluded within five years, a few

cases extend significantly longer, with the longest one lasting more than 20 years. The median time to resolution is three years.

Table 6: Time to Resolution of Defaults

Number of Years	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	>=20
Annual Resolutions	15	7	5	8	1	3	4	2	1	1	0	1	0	3	1	1	0	0	0	2
Cumulative % Resolved	27%	40%	49%	64%	65%	71%	78%	82%	84%	85%	85%	87%	87%	93%	95%	96%	96%	96%	96%	100%

Figure 8: Time to Resolution of Defaults



2. Characteristics of Sovereign and Sovereign-Guaranteed Lending

2.1 Definition

Data on sovereign and sovereign-guaranteed lending are provided by GEMs institutions that are exclusively multilateral development banks (MDBs). This lending includes direct lending to sovereign countries and lending to their states, institutions or agencies, with an explicit sovereign guarantee to ensure payments if individual borrowers default. Concessional lending is only included in the data to the extent it was executed as part of the ordinary capital funds of the MDBs.

All lending operations within a country, as considered in this publication, are connected via contractual cross-default clauses within each MDB. Furthermore, if a sovereign falls into arrears on any single operation, sanctions are applied to all operations of a sovereign simultaneously, regardless of whether the others are in arrears.

To reflect the specific format of this lending, the following methodology is used in this publication:

- Default events are defined as payment delays on any operation that exceed the most severe sanction trigger applicable to each respective MDB, typically set at 180 days of payment delay.
- Resolution of default events occurs only when all overdue amounts – including principal, interest and any applicable charges – on all loans associated with the defaulting sovereign are fully paid.

2.2 Count of Observations and Defaults

Countries often borrow from several MDBs and some defaults and observations therefore overlap across institutions. To address these duplicates, GEMs applies a specific methodology for the calculation of default rates:

- Observations: One observation is counted per country per year, provided the country is not in default with any MDB on 1 January of that year.
- Defaults: For each country and year, the default count is calculated as the ratio between the number of MDBs the country has defaulted

on and the number of MDBs it has borrowed from. If a country defaults to an additional MDB in subsequent years, then the additional defaults are counted in the ratio for those years.

To address duplicates in the calculation of recovery rates that MDBs experience with countries concurrently, the individual MDB's recovery rates are averaged in a first step to result in a recovery rate for the default event. That result is then averaged with the other event recovery rates to calculate the overall averages.

2.3 Preferred Creditor Status

The statistics in this publication show significantly lower default and higher recovery rates compared to other publications on sovereign lending, such as those based on databases maintained by credit rating agencies for lending by institutions except MDBs.

This superior performance is largely attributable to the unique features of MDBs. These institutions benefit from stringent arrears policies, strong shareholding structures and a preferred creditor status for their sovereign and sovereign-guaranteed loans.

Preferred creditor status is a well-established convention under which MDBs are given priority for debt repayment when a country faces financial distress. Although not legally binding, it has been a cornerstone for MDBs, allowing them to operate with low losses. The principle entails the following expectations:

- Countries commit to the timely payment of their financial obligations to MDBs.
- Countries commit to exempt MDBs from generalised payment moratoria and exchange rate controls.
- The International Monetary Fund typically requires that preferred creditor status be extended to itself and to MDBs with global membership as a condition for providing funding to a country in crisis.
- MDBs are exempt from participating in sovereign debt rescheduling. This benefit is granted
- Under the Group of 20's Common Framework for Debt Treatments beyond the DSSI (Debt Service Suspension Initiative), debt with MDBs is excluded from the comparable treatment requirements applied to official bilateral creditors and private creditors. Instead, MDBs are encouraged to develop options to help meet countries' longer-term financing needs while protecting their current credit ratings and access to low-cost funding.

2.4 GEMs Rating for Countries

The GEMs rating for countries (as shown in Table 7) is not collected from the member institutions. Instead, it is calculated as the average ratings for countries by the major credit rating agencies (S&P, Moody's, and Fitch). This approach ensures consistency in the rating scale across the MDBs contributing data to GEMs. In cases

where ratings from these agencies are unavailable, ratings from the Organization for Economic Cooperation and Development (OECD) are used as an alternative. If OECD ratings are also unavailable, then World Risk Review ratings are applied. Countries for which none of these ratings are available are classified as not rated (NR).

Figure 9: Dataset Composition by Rating Category

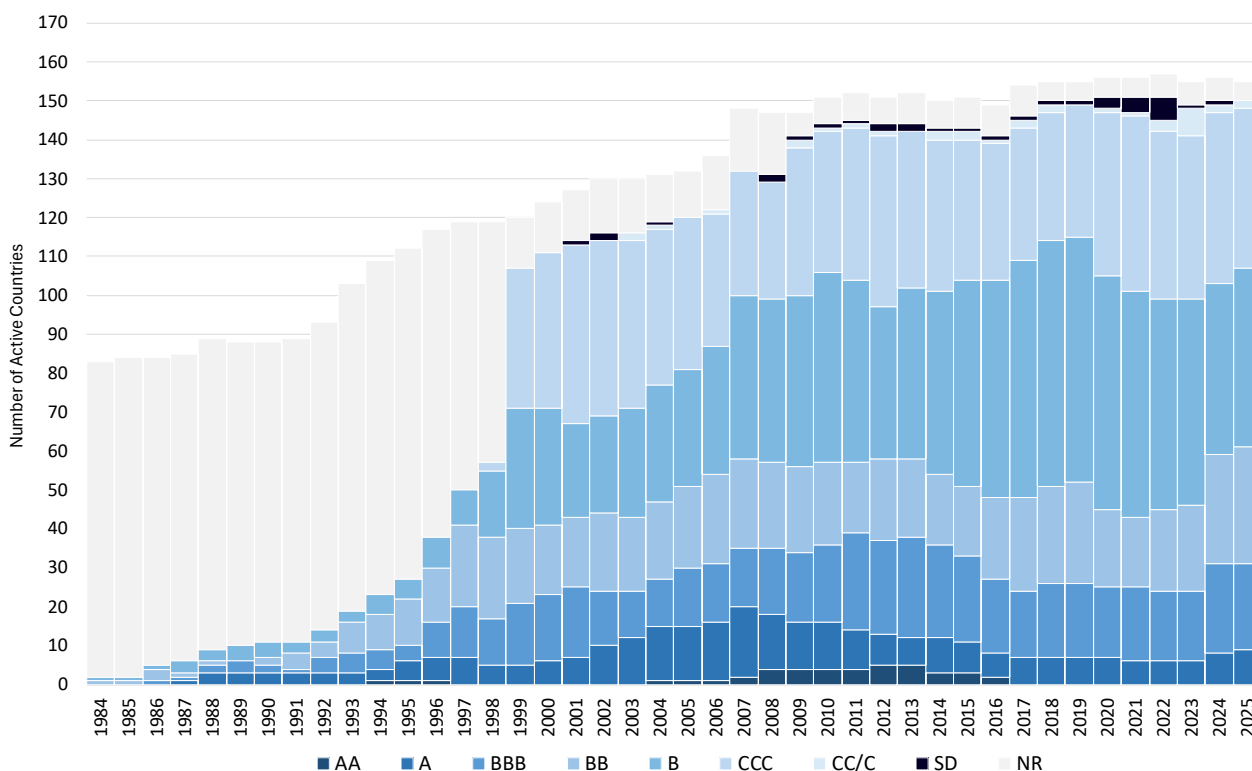


Table 7: Mapping of External Ratings to the GEMs Scale

GEMs scale	S&P	Moody's	Fitch	OECD	WRR
AAA	AAA	Aaa	AAA		
AA+	AA+	Aa1	AA+	0	1
AA	AA	Aa2	AA		
AA-	AA-	Aa3	AA-		
A+	A+	A1	A+	1	2
A	A	A2	A		
A-	A-	A3	A-	2	
BBB+	BBB+	Baa1	BBB+		3
BBB	BBB	Baa2	BBB		
BBB-	BBB-	Baa3	BBB-	3	4
BB+	BB+	Ba1	BB+		
BB	BB	Ba2	BB	4	
BB-	BB-	Ba3	BB-		5
B+	B+	B1	B+	5	
B	B	B2	B		6
B-	B-	B3	B-	6	
CCC+	CCC+	Caa1	CCC+		7
CCC	CCC	Caa2	CCC		
CCC-	CCC-	Caa3	CCC-	7	8
CC	CC		CC		
C	C		C		9
SD	SD	Ca/C	SD		10
NR	NR	NR	NR	NR	NR

2.5 Countries in the Dataset

As detailed in Table 8, the dataset includes 169 countries, though not all were active throughout the entire 42-year period covered by this publication. In addition to indicating the years that a country has been part of the GEMs dataset, the table details the number of GEMs institutions

that have provided lending to each country; the region and continent to which each country is assigned; the cumulative signed amount of lending from MDBs; and the first year a GEMs rating was assigned to the country.

Table 8: Countries in the Dataset

ISO country code	ISO country name	World Bank region	Continent	Number of MDBs with lending	Signed amount (EUR million)	Outstanding 31 Dec 2025 (EUR million)	First year in dataset	Last year in dataset	First year of GEMs rating
AF	Afghanistan	Middle East, North Africa, Afghanistan & Pakistan	Asia	2	693	451	2007	2022	1999
AG	Antigua and Barbuda	Latin America & Caribbean	North America	3	217	94	1996	2025	1999
AI	Anguilla	Latin America & Caribbean	North America	1	88	36	2011	2025	Not rated
AL	Albania	Europe & Central Asia	Europe	5	3,206	1,542	1996	2025	1999
AM	Armenia	Europe & Central Asia	Europe	4	3,140	1,924	1994	2025	1999
AO	Angola	Sub-Saharan Africa	Africa	4	10,003	5,316	1984	2025	1999
AR	Argentina	Latin America & Caribbean	South America	6	95,349	32,350	1984	2025	1986
AZ	Azerbaijan	Europe & Central Asia	Europe	5	7,484	3,263	2006	2025	1999
BA	Bosnia and Herzegovina	Europe & Central Asia	Europe	4	4,668	2,279	1988	2025	1999
BB	Barbados	Latin America & Caribbean	North America	5	2,763	1,375	1984	2025	1994
BD	Bangladesh	South Asia	Asia	6	31,987	17,670	1984	2025	1999
BF	Burkina Faso	Sub-Saharan Africa	Africa	3	1,460	728	1997	2025	1999
BG	Bulgaria	Europe & Central Asia	Europe	2	3,114	303	1992	2025	1996
BH	Bahrain	Middle East, North Africa, Afghanistan & Pakistan	Asia	1	1,307	360	2007	2025	1996
BI	Burundi	Sub-Saharan Africa	Africa	2	135	90	2006	2025	2007
BJ	Benin	Sub-Saharan Africa	Africa	3	1,370	745	2001	2025	1999
BN	Brunei Darussalam	East Asia & Pacific	Asia	1	5	1	2007	2011	1999

ISO country code	ISO country name	World Bank region	Continent	Number of MDBs with lending	Signed amount (EUR million)	Outstanding 31 Dec 2025 (EUR million)	First year in dataset	Last year in dataset	First year of GEMs rating
BO	Bolivia	Latin America & Caribbean	South America	5	15,311	7,567	1984	2025	1998
BR	Brazil	Latin America & Caribbean	South America	7	121,583	31,514	1984	2025	1986
BS	Bahamas, The	Latin America & Caribbean	North America	4	2,231	1,184	1984	2025	1997
BT	Bhutan	South Asia	Asia	2	782	485	2010	2025	1999
BW	Botswana	Sub-Saharan Africa	Africa	4	3,112	1,174	1984	2025	1999
BY	Belarus	Europe & Central Asia	Europe	1	1,872	863	1994	2022	1999
BZ	Belize	Latin America & Caribbean	North America	6	848	311	1984	2025	1999
CD	Congo, Dem. Rep.	Sub-Saharan Africa	Africa	3	565	78	1984	2025	1999
CF	Central African Republic	Sub-Saharan Africa	Africa	1	35	15	2017	2025	1999
CG	Congo, Rep.	Sub-Saharan Africa	Africa	4	1,629	694	1984	2025	1999
CI	Côte d'Ivoire	Sub-Saharan Africa	Africa	6	8,858	2,936	1984	2025	1999
CK	Cook Islands	East Asia & Pacific	Oceania	2	189	102	2010	2025	1998
CL	Chile	Latin America & Caribbean	South America	2	13,620	2,881	1984	2025	1992
CM	Cameroon	Sub-Saharan Africa	Africa	5	6,699	2,750	1984	2025	1999
CN	China	East Asia & Pacific	Asia	6	93,411	35,333	1984	2025	1988
CO	Colombia	Latin America & Caribbean	South America	6	64,516	28,090	1984	2025	1993
CR	Costa Rica	Latin America & Caribbean	North America	6	12,973	4,918	1984	2025	1997

ISO country code	ISO country name	World Bank region	Continent	Number of MDBs with lending	Signed amount (EUR million)	Outstanding 31 Dec 2025 (EUR million)	First year in dataset	Last year in dataset	First year of GEMs rating
CU	Cuba	Latin America & Caribbean	North America	2	91	62	2017	2025	1999
CV	Cabo Verde	Sub-Saharan Africa	Africa	4	591	334	1984	2025	1999
CY	Cyprus	Europe & Central Asia	Europe	3	869	168	1984	2025	1994
CZ	Czech Republic	Europe & Central Asia	Europe	1	534	0	1992	2007	1993
DJ	Djibouti	Middle East, North Africa, Afghanistan & Pakistan	Asia	2	240	125	2007	2025	2009
DM	Dominica	Latin America & Caribbean	North America	4	65	34	1993	2025	2009
DO	Dominican Republic	Latin America & Caribbean	North America	6	16,768	6,562	1984	2025	1997
DZ	Algeria	Middle East, North Africa, Afghanistan & Pakistan	Africa	3	8,772	634	1984	2025	1999
EC	Ecuador	Latin America & Caribbean	South America	6	33,339	17,842	1984	2025	1997
EE	Estonia	Europe & Central Asia	Europe	1	128	0	1993	2010	1997
EG	Egypt, Arab Rep.	Middle East, North Africa, Afghanistan & Pakistan	Africa	6	34,764	16,649	1984	2025	1996
ER	Eritrea	Sub-Saharan Africa	Africa	2	43	17	1995	2025	2007
ET	Ethiopia	Sub-Saharan Africa	Africa	3	872	528	1984	2025	1999
FJ	Fiji	East Asia & Pacific	Oceania	5	1,321	813	1984	2025	1999
FM	Micronesia, Fed. Sts.	East Asia & Pacific	Oceania	1	77	28	2006	2025	2009
GA	Gabon	Sub-Saharan Africa	Africa	5	3,719	1,500	1984	2025	1999

ISO country code	ISO country name	World Bank region	Continent	Number of MDBs with lending	Signed amount (EUR million)	Outstanding 31 Dec 2025 (EUR million)	First year in dataset	Last year in dataset	First year of GEMs rating
GD	Grenada	Latin America & Caribbean	North America	4	125	53	1996	2025	2002
GE	Georgia	Europe & Central Asia	Europe	6	7,159	4,809	2010	2025	1999
GH	Ghana	Sub-Saharan Africa	Africa	3	864	216	1984	2025	1999
GM	Gambia, The	Sub-Saharan Africa	Africa	3	403	281	1992	2025	1999
GN	Guinea	Sub-Saharan Africa	Africa	4	1,526	851	1984	2025	1999
GQ	Equatorial Guinea	Sub-Saharan Africa	Africa	2	129	43	1984	2025	2000
GT	Guatemala	Latin America & Caribbean	North America	4	13,285	3,505	1984	2025	1997
GW	Guinea-Bissau	Sub-Saharan Africa	Africa	2	76	39	2007	2025	1999
GY	Guyana	Latin America & Caribbean	South America	6	2,290	1,315	1984	2025	1999
HN	Honduras	Latin America & Caribbean	North America	5	9,703	4,229	1984	2025	1998
HR	Croatia	Europe & Central Asia	Europe	3	5,443	1,337	1993	2022	1997
HT	Haiti	Latin America & Caribbean	North America	1	73	28	2017	2025	2000
HU	Hungary	Europe & Central Asia	Europe	3	6,489	775	1984	2025	1989
ID	Indonesia	East Asia & Pacific	Asia	6	90,945	35,140	1984	2025	1992
IL	Israel	Middle East, North Africa, Afghanistan & Pakistan	Asia	1	242	0	1984	1988	1988
IN	India	South Asia	Asia	6	133,806	52,204	1984	2025	1988
IQ	Iraq	Middle East, North Africa, Afghanistan & Pakistan	Asia	3	5,257	2,177	1984	2025	1999

ISO country code	ISO country name	World Bank region	Continent	Number of MDBs with lending	Signed amount (EUR million)	Outstanding 31 Dec 2025 (EUR million)	First year in dataset	Last year in dataset	First year of GEMs rating
IR	Iran, Islamic Rep.	Middle East, North Africa, Afghanistan & Pakistan	Asia	2	5,112	829	1984	2025	1999
JM	Jamaica	Latin America & Caribbean	North America	4	6,680	2,152	1984	2025	1998
JO	Jordan	Middle East, North Africa, Afghanistan & Pakistan	Asia	5	12,688	6,026	1984	2025	1995
KE	Kenya	Sub-Saharan Africa	Africa	4	6,332	3,717	1984	2025	1999
KG	Kyrgyz Republic	Europe & Central Asia	Asia	5	1,865	943	2007	2025	1999
KH	Cambodia	East Asia & Pacific	Asia	4	4,673	2,497	2017	2025	2007
KI	Kiribati	East Asia & Pacific	Oceania	2	27	15	2000	2025	2009
KM	Comoros	Sub-Saharan Africa	Africa	2	55	32	2014	2025	2009
KN	St. Kitts and Nevis	Latin America & Caribbean	North America	3	60	7	1992	2025	2000
KR	Korea, Rep.	East Asia & Pacific	Asia	2	21,113	0	1984	2013	1986
KZ	Kazakhstan	Europe & Central Asia	Europe	4	13,521	5,544	1994	2025	1996
LA	Lao PDR	East Asia & Pacific	Asia	4	1,954	883	2006	2025	2000
LB	Lebanon	Middle East, North Africa, Afghanistan & Pakistan	Asia	4	5,557	1,244	1984	2025	1997
LC	St. Lucia	Latin America & Caribbean	North America	3	246	104	1988	2025	2018
LK	Sri Lanka	South Asia	Asia	5	12,143	7,404	1984	2025	1999
LR	Liberia	Sub-Saharan Africa	Africa	3	287	85	1984	2025	1999
LS	Lesotho	Sub-Saharan Africa	Africa	3	465	87	1993	2025	1999
LT	Lithuania	Europe & Central Asia	Europe	2	1,356	591	1993	2014	1996

ISO country code	ISO country name	World Bank region	Continent	Number of MDBs with lending	Signed amount (EUR million)	Outstanding 31 Dec 2025 (EUR million)	First year in dataset	Last year in dataset	First year of GEMs rating
LV	Latvia	Europe & Central Asia	Europe	2	877	0	1993	2013	1997
MA	Morocco	Middle East, North Africa, Afghanistan & Pakistan	Africa	6	44,948	17,744	1984	2025	1998
MD	Moldova	Europe & Central Asia	Europe	4	1,863	855	1994	2025	1997
ME	Montenegro	Europe & Central Asia	Europe	4	1,998	692	2002	2025	2004
MG	Madagascar	Sub-Saharan Africa	Africa	3	663	381	1984	2025	1999
MH	Marshall Islands	East Asia & Pacific	Oceania	1	78	22	2002	2025	2018
MK	North Macedonia	Europe & Central Asia	Europe	4	3,491	965	1988	2025	2004
ML	Mali	Sub-Saharan Africa	Africa	3	1,114	556	2000	2025	1999
MM	Myanmar	East Asia & Pacific	Asia	2	2,385	628	1984	2025	1999
MN	Mongolia	East Asia & Pacific	Asia	5	3,974	2,154	2015	2025	1999
MR	Mauritania	Sub-Saharan Africa	Africa	4	921	325	1984	2025	1999
MU	Mauritius	Sub-Saharan Africa	Africa	4	2,422	867	1984	2025	1996
MV	Maldives	South Asia	Asia	5	522	236	2007	2025	1999
MW	Malawi	Sub-Saharan Africa	Africa	3	606	346	1984	2025	1999
MX	Mexico	Latin America & Caribbean	North America	5	93,524	22,821	1984	2025	1990
MY	Malaysia	East Asia & Pacific	Asia	3	6,478	1	1984	2025	1986
MZ	Mozambique	Sub-Saharan Africa	Africa	4	832	442	1997	2025	1999
NA	Namibia	Sub-Saharan Africa	Africa	3	2,125	861	1995	2025	2005
NC	New Caledonia	East Asia & Pacific	Oceania	1	20	9	2015	2025	Not rated
NE	Niger	Sub-Saharan Africa	Africa	3	933	426	2001	2025	1999

ISO country code	ISO country name	World Bank region	Continent	Number of MDBs with lending	Signed amount (EUR million)	Outstanding 31 Dec 2025 (EUR million)	First year in dataset	Last year in dataset	First year of GEMs rating
NG	Nigeria	Sub-Saharan Africa	Africa	5	14,820	3,675	1984	2025	1999
NI	Nicaragua	Latin America & Caribbean	North America	5	7,878	4,205	1984	2025	1998
NP	Nepal	South Asia	Asia	4	6,572	2,953	1984	2025	1999
NR	Nauru	East Asia & Pacific	Oceania	1	4	0	2000	2013	Not rated
OM	Oman	Middle East, North Africa, Afghanistan & Pakistan	Asia	3	1,923	1,014	1984	2025	1996
PA	Panama	Latin America & Caribbean	North America	5	18,818	8,216	1984	2025	1997
PE	Peru	Latin America & Caribbean	South America	5	34,437	8,984	1984	2025	1996
PF	French Polynesia	East Asia & Pacific	Oceania	1	8	4	2013	2025	Not rated
PG	Papua New Guinea	East Asia & Pacific	Oceania	4	4,619	2,284	1984	2025	1998
PH	Philippines	East Asia & Pacific	Asia	5	55,871	29,982	1984	2025	1993
PK	Pakistan	Middle East, North Africa, Afghanistan & Pakistan	Asia	6	44,620	18,945	1984	2025	1994
PL	Poland	Europe & Central Asia	Europe	2	15,664	5,926	1991	2025	1995
PS	West Bank and Gaza	Middle East, North Africa, Afghanistan & Pakistan	Asia	2	183	10	1996	2025	2009
PW	Palau	East Asia & Pacific	Oceania	2	178	131	2007	2025	Not rated
PY	Paraguay	Latin America & Caribbean	South America	5	12,524	6,414	1984	2025	1995
QA	Qatar	Middle East, North Africa, Afghanistan & Pakistan	Asia	1	0	0	2007	2013	1996

ISO country code	ISO country name	World Bank region	Continent	Number of MDBs with lending	Signed amount (EUR million)	Outstanding 31 Dec 2025 (EUR million)	First year in dataset	Last year in dataset	First year of GEMs rating
RO	Romania	Europe & Central Asia	Europe	3	16,812	6,073	1984	2025	1996
RS	Serbia	Europe & Central Asia	Europe	3	12,841	4,878	1984	2025	1999
RU	Russian Federation	Europe & Central Asia	Europe	3	14,311	1,146	1993	2025	1996
RW	Rwanda	Sub-Saharan Africa	Africa	3	696	354	2001	2025	1999
SA	Saudi Arabia	Middle East, North Africa, Afghanistan & Pakistan	Asia	1	43	0	2007	2015	1996
SB	Solomon Islands	East Asia & Pacific	Oceania	2	233	102	2017	2025	2000
SC	Seychelles	Sub-Saharan Africa	Africa	4	502	315	1984	2025	1973
SD	Sudan	Sub-Saharan Africa	Africa	3	967	549	1984	2025	1999
SI	Slovenia	Europe & Central Asia	Europe	1	317	0	1993	2006	1996
SK	Slovak Republic	Europe & Central Asia	Europe	1	490	0	1993	2008	1994
SL	Sierra Leone	Sub-Saharan Africa	Africa	4	395	220	1984	2025	2000
SN	Senegal	Sub-Saharan Africa	Africa	5	5,932	3,595	1984	2025	1999
SO	Somalia	Sub-Saharan Africa	Africa	1	14	1	2024	2025	1999
SR	Suriname	Latin America & Caribbean	South America	5	1,796	1,010	1986	2025	1999
SS	South Sudan	Sub-Saharan Africa	Africa	1	2	1	2022	2025	2013
ST	São Tomé and Príncipe	Sub-Saharan Africa	Africa	2	43	32	2004	2025	2000
SV	El Salvador	Latin America & Caribbean	North America	6	17,641	6,587	1984	2025	1996
SX	Sint Maarten (Dutch part)	Latin America & Caribbean	North America	1	44	43	2020	2025	2020

ISO country code	ISO country name	World Bank region	Continent	Number of MDBs with lending	Signed amount (EUR million)	Outstanding 31 Dec 2025 (EUR million)	First year in dataset	Last year in dataset	First year of GEMs rating
SY	Syrian Arab Republic	Middle East, North Africa, Afghanistan & Pakistan	Asia	4	2,059	884	1984	2025	1999
SZ	Eswatini	Sub-Saharan Africa	Africa	4	1,396	544	1984	2025	2007
TC	Turks and Caicos Islands	Latin America & Caribbean	North America	1	1	0	2018	2025	2014
TD	Chad	Sub-Saharan Africa	Africa	4	1,019	471	2002	2025	1999
TG	Togo	Sub-Saharan Africa	Africa	4	556	134	1984	2025	1999
TH	Thailand	East Asia & Pacific	Asia	3	9,808	957	1984	2025	1989
TJ	Tajikistan	Europe & Central Asia	Asia	5	1,326	558	2007	2025	1999
TL	Timor-Leste	East Asia & Pacific	Asia	2	561	157	2013	2025	2013
TM	Turkmenistan	Europe & Central Asia	Asia	3	1,563	1,164	1996	2025	1997
TN	Tunisia	Middle East, North Africa, Afghanistan & Pakistan	Africa	5	30,899	8,385	1984	2025	1995
TO	Tonga	East Asia & Pacific	Oceania	3	61	21	1988	2025	2009
TR	Turkey	Europe & Central Asia	Europe	6	81,483	20,720	1984	2025	1992
TT	Trinidad and Tobago	Latin America & Caribbean	North America	5	3,909	1,711	1984	2025	1993
TV	Tuvalu	East Asia & Pacific	Oceania	2	4	1	2005	2025	2009
TZ	Tanzania	Sub-Saharan Africa	Africa	4	2,600	1,102	1984	2025	1999
UA	Ukraine	Europe & Central Asia	Europe	3	29,448	17,993	1994	2025	1998
UG	Uganda	Sub-Saharan Africa	Africa	4	1,938	945	1985	2025	1999
UY	Uruguay	Latin America & Caribbean	South America	4	15,956	5,955	1984	2025	1993
UZ	Uzbekistan	Europe & Central Asia	Asia	6	20,779	12,672	1994	2025	1999

ISO country code	ISO country name	World Bank region	Continent	Number of MDBs with lending	Signed amount (EUR million)	Outstanding 31 Dec 2025 (EUR million)	First year in dataset	Last year in dataset	First year of GEMs rating
VC	St. Vincent and the Grenadines	Latin America & Caribbean	North America	3	302	162	1993	2025	1999
VE	Venezuela, RB	Latin America & Caribbean	South America	4	14,204	3,372	1984	2024	1973
VG	British Virgin Islands	Latin America & Caribbean	North America	2	111	62	1995	2025	2025
VN	Vietnam	East Asia & Pacific	Asia	4	16,490	8,102	1984	2025	1997
VU	Vanuatu	East Asia & Pacific	Oceania	2	86	45	2000	2025	2009
WS	Samoa	East Asia & Pacific	Oceania	2	123	47	2017	2025	2009
XK	Kosovo	Europe & Central Asia	Europe	4	483	203	2010	2025	2011
YE	Yemen, Rep.	Middle East, North Africa, Afghanistan & Pakistan	Asia	1	243	151	2007	2012	1999
ZA	South Africa	Sub-Saharan Africa	Africa	4	15,620	9,163	1999	2025	1994
ZM	Zambia	Sub-Saharan Africa	Africa	4	2,134	749	1984	2025	1999
ZW	Zimbabwe	Sub-Saharan Africa	Africa	4	1,892	700	1984	2025	1999

3. Default Rate Statistics

3.1 Overall Default Rates

Annual default rates range from 0% to 4.8% over the observed period. The highest annual default rate was recorded in 1987 at 4.8%, based on four

defaults. Annual default counts were generally low, with all but four years recording between zero and two defaults.

Table 9: Overall Default Rates

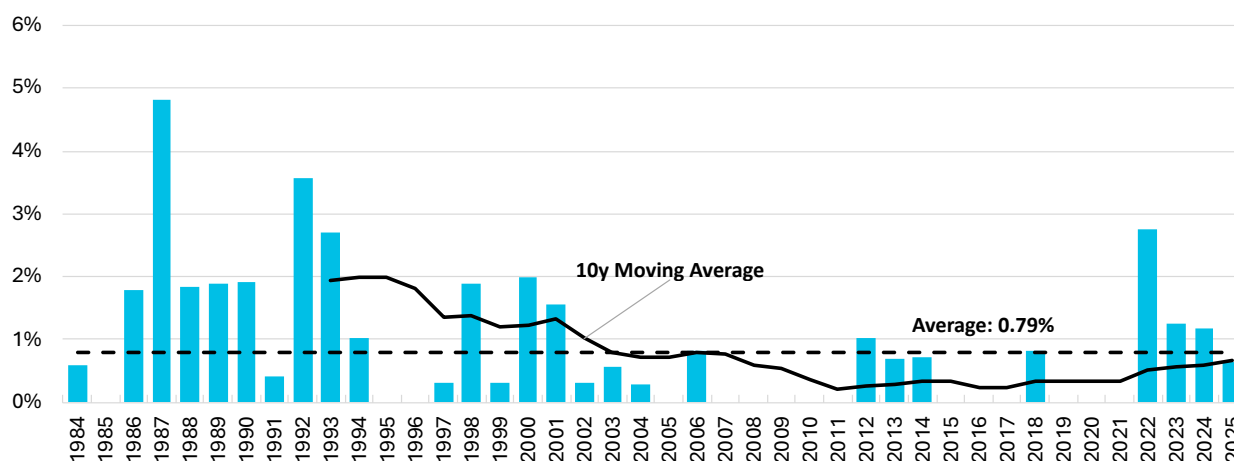
Counterparts	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
169	1,707,389	39.50 / 4,999	0.79% (0.53%–1.05%)

Table 10: Annual Default Rates

Year	Counterparts	Signed amount (€m)	Defaults / observations	Annual Default Rate
1984	83	1,514,043	0.50/83	0.60%
1985	83	1,508,104	0.00/83	0.00%
1986	84	1,509,899	1.50/84	1.79%
1987	83	1,507,609	4.00/83	4.82%
1988	82	1,476,764	1.50/82	1.83%
1989	80	1,457,703	1.50/80	1.88%
1990	78	1,431,020	1.50/78	1.92%
1991	79	1,440,302	0.33/79	0.42%
1992	84	1,469,052	3.00/84	3.57%
1993	93	1,502,778	2.50/93	2.69%
1994	97	1,595,474	1.00/97	1.03%
1995	102	1,603,702	0.00/102	0.00%
1996	106	1,607,058	0.00/106	0.00%
1997	109	1,610,876	0.33/109	0.31%
1998	106	1,607,367	2.00/106	1.89%
1999	108	1,622,893	0.33/108	0.31%
2000	109	1,618,282	2.17/109	1.99%
2001	107	1,615,760	1.67/107	1.56%
2002	112	1,627,666	0.33/112	0.30%
2003	116	1,642,289	0.67/116	0.57%
2004	117	1,636,128	0.33/117	0.28%
2005	117	1,636,089	0.00/117	0.00%
2006	122	1,658,579	1.00/122	0.82%
2007	139	1,672,462	0.00/139	0.00%
2008	140	1,672,294	0.00/140	0.00%

Year	Counterparts	Signed amount (€m)	Defaults / observations	Annual Default Rate
2009	140	1,671,809	0.00/140	0.00%
2010	145	1,693,667	0.00/145	0.00%
2011	145	1,693,627	0.00/145	0.00%
2012	145	1,694,491	1.50/145	1.03%
2013	144	1,692,698	1.00/144	0.69%
2014	141	1,670,758	1.00/141	0.71%
2015	139	1,672,408	0.00/139	0.00%
2016	137	1,671,670	0.00/137	0.00%
2017	147	1,677,741	0.00/147	0.00%
2018	150	1,677,855	1.25/150	0.83%
2019	149	1,663,650	0.00/149	0.00%
2020	150	1,663,695	0.00/150	0.00%
2021	150	1,663,695	0.00/150	0.00%
2022	151	1,663,696	4.17/151	2.76%
2023	145	1,634,706	1.83/145	1.26%
2024	143	1,632,833	1.67/143	1.17%
2025	142	1,631,177	0.92/142	0.65%

Figure 10: Annual Default Rates



The results for the whole dataset cannot be directly compared to default rates published by rating agencies for sovereign borrowers as those statistics only include sovereigns that had obtained credit ratings. A substantial number of defaults and observations in the GEMs statistics are for sovereigns during time periods when

they did not have such ratings. For a data subset that only includes defaults and observations for sovereigns when they had credit ratings from at least one of the main three rating agencies, the overall average default rate decreases to only 0.32%, which is based on 8.33 defaults and 2,580 observations.

Table 11: Overall Default Rates for CRA-Rated Countries

Counterparts	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
122	1,679,383	8.33 / 2,580	0.32% (0.14%–0.51%)

3.3 Default Rates by Region

3.3.1 Default Rates by World Bank Region

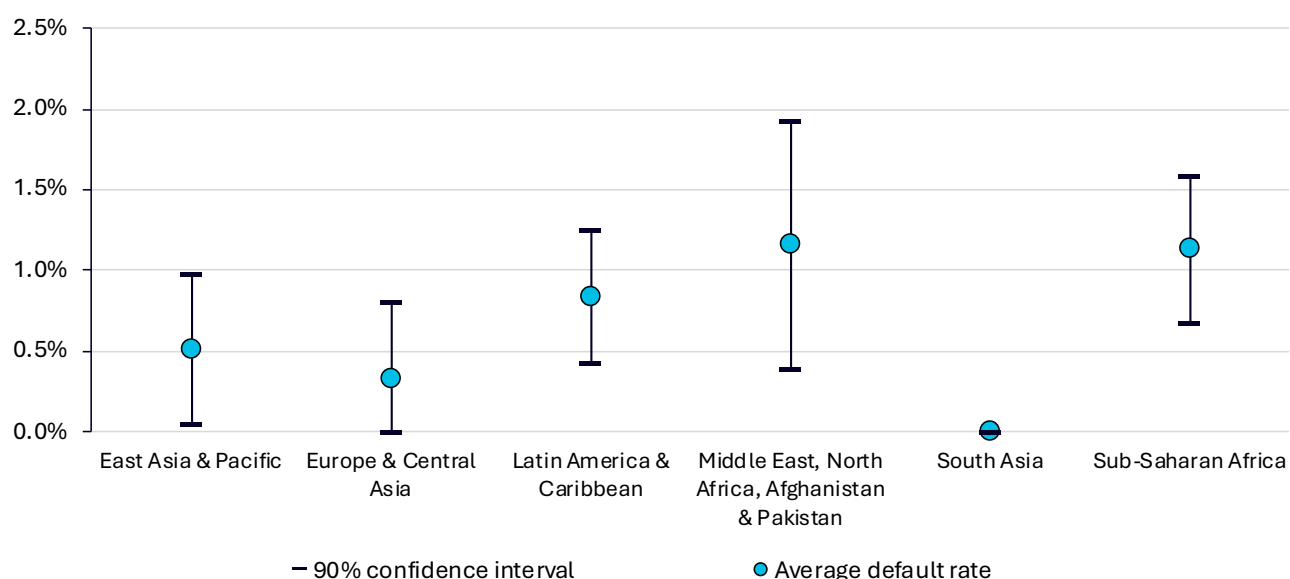
The World Bank Group classification of countries to regions is used for the statistics shown in this

section. Assignments of individual countries to regions can be found in Table 8.

Table 12: Default Rates by World Bank Region

Region	Counterparts	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
East Asia & Pacific	28	314,696	3.5 / 688	0.51% (0.05%–0.97%)
Europe & Central Asia	31	264,591	2.8 / 856	0.33% (0.00%–0.80%)
Latin America & Caribbean	37	633,370	10.8 / 1,289	0.84% (0.43%–1.25%)
Middle East, North Africa, Afghanistan & Pakistan	19	199,552	6.0 / 519	1.16% (0.39%–1.92%)
South Asia	6	185,812	0.0 / 203	0.00% (0.00%–0.00%)
Sub-Saharan Africa	48	109,368	16.3 / 1,444	1.13% (0.67%–1.59%)
Overall	169	1,707,389	39.5 / 4,999	0.79% (0.53%–1.05%)

Figure 11: Default Rates by World Bank Region



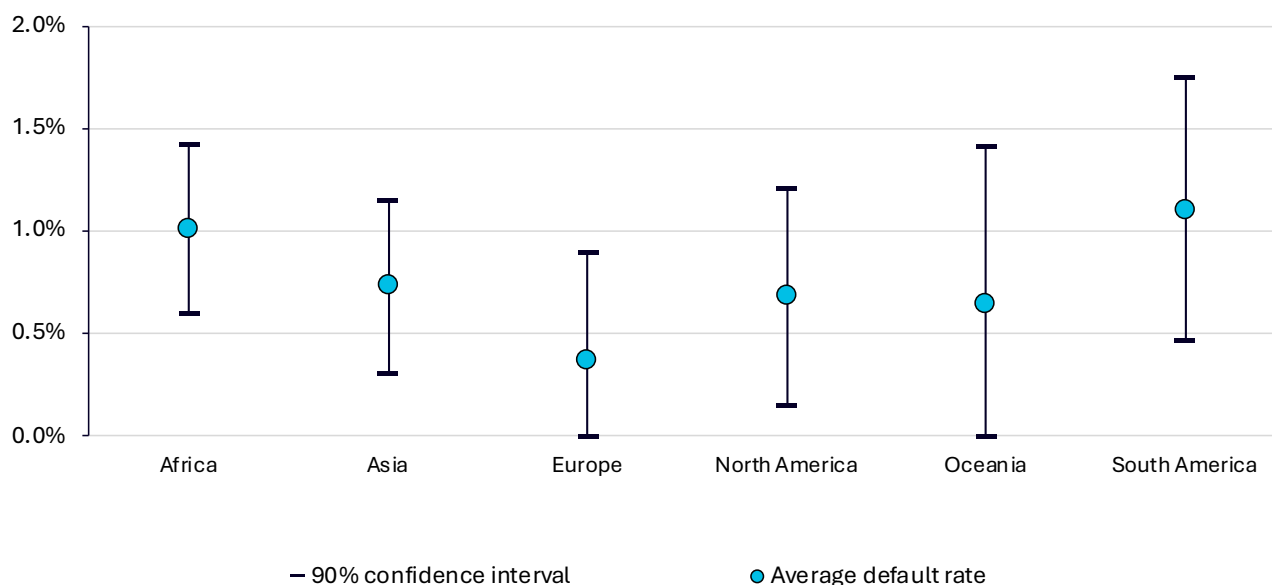
3.3.2 Default Rates by Continent

Table 13 and Figure 11 show the default rates by continent. (See Table 8 for the assignment of individual countries to continents.)

Table 13: Default Rates by Continent

Continent	Counterparts	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
Africa	52	228,752	16.3 / 1,612	1.01% (0.60%–1.42%)
Asia	38	599,182	7.5 / 1,030	0.73% (0.30%–1.15%)
Europe	27	239,058	2.8 / 756	0.37% (0.00%–0.89%)
North America	25	208,446	5.5 / 806	0.68% (0.15%–1.21%)
Oceania	15	7,027	2.0 / 312	0.64% (0.00%–1.41%)
South America	12	424,924	5.3 / 483	1.10% (0.46%–1.75%)
Overall (including omitted categories)	169	1,707,389	39.5 / 4,999	0.79% (0.53%–1.05%)

Figure 12: Default Rates by Continent



3.4 Default Rates by Income Group

The World Bank Group's historical income classification database is used to assign each country to the income group applicable for the years observations were made and defaults occurred. As historical classifications are available from 1987 onward, the analysis covers 39 years. Five countries in the dataset are not currently classified by the World Bank Group. The signed amounts and number of unique countries presented in this section are based on income classifications as at the end of 2025.

Average default rates increase across the income groups, from 0.0% for high income countries to 0.6% for upper middle income, 0.8% for lower middle income and 1.2% for low income countries, the highest rate among the classified groups. The Not Available category recorded an average rate of 1.1%, based on 3.8 defaults over 335 observations, the smallest observation base and the widest confidence interval across all groups. The overall average default rate is 0.8%.

Figure 13: Dataset Composition over Time by Income Group

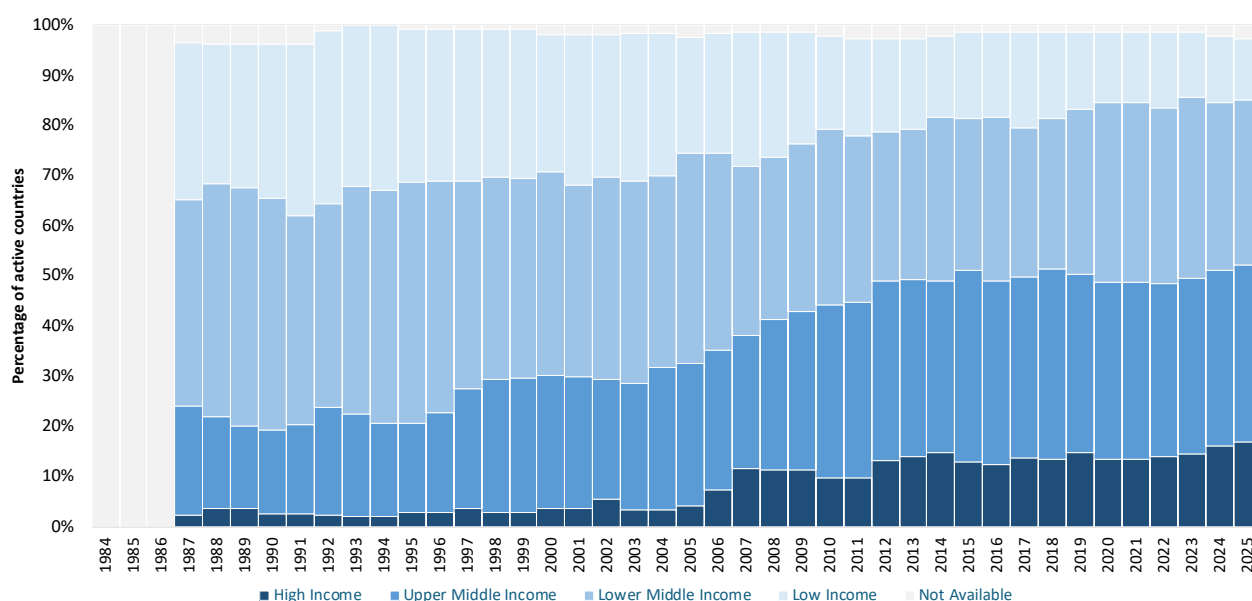
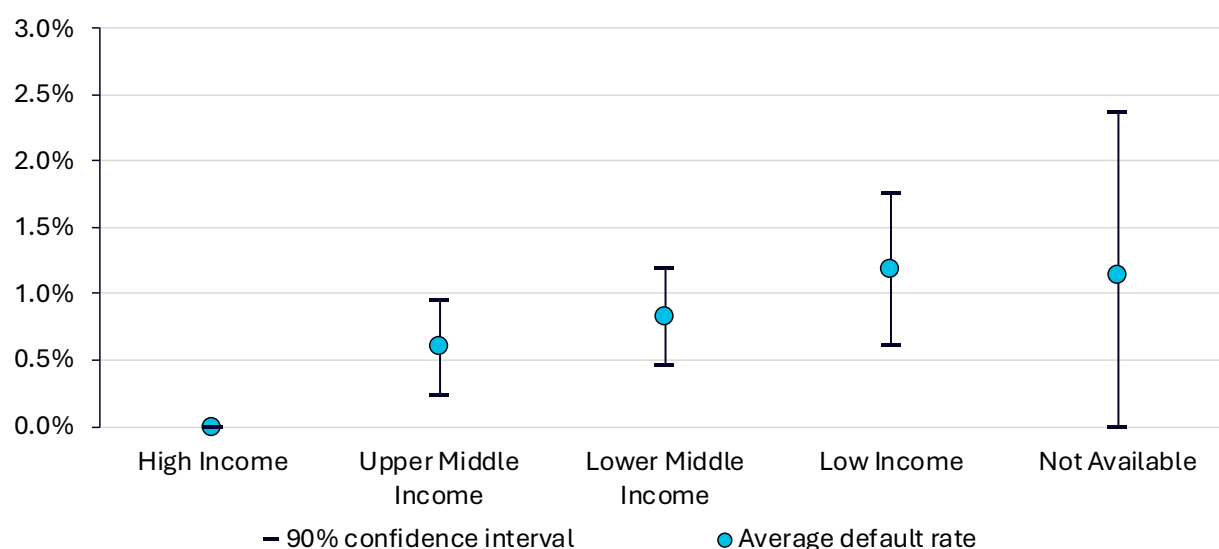


Table 14: Default Rates by Income Group

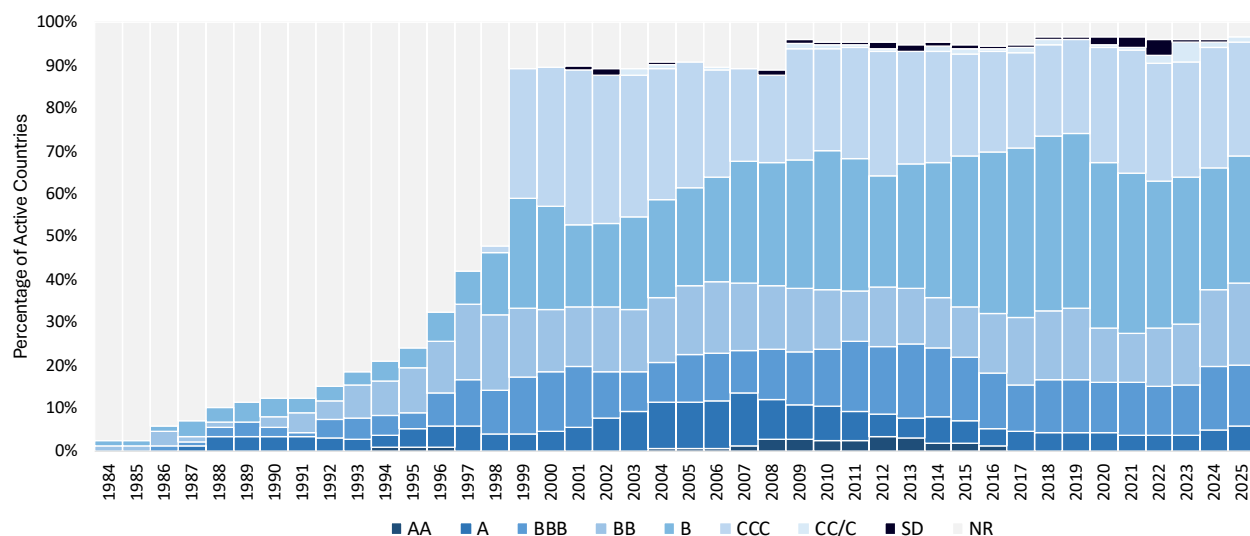
Income Group	Counterparts	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
High Income	38	164,742	0.0 / 432	0.00% (0.00%–0.00%)
Upper Middle Income	52	938,312	8.4 / 1,413	0.60% (0.24%–0.95%)
Lower Middle Income	50	572,765	14.6 / 1,751	0.83% (0.47%–1.19%)
Low Income	24	15,734	12.7 / 1,068	1.19% (0.61%–1.76%)
Not Available	5	15,836	3.8 / 335	1.14% (0.00%–2.37%)
Overall (including omitted categories)	169	778,593	39.5 / 4,999	0.79% (0.53%–1.05%)

Figure 14: Default Rates by Income Group



3.5 Default Rates by Credit Ratings

Figure 15: Dataset Composition by Rating Category



3.5.1 Marginal Default Rates by Credit Rating Category

Table 15: Marginal Default Rates by Credit Rating Category

Years	AA	A	BBB	BB	B	CCC	CC/C	SD	NR
1	0.00%	0.00%	0.06%	0.00%	0.26%	1.14%	5.17%	11.33%	1.55%
2	0.00%	0.00%	0.07%	0.00%	0.27%	1.05%	0.00%	3.33%	1.54%
3	0.00%	0.00%	0.07%	0.00%	0.42%	0.78%	0.00%	1.33%	1.48%
4	0.00%	0.00%	0.07%	0.00%	0.49%	0.80%	0.00%	1.52%	1.36%
5	0.00%	0.00%	0.00%	0.06%	0.55%	0.76%	0.00%	0.00%	1.11%
6	0.00%	0.00%	0.00%	0.06%	0.62%	0.76%	0.00%	0.00%	0.86%
7	0.00%	0.00%	0.00%	0.06%	0.43%	0.75%	1.85%	0.00%	0.66%
8	0.00%	0.00%	0.08%	0.10%	0.44%	0.74%	2.08%	0.00%	0.48%
9	0.00%	0.00%	0.09%	0.11%	0.47%	0.61%	2.38%	0.00%	0.46%
10	0.00%	0.00%	0.09%	0.00%	0.63%	0.64%	0.00%	0.00%	0.43%
11	0.00%	0.00%	0.10%	0.06%	0.69%	0.52%	0.00%	0.00%	0.32%
12	0.00%	0.00%	0.10%	0.06%	0.74%	0.55%	0.00%	0.00%	0.25%
13	0.00%	0.00%	0.11%	0.06%	0.80%	0.60%	0.00%	0.00%	0.25%
14	0.00%	0.00%	0.12%	0.07%	0.86%	0.53%	0.00%	0.00%	0.29%
15	0.00%	0.00%	0.14%	0.07%	0.84%	0.58%	0.00%	0.00%	0.33%
16	0.00%	0.00%	0.15%	0.08%	0.70%	0.64%	0.00%	0.00%	0.33%
17	0.00%	0.00%	0.16%	0.08%	0.70%	0.72%	0.00%	0.00%	0.23%
18	0.00%	0.00%	0.17%	0.09%	0.69%	0.67%	0.00%	0.00%	0.13%
19	0.00%	0.00%	0.00%	0.13%	0.87%	0.74%	0.00%	0.00%	0.12%
20	0.00%	0.00%	0.00%	0.14%	0.98%	0.74%	0.00%	0.00%	0.10%

Years	AA	A	BBB	BB	B	CCC	CC/C	SD	NR
21	0.00%	0.00%	0.00%	0.46%	0.50%	1.29%	0.00%	0.00%	0.10%
22	0.00%	0.00%	0.00%	0.00%	1.05%	1.21%	0.00%	0.00%	0.08%
23	0.00%	0.00%	0.00%	0.84%	0.28%	2.06%		0.00%	0.08%
24	0.00%	0.00%	0.00%	0.94%	0.33%	0.83%		0.00%	0.16%
25	0.00%	0.00%	0.00%	1.30%	0.00%	0.67%			0.21%
26	0.00%	0.00%	0.00%	1.08%	0.00%	1.33%			0.21%
27	0.00%	0.00%	0.00%	0.96%	0.00%	0.00%			0.27%
28	0.00%	0.00%	0.00%	0.00%	1.85%				0.25%
29	0.00%	0.00%	0.00%	0.00%	2.22%				0.30%
30	0.00%	0.00%	0.00%	2.13%	0.00%				0.18%
31	0.00%	0.00%	0.00%	2.86%	0.00%				0.11%
32		0.00%	0.00%	3.85%	0.00%				0.12%
33		0.00%	0.00%	5.56%	0.00%				0.13%
34		0.00%	0.00%	7.14%	0.00%				0.15%
35		0.00%	0.00%	10.00%	0.00%				0.17%
36		0.00%	0.00%	0.00%	0.00%				0.19%
37		0.00%	0.00%	0.00%	0.00%				0.21%
38		0.00%	0.00%	0.00%	0.00%				0.25%
39		0.00%	0.00%	0.00%	0.00%				0.31%
40				0.00%	0.00%				0.20%
41				0.00%	0.00%				0.00%
42				0.00%	0.00%				0.00%

3.5.2 Cumulative Default Rates by Credit Rating Category

Table 16: Cumulative Default Rates by Credit Rating Category

Years	AA	A	BBB	BB	B	CCC	CC/C	SD	NR
1	0.00%	0.00%	0.06%	0.00%	0.26%	1.14%	5.17%	11.33%	1.55%
2	0.00%	0.00%	0.13%	0.00%	0.53%	2.18%	5.17%	14.29%	3.07%
3	0.00%	0.00%	0.20%	0.00%	0.95%	2.95%	5.17%	15.43%	4.50%
4	0.00%	0.00%	0.27%	0.00%	1.44%	3.72%	5.17%	16.71%	5.80%
5	0.00%	0.00%	0.27%	0.06%	1.99%	4.45%	5.17%	16.71%	6.85%
6	0.00%	0.00%	0.27%	0.12%	2.59%	5.18%	5.17%	16.71%	7.66%
7	0.00%	0.00%	0.27%	0.18%	3.01%	5.89%	6.93%	16.71%	8.27%
8	0.00%	0.00%	0.35%	0.29%	3.43%	6.59%	8.87%	16.71%	8.71%
9	0.00%	0.00%	0.43%	0.39%	3.89%	7.15%	11.04%	16.71%	9.14%
10	0.00%	0.00%	0.53%	0.39%	4.49%	7.75%	11.04%	16.71%	9.52%
11	0.00%	0.00%	0.62%	0.45%	5.15%	8.23%	11.04%	16.71%	9.81%
12	0.00%	0.00%	0.73%	0.51%	5.85%	8.73%	11.04%	16.71%	10.04%

Years	AA	A	BBB	BB	B	CCC	CC/C	SD	NR
13	0.00%	0.00%	0.84%	0.58%	6.61%	9.28%	11.04%	16.71%	10.26%
14	0.00%	0.00%	0.96%	0.64%	7.41%	9.76%	11.04%	16.71%	10.52%
15	0.00%	0.00%	1.10%	0.71%	8.19%	10.28%	11.04%	16.71%	10.81%
16	0.00%	0.00%	1.24%	0.79%	8.84%	10.86%	11.04%	16.71%	11.11%
17	0.00%	0.00%	1.40%	0.87%	9.47%	11.50%	11.04%	16.71%	11.31%
18	0.00%	0.00%	1.57%	0.96%	10.09%	12.09%	11.04%	16.71%	11.43%
19	0.00%	0.00%	1.57%	1.08%	10.87%	12.75%	11.04%	16.71%	11.53%
20	0.00%	0.00%	1.57%	1.22%	11.75%	13.39%	11.04%	16.71%	11.62%
21	0.00%	0.00%	1.57%	1.67%	12.19%	14.51%	11.04%	16.71%	11.71%
22	0.00%	0.00%	1.57%	1.67%	13.11%	15.54%	11.04%	16.71%	11.78%
23	0.00%	0.00%	1.57%	2.50%	13.36%	17.29%	11.04%	16.71%	11.85%
24	0.00%	0.00%	1.57%	3.41%	13.64%	17.98%	11.04%	16.71%	11.99%
25	0.00%	0.00%	1.57%	4.67%	13.64%	18.52%	11.04%	16.71%	12.18%
26	0.00%	0.00%	1.57%	5.70%	13.64%	19.61%	11.04%	16.71%	12.36%
27	0.00%	0.00%	1.57%	6.61%	13.64%	19.61%	11.04%	16.71%	12.60%
28	0.00%	0.00%	1.57%	6.61%	15.24%	19.61%	11.04%	16.71%	12.82%
29	0.00%	0.00%	1.57%	6.61%	17.12%	19.61%	11.04%	16.71%	13.08%
30	0.00%	0.00%	1.57%	8.60%	17.12%	19.61%	11.04%	16.71%	13.24%
31	0.00%	0.00%	1.57%	11.21%	17.12%	19.61%	11.04%	16.71%	13.34%
32	0.00%	0.00%	1.57%	14.62%	17.12%	19.61%	11.04%	16.71%	13.44%
33	0.00%	0.00%	1.57%	19.37%	17.12%	19.61%	11.04%	16.71%	13.55%
34	0.00%	0.00%	1.57%	25.13%	17.12%	19.61%	11.04%	16.71%	13.68%
35	0.00%	0.00%	1.57%	32.61%	17.12%	19.61%	11.04%	16.71%	13.83%
36	0.00%	0.00%	1.57%	32.61%	17.12%	19.61%	11.04%	16.71%	13.99%
37	0.00%	0.00%	1.57%	32.61%	17.12%	19.61%	11.04%	16.71%	14.17%
38	0.00%	0.00%	1.57%	32.61%	17.12%	19.61%	11.04%	16.71%	14.39%
39	0.00%	0.00%	1.57%	32.61%	17.12%	19.61%	11.04%	16.71%	14.65%
40	0.00%	0.00%	1.57%	32.61%	17.12%	19.61%	11.04%	16.71%	14.83%
41	0.00%	0.00%	1.57%	32.61%	17.12%	19.61%	11.04%	16.71%	14.83%

3.5.3 Marginal Default Rates by Credit Rating

Table 17: Marginal Default Rates by Credit Rating

Years	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	CC	C	SD	NR
1	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.14%	0.00%	0.00%	0.00%	0.00%	0.25%	0.49%	0.21%	2.48%	1.27%	3.85%	6.25%	10.00%	1.55%
2	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.15%	0.00%	0.00%	0.00%	0.00%	0.26%	0.51%	0.78%	4.72%	0.87%	0.00%	0.00%	3.70%	1.56%
3	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.15%	0.00%	0.00%	0.00%	0.07%	0.27%	0.88%	0.43%	5.16%	0.60%	0.00%	0.00%	1.54%	1.53%
4	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.16%	0.00%	0.00%	0.00%	0.08%	0.42%	0.94%	1.02%	3.73%	0.59%	0.00%	0.00%	1.69%	1.42%
5	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.20%	0.00%	0.00%	0.08%	0.15%	1.38%	0.00%	5.51%	0.69%	0.00%	0.00%	0.00%	1.18%
6	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.21%	0.00%	0.00%	0.51%	0.00%	1.33%	0.00%	5.86%	0.72%	0.00%	0.00%	0.00%	0.93%
7	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.22%	0.00%	0.00%	0.53%	0.18%	0.61%	1.08%	0.00%	0.75%	0.00%	3.03%	0.00%	0.72%
8	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.27%	0.00%	0.00%	0.00%	0.27%	0.38%	0.19%	0.76%	0.00%	0.00%	0.95%	0.00%	3.70%	0.00%	0.53%
9	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.28%	0.00%	0.00%	0.00%	0.29%	0.50%	0.42%	0.53%	0.00%	0.00%	0.78%	5.56%	0.00%	0.00%	0.51%
10	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.30%	0.00%	0.00%	0.00%	0.00%	0.74%	0.62%	0.58%	0.00%	0.00%	0.83%	0.00%	0.00%	0.00%	0.48%
11	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.31%	0.00%	0.00%	0.00%	0.16%	1.08%	0.25%	0.80%	0.00%	0.00%	0.67%	0.00%	0.00%	0.00%	0.36%
12	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.34%	0.00%	0.00%	0.00%	0.18%	1.16%	0.81%	0.35%	0.00%	0.00%	0.72%	0.00%	0.00%	0.00%	0.28%
13	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.37%	0.00%	0.00%	0.00%	0.20%	1.07%	1.09%	0.38%	0.00%	0.00%	0.79%	0.00%	0.00%	0.00%	0.28%
14	0.00%	0.00%	0.00%	0.00%	0.00%	0.51%	0.00%	0.00%	0.00%	0.00%	0.22%	0.86%	1.19%	0.70%	0.00%	0.00%	0.69%	0.00%	0.00%	0.00%	0.33%
15	0.00%	0.00%	0.00%	0.00%	0.00%	0.53%	0.00%	0.00%	0.00%	0.00%	0.24%	0.96%	0.24%	1.43%	0.00%	0.00%	0.76%	0.00%	0.00%	0.00%	0.37%
16	0.00%	0.00%	0.00%	0.00%	0.00%	0.56%	0.00%	0.00%	0.00%	0.00%	0.26%	0.35%	0.27%	1.62%	0.00%	0.00%	0.84%	0.00%	0.00%	0.00%	0.37%
17	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.56%	0.00%	0.00%	0.00%	0.27%	1.13%	0.31%	0.72%	0.00%	0.00%	0.93%	0.00%	0.00%	0.00%	0.26%
18	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.40%	0.00%	0.00%	0.30%	1.22%	0.36%	0.50%	0.00%	0.00%	0.86%	0.00%	0.00%	0.00%	0.15%
19	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.40%	0.00%	0.00%	0.93%	1.01%	0.87%	0.00%	0.00%	0.97%	0.00%	0.00%	0.00%	0.14%
20		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.34%	0.00%	1.04%	1.19%	0.97%	0.00%	0.00%	0.95%	0.00%		0.00%	0.11%
21		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.87%	0.37%	1.45%	0.00%	0.00%	0.00%	1.64%	0.00%		0.00%	0.12%
22		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.81%	1.40%	0.00%	0.00%	0.00%	1.50%	0.00%		0.00%	0.09%
23		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.41%	0.00%	0.00%	1.00%	0.00%	0.00%	2.57%			0.00%	0.09%
24		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.23%	0.80%	0.00%	0.00%	0.00%	0.00%	11.11%	0.55%		0.00%	0.19%
25		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.42%	1.72%	0.00%	0.00%	0.00%	0.00%	0.00%	0.90%				0.24%

Years	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	CC	C	SD	NR
26		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.92%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.83%				0.25%
27		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.68%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%				0.32%
28		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.35%	0.00%	0.00%							0.30%
29		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.25%	0.00%	0.00%							0.35%
30		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.50%	0.00%	0.00%	0.00%							0.22%
31		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%							0.13%
32			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.33%	0.00%	0.00%	0.00%	0.00%							0.14%
33			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.50%	0.00%	0.00%	0.00%	0.00%							0.16%
34			0.00%	0.00%	0.00%	0.00%			0.00%	20.00%	0.00%	0.00%	0.00%	0.00%							0.18%
35			0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	50.00%	0.00%	0.00%	0.00%	0.00%							0.20%
36				0.00%	0.00%	0.00%	0.00%		0.00%		0.00%	0.00%	0.00%	0.00%							0.23%
37				0.00%	0.00%	0.00%			0.00%		0.00%	0.00%	0.00%	0.00%							0.27%
38				0.00%		0.00%			0.00%		0.00%	0.00%	0.00%	0.00%							0.32%
39				0.00%		0.00%			0.00%		0.00%			0.00%							0.39%
40														0.00%							0.26%
41														0.00%							0.00%
42														0.00%							0.00%

3.5.4 Cumulative Default Rates by Credit Rating

Table 18: Cumulative Default Rates by Credit Rating

Years	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	CC	C	SD	NR
1	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.14%	0.00%	0.00%	0.00%	0.00%	0.25%	0.49%	0.21%	2.48%	1.27%	3.85%	6.25%	10.00%	1.55%
2	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.29%	0.00%	0.00%	0.00%	0.00%	0.51%	1.00%	1.00%	7.08%	2.13%	3.85%	6.25%	13.33%	3.09%
3	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.45%	0.00%	0.00%	0.00%	0.07%	0.77%	1.87%	1.42%	11.88%	2.72%	3.85%	6.25%	14.67%	4.57%
4	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.61%	0.00%	0.00%	0.00%	0.15%	1.19%	2.80%	2.43%	15.16%	3.30%	3.85%	6.25%	16.11%	5.93%
5	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.61%	0.20%	0.00%	0.00%	0.23%	1.34%	4.14%	2.43%	19.84%	3.96%	3.85%	6.25%	16.11%	7.05%
6	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.61%	0.41%	0.00%	0.00%	0.73%	1.34%	5.41%	2.43%	24.53%	4.65%	3.85%	6.25%	16.11%	7.91%
7	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.61%	0.62%	0.00%	0.00%	1.27%	1.51%	5.99%	3.48%	24.53%	5.37%	3.85%	9.09%	16.11%	8.58%
8	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.27%	0.61%	0.62%	0.00%	0.27%	1.64%	1.70%	6.70%	3.48%	24.53%	6.27%	3.85%	12.46%	16.11%	9.06%
9	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.55%	0.61%	0.62%	0.00%	0.57%	2.13%	2.12%	7.20%	3.48%	24.53%	7.00%	9.19%	12.46%	16.11%	9.53%
10	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.84%	0.61%	0.62%	0.00%	0.57%	2.85%	2.73%	7.74%	3.48%	24.53%	7.78%	9.19%	12.46%	16.11%	9.96%
11	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.15%	0.61%	0.62%	0.00%	0.73%	3.90%	2.97%	8.47%	3.48%	24.53%	8.39%	9.19%	12.46%	16.11%	10.28%
12	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.49%	0.61%	0.62%	0.00%	0.91%	5.01%	3.76%	8.79%	3.48%	24.53%	9.06%	9.19%	12.46%	16.11%	10.53%
13	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.85%	0.61%	0.62%	0.00%	1.10%	6.03%	4.80%	9.13%	3.48%	24.53%	9.77%	9.19%	12.46%	16.11%	10.78%
14	0.00%	0.00%	0.00%	0.00%	0.00%	0.51%	1.85%	0.61%	0.62%	0.00%	1.32%	6.84%	5.94%	9.77%	3.48%	24.53%	10.40%	9.19%	12.46%	16.11%	11.07%
15	0.00%	0.00%	0.00%	0.00%	0.00%	1.03%	1.85%	0.61%	0.62%	0.00%	1.56%	7.73%	6.17%	11.06%	3.48%	24.53%	11.08%	9.19%	12.46%	16.11%	11.40%
16	0.00%	0.00%	0.00%	0.00%	0.00%	1.59%	1.85%	0.61%	0.62%	0.00%	1.81%	8.06%	6.42%	12.50%	3.48%	24.53%	11.82%	9.19%	12.46%	16.11%	11.73%
17	0.00%	0.00%	0.00%	0.00%	0.00%	1.59%	2.41%	0.61%	0.62%	0.00%	2.08%	9.09%	6.71%	13.13%	3.48%	24.53%	12.64%	9.19%	12.46%	16.11%	11.96%
18	0.00%	0.00%	0.00%	0.00%	0.00%	1.59%	2.41%	1.00%	0.62%	0.00%	2.38%	10.20%	7.05%	13.57%	3.48%	24.53%	13.40%	9.19%	12.46%	16.11%	12.09%
19	0.00%	0.00%	0.00%	0.00%	0.00%	1.59%	2.41%	1.00%	1.02%	0.00%	2.38%	11.04%	7.99%	14.32%	3.48%	24.53%	14.24%	9.19%	12.46%	16.11%	12.21%
20		0.00%	0.00%	0.00%	0.00%	1.59%	2.41%	1.00%	1.02%	0.34%	2.38%	11.96%	9.08%	15.15%	3.48%	24.53%	15.05%	9.19%		16.11%	12.31%
21		0.00%	0.00%	0.00%	0.00%	1.59%	2.41%	1.00%	1.02%	0.34%	4.20%	12.28%	10.40%	15.15%	3.48%	24.53%	16.44%	9.19%		16.11%	12.41%
22		0.00%	0.00%	0.00%	0.00%	1.59%	2.41%	1.00%	1.02%	0.34%	4.20%	13.88%	11.66%	15.15%	3.48%	24.53%	17.70%	9.19%		16.11%	12.49%
23		0.00%	0.00%	0.00%	0.00%	1.59%	2.41%	1.00%	1.02%	0.34%	7.47%	13.88%	11.66%	16.00%	3.48%	24.53%	19.82%			16.11%	12.57%
24		0.00%	0.00%	0.00%	0.00%	1.59%	2.41%	1.00%	1.02%	0.34%	11.38%	14.57%	11.66%	16.00%	3.48%	32.92%	20.26%			16.11%	12.74%
25		0.00%	0.00%	0.00%	0.00%	1.59%	2.41%	1.00%	1.02%	2.75%	12.91%	14.57%	11.66%	16.00%	3.48%	32.92%	20.98%				12.95%

Years	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	CC	C	SD	NR
26		0.00%	0.00%	0.00%	0.00%	1.59%	2.41%	1.00%	1.02%	5.59%	12.91%	14.57%	11.66%	16.00%	3.48%	32.92%	22.42%				13.17%
27		0.00%	0.00%	0.00%	0.00%	1.59%	2.41%	1.00%	1.02%	8.12%	12.91%	14.57%	11.66%	16.00%		32.92%	22.42%				13.44%
28		0.00%	0.00%	0.00%	0.00%	1.59%	2.41%	1.00%	1.02%	8.12%	12.91%	18.28%	11.66%	16.00%							13.70%
29		0.00%	0.00%	0.00%	0.00%	1.59%	2.41%	1.00%	1.02%	8.12%	12.91%	23.39%	11.66%	16.00%							14.00%
30		0.00%	0.00%	0.00%	0.00%	1.59%	2.41%	1.00%	1.02%	8.12%	23.79%	23.39%	11.66%	16.00%							14.19%
31		0.00%	0.00%	0.00%	0.00%	1.59%	2.41%	1.00%	1.02%	8.12%	39.03%	23.39%	11.66%	16.00%							14.31%
32			0.00%	0.00%	0.00%	1.59%	2.41%	1.00%	1.02%	15.78%	39.03%	23.39%	11.66%	16.00%							14.43%
33			0.00%	0.00%	0.00%	1.59%	2.41%	1.00%	1.02%	26.31%	39.03%	23.39%	11.66%	16.00%							14.57%
34			0.00%	0.00%	0.00%	1.59%	2.41%		1.02%	41.04%	39.03%	23.39%	11.66%	16.00%							14.72%
35			0.00%	0.00%	0.00%	1.59%	2.41%		1.02%	70.52%	39.03%	23.39%	11.66%	16.00%							14.90%
36				0.00%	0.00%	1.59%	2.41%		1.02%		39.03%	23.39%	11.66%	16.00%							15.09%
37				0.00%	0.00%	1.59%			1.02%		39.03%	23.39%	11.66%	16.00%							15.32%
38				0.00%		1.59%			1.02%		39.03%	23.39%	11.66%	16.00%							15.59%
39				0.00%		1.59%			1.02%		39.03%			16.00%							15.92%
40														16.00%							16.14%
41														16.00%							16.14%
42														16.00%							16.14%

4. Recovery Rate Statistics

Recovery rates are calculated individually for each default of a country and each member. According to the definition of sovereign and sovereign-guaranteed lending, all loans extended by multilateral development banks (MDBs) to a country are considered to default simultaneously and return to performing

status on the same date. To date, all defaults covered by the GEMs dataset have resulted in full recovery of overdue principal and interest on a nominal basis. As a result, the only losses incurred stem from the cost of funding overdue interest, as these amounts are neither capitalised nor charged to borrowers.

4.1 Overall Recovery Rates

The average recovery rate across the dataset is 95.0%. Recovery outcomes are similar between resolved and unresolved defaults, with resolved contracts recording an average recovery rate of 94.8% and unresolved contracts 95.7%.

Median recovery rates are also high at 98.2% for resolved contracts and 99.6% for unresolved contracts. Of the 55 defaulted contracts, 41 are resolved and 14 remain unresolved.

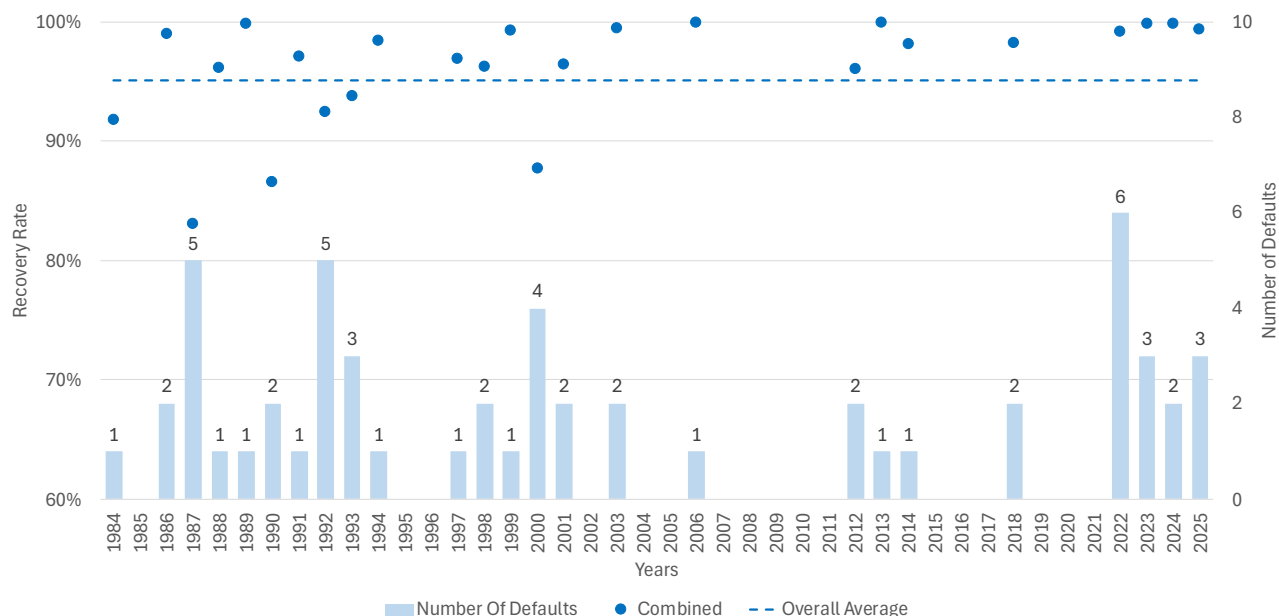
Table 19: Overall Recovery Rates

Resolution Status	Number of Defaulted Contracts	Signed Amount (€m)	Average RR	Median RR (IQR)	P10–P90 Range
Resolved	41	114,985	94.8%	98.2% (96.2%–99.9%)	90.4%–100.0%
Unresolved	14	18,839	95.7%	99.6% (98.0%–100.0%)	95.2%–100.0%
Combined	55	133,824	95.1%	98.8% (96.6%–99.9%)	90.7%–100.0%

Table 20: Annual Recovery Rates

Year	Resolved	Unresolved	Combined
1984	91.8%		91.8%
1985			
1986	99.0%		99.0%
1987	83.1%		83.1%
1988	96.2%		96.2%
1989	99.8%		99.8%
1990	86.5%		86.5%
1991	97.1%		97.1%
1992	92.5%		92.5%
1993	93.8%		93.8%
1994	98.4%		98.4%
1995			
1996			
1997	96.9%		96.9%
1998	96.2%		96.2%
1999	99.3%		99.3%
2000	99.0%	57.5%	88.6%
2001	96.5%		96.5%
2002			
2003	99.5%		99.5%
2004			
2005			
2006	100.0%		100.0%
2007			
2008			
2009			
2010			
2011			
2012		96.1%	96.1%
2013	100.0%		100.0%
2014		98.2%	98.2%
2015			
2016			
2017			
2018	98.9%	97.5%	98.2%
2019			
2020			
2021			
2022	98.5%	99.5%	99.2%
2023	99.80%	100.00%	99.87%
2024		99.88%	99.88%
2025	98.18%	100.00%	99.39%

Figure 16: Annual Recovery Rates



4.2 Distribution of Recovery Rates

Table 21: Distribution of Recovery Rates

Recovery Rate	0-10%	10-20%	20-30%	30-40%	40-50%	50-60%	60-70%	70-80%	80-90%	90-100%
Defaulted contracts	0	0	0	0	1	1	0	3	0	50
% Defaulted contracts	0.0%	0.0%	0.0%	0.0%	1.8%	1.8%	0.0%	5.5%	0.0%	90.9%

Figure 17: Distribution of Recovery Rates

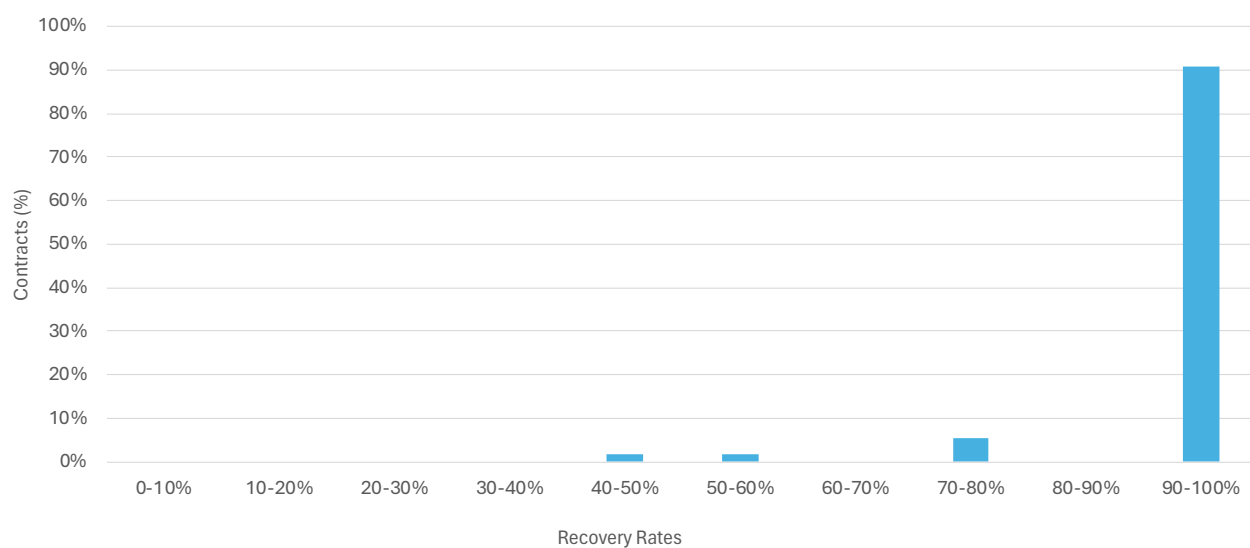
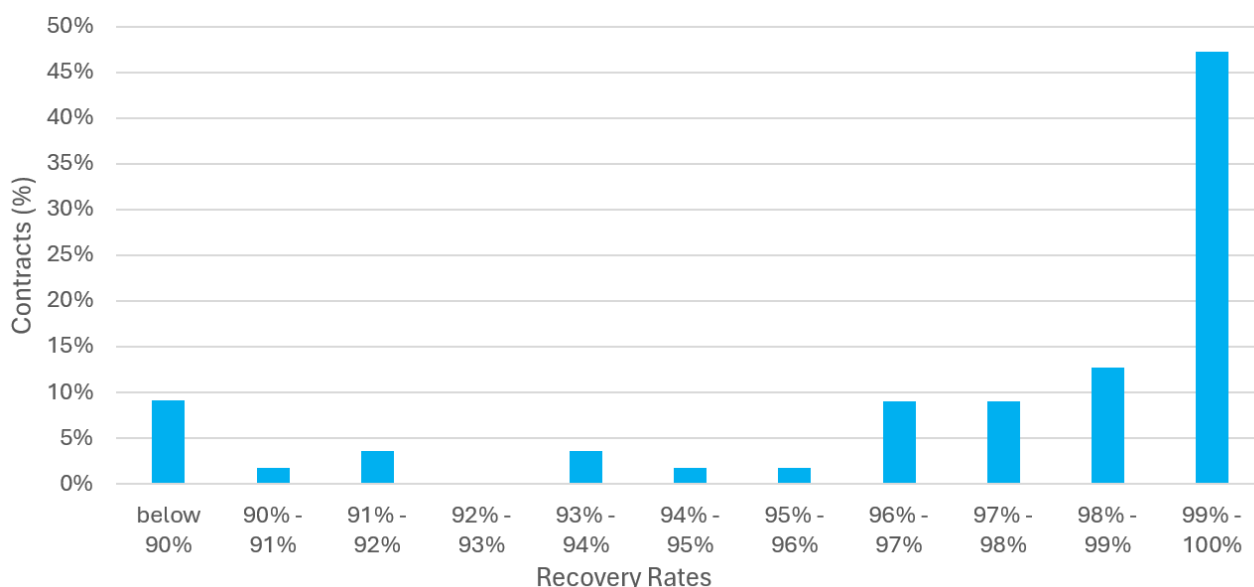


Table 22: Distribution of Recovery Rates – Detail for 90% to 100%

Recovery Rate	below 90%	90% - 91%	91% - 92%	92% - 93%	93% - 94%	94% - 95%	95% - 96%	96% - 97%	97% - 98%	98% - 99%	98% - 100%
Defaulted contracts	5	1	2	0	2	1	1	5	5	7	26
% Defaulted contracts	9.1%	1.8%	3.6%	0.0%	3.6%	1.8%	1.8%	9.1%	9.1%	12.7%	47.3%

Figure 18: Distribution of Recovery Rates – Detail for 90% to 100%



4.3 Time to Resolution

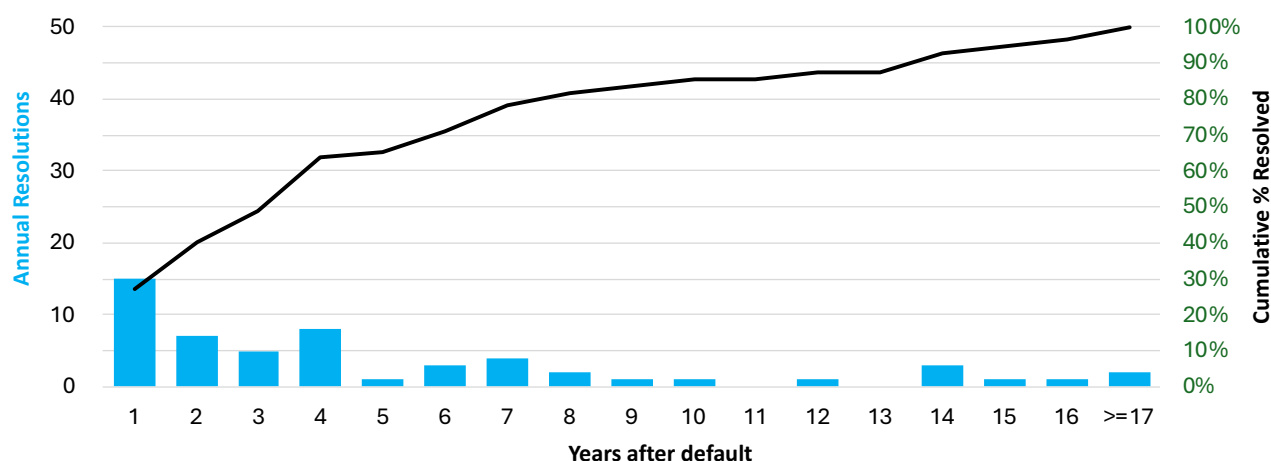
Table 23 and Figure 19 present the duration of default events. Approximately 27.3% of defaults are resolved within one year, exponentially increasing over time to 70.9% within six years. Most defaults are resolved within the first ten

years, although a small number resolve beyond this point, including two cases lasting 20 years or more. Based on the annual resolution counts, the median time to resolution is approximately three years.

Table 23: Time to Resolution

Number of Years	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	>=20
Annual Resolutions	15	7	5	8	1	3	4	2	1	1	0	1	0	3	1	1	0	0	0	2
Cumulative % Resolved	27%	40%	49%	64%	65%	71%	78%	82%	84%	85%	85%	87%	87%	93%	95%	96%	96%	96%	96%	100%

Figure 19: Time to Resolution



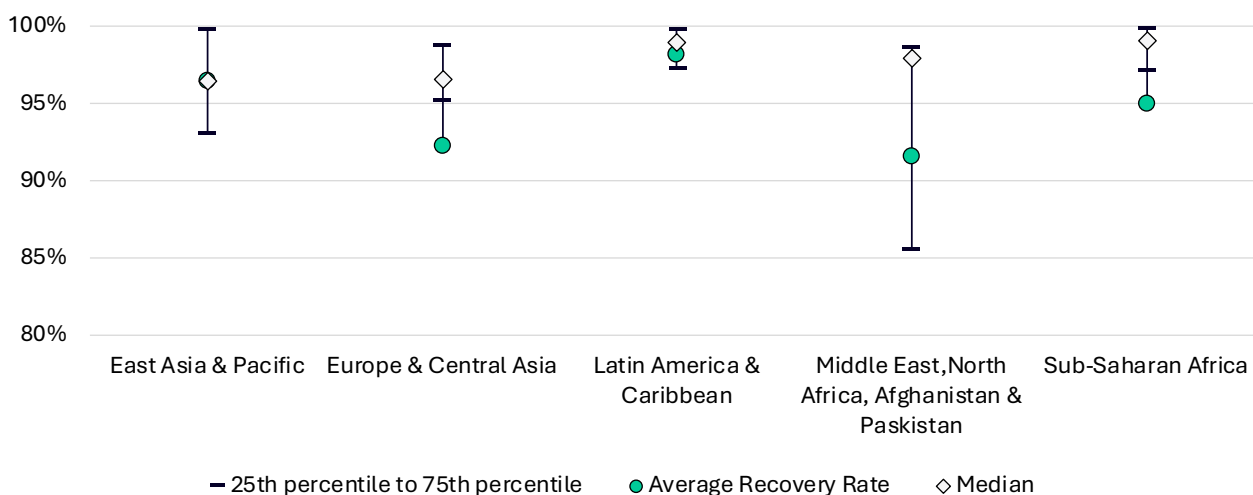
4.4 Recovery Rates by Region

4.4.1 Recovery Rates by World Bank Region

Table 24: Recovery Rates by World Bank Region

Region	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10–P90 Range
East Asia & Pacific	4	2,468	96.5%	96.5% (93.1%–99.8%)	93.1%–99.9%
Europe & Central Asia	5	13,137	92.3%	96.5% (95.3%–98.8%)	80.6%–99.5%
Latin America & Caribbean	12	75,004	98.2%	99.0% (97.4%–99.9%)	96.3%–100.0%
Middle East, North Africa, Afghanistan & Pakistan	7	11,873	91.6%	98.0% (85.7%–98.7%)	75.9%–99.7%
Sub-Saharan Africa	27	31,343	95.0%	99.1% (97.2%–100.0%)	90.9%–100.0%
Overall (Including Omitted Categories)	55	133,824	95.1%	98.8% (96.6%–99.9%)	90.7%–100.0%

Figure 20: Recovery Rates by World Bank Region

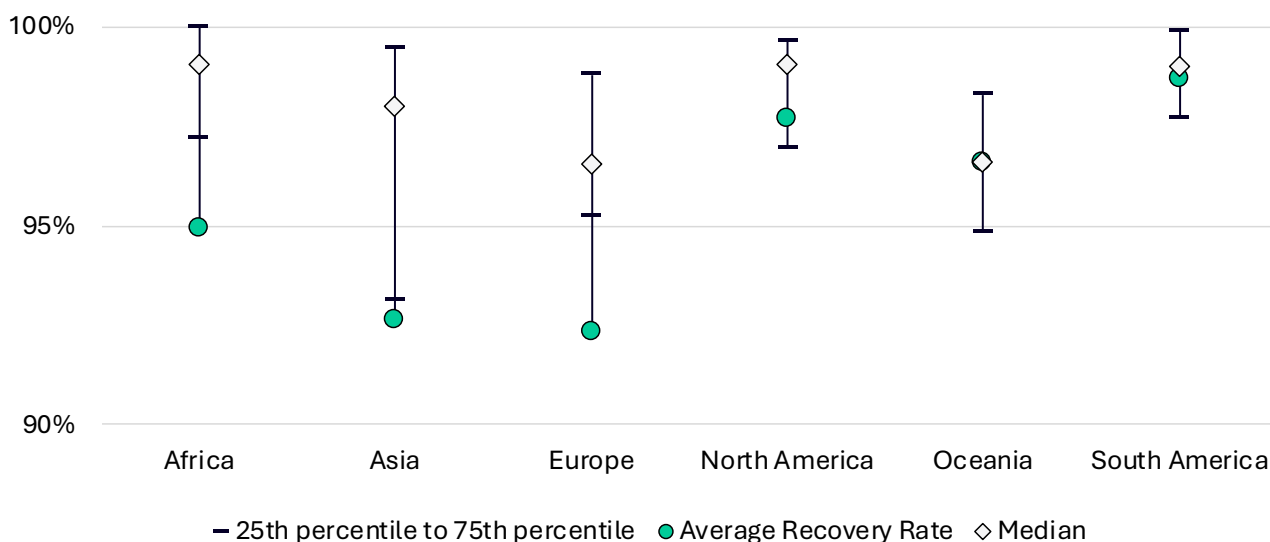


4.4.2 Recovery Rates by Continent

Table 25: Recovery Rates by Continent

Region	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10–P90 Range
Africa	27	31,343	95.0%	99.1% (97.2%–100.0%)	90.9%–100.0%
Asia	9	14,258	92.6%	98.0% (93.1%–99.5%)	76.5%–99.8%
Europe	5	13,137	92.3%	96.5% (95.3%–98.8%)	80.6%–99.5%
North America	6	27,229	97.7%	99.0% (96.9%–99.7%)	94.0%–99.9%
Oceania	2	83	96.6%	96.6% (94.8%–98.3%)	93.8%–99.3%
South America	6	47,774	98.7%	99.0% (97.7%–99.9%)	97.1%–100.0%
Overall (Including Omitted Categories)	55	133,824	95.1%	98.8% (96.6%–99.9%)	90.7%–100.0%

Figure 21: Recovery Rates by Continent



4.5 Recovery Rates by Income Group

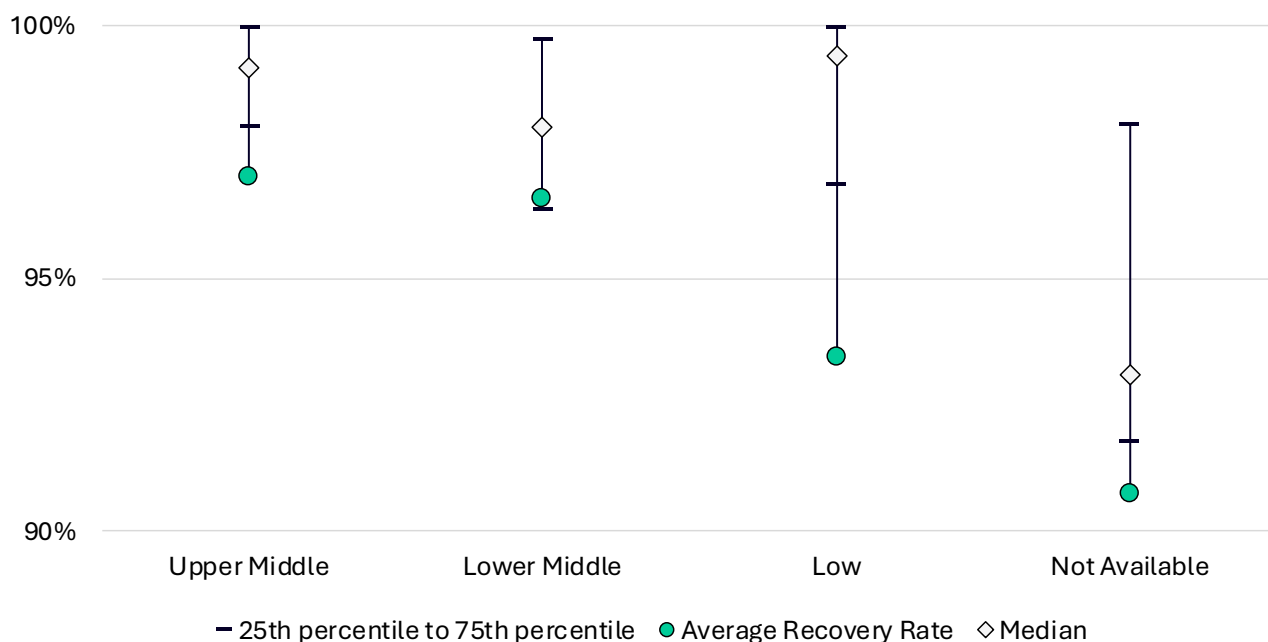
Country income group classifications at the time of default are based on the World Bank Group's historical income group database. Five defaults relate to countries for which an income classification was not available. The dataset contains no recovery observations for high income countries. Across the reported income groups, average recovery rates are high, ranging from 93.5%

for low income countries to 97.0% for upper middle income countries, with an overall average recovery rate of 95.1%. Median recovery rates are also high across all groups, although low income countries show greater dispersion in recovery outcomes. Specifically, the low income group had a 52.2% dispersion range between the lowest to highest reported recovery rate.

Table 26: Recovery Rates by Income Group

Income Group	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10-P90 Range
Upper Middle	12	27,749	97.0%	99.2% (98.0%–100.0%)	97.3%–100.0%
Lower Middle	19	70,092	96.6%	98.0% (96.4%–99.8%)	93.6%–99.9%
Low	19	25,868	93.5%	99.4% (96.9%–100.0%)	83.8%–100.0%
Not Available	5	10,115	90.8%	93.1% (91.8%–98.1%)	79.3%–99.2%
Overall (including omitted categories)	55	133,824	95.1%	98.8% (96.6%–99.9%)	90.7%–100.0%

Figure 22: Recovery Rates by Income Group



5. Rating Migration Statistics

The rating migrations presented in this publication are based on GEMs country ratings, as described in Section 2.4. The analysis includes only years in which a country has exposure to at least one multilateral development bank (MDB). Migration rates are calculated using annual rating snapshots as at 1 January, with one-year migrations comparing a country's rating in year i with its rating in year $i + 1$. Rating changes occurring within a year are therefore not captured.

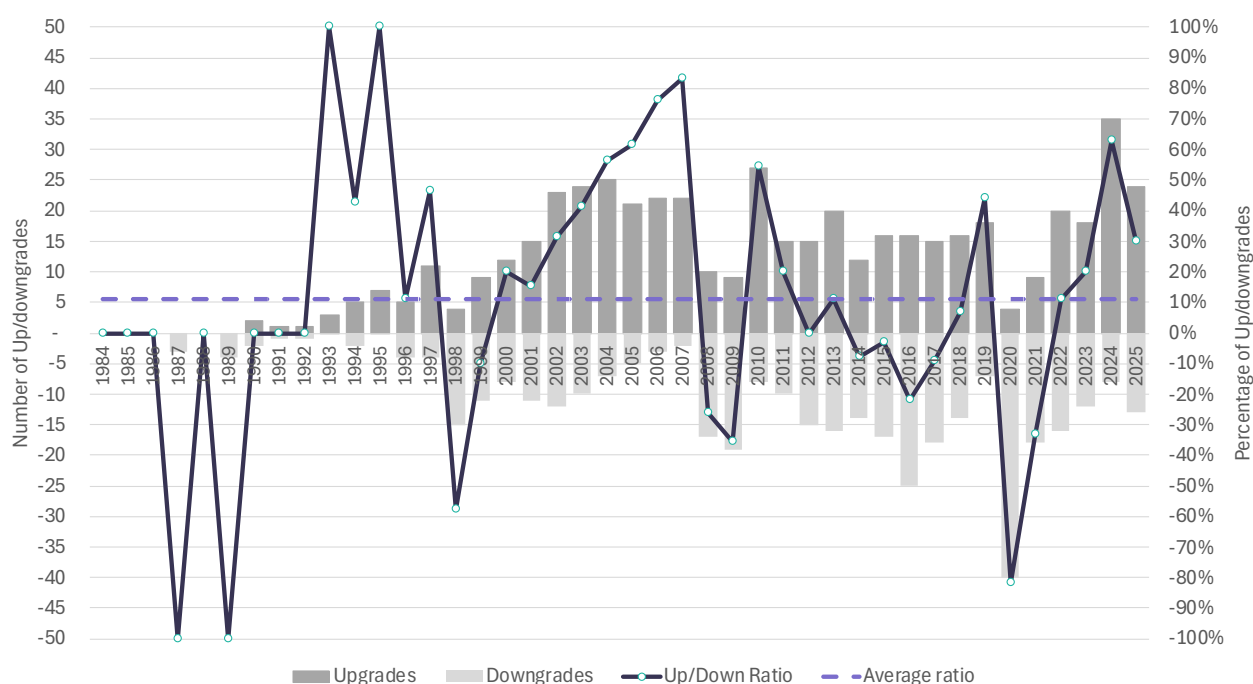
The SD category in Table 28 identifies countries in default to creditors other than MDBs, including commercial banks or investors in bond issuances. Table 28 separately presents migrations into and out of non-accrual status, reflecting defaults to MDBs. As countries may subsequently return to performing status, some countries transition from a non-accrual status back to performing ratings.

5.1 Annual Upgrade vs. Downgrade Ratio

Figure 22 shows the yearly credit rating upgrades and downgrades of countries in the GEMs dataset. Transitions into and out of the NR category are excluded from the calculation, as they do not reflect changes in creditworthiness. This exclusion also explains the limited rating

changes in earlier years, when many countries in the dataset were still unrated. The ratio of the yearly rating changes has been calculated as the difference in the number of upgrades and downgrades over the total number of rating changes.

Figure 23: Annual Upgrade vs. Downgrade Ratio



5.2 Rating Migration Rates

5.2.1 One-Year Rating Migration Rates

Table 27: One-Year Rating Migration Rates

From/to	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	CC	C	SD	NR	# Obs
AAA																								0
AA+																								0
AA	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3
AA-	0.0%	0.0%	6.9%	79.3%	10.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	29
A+	0.0%	0.0%	0.0%	22.9%	68.6%	8.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	35
A	0.0%	0.0%	0.0%	0.0%	9.8%	79.3%	6.1%	0.0%	2.4%	1.2%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	82
A-	0.0%	0.0%	0.0%	0.0%	0.0%	12.1%	80.3%	5.3%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	132
BBB+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.7%	74.6%	11.9%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	126
BBB	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	14.3%	72.6%	8.6%	2.3%	0.6%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	175
BBB-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	12.1%	75.0%	8.2%	1.3%	1.3%	0.4%	0.4%	0.4%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	232
BB+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	18.3%	68.6%	6.8%	3.1%	1.1%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	191
BB	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	15.5%	70.5%	9.0%	2.0%	1.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.5%	200
BB-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	1.2%	0.8%	10.3%	69.4%	12.6%	3.5%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	261
B+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	1.3%	9.9%	73.8%	9.9%	4.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	374
B	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	3.0%	10.6%	71.1%	8.0%	4.0%	0.5%	1.0%	0.3%	0.3%	0.5%	0.0%	398
B-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	2.9%	8.5%	76.4%	3.2%	1.8%	5.2%	0.5%	0.0%	0.2%	0.2%	445
CCC+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.6%	0.0%	8.3%	12.8%	62.2%	9.0%	5.1%	0.0%	0.0%	1.3%	0.0%	156
CCC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%	6.4%	29.8%	31.9%	8.5%	4.3%	8.5%	6.4%	0.0%	47
CCC-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.3%	0.6%	1.6%	4.8%	1.7%	0.6%	89.0%	0.3%	0.2%	0.5%	0.3%	643
CC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.7%	15.4%	7.7%	30.8%	30.8%	7.7%	0.0%	0.0%	13
C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%	6.3%	12.5%	18.8%	0.0%	43.8%	6.3%	0.0%	16
SD	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	8.0%	8.0%	8.0%	12.0%	8.0%	52.0%	0.0%	25
NR	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.4%	0.1%	0.4%	0.6%	0.4%	1.1%	0.8%	0.7%	0.6%	0.9%	0.3%	0.0%	1.9%	0.0%	0.1%	0.1%	91.4%	1,401

5.2.2 One-Year Rating Migration to and from Non-Accrual

Table 28: One-Year Rating Migration to and from Non-Accrual

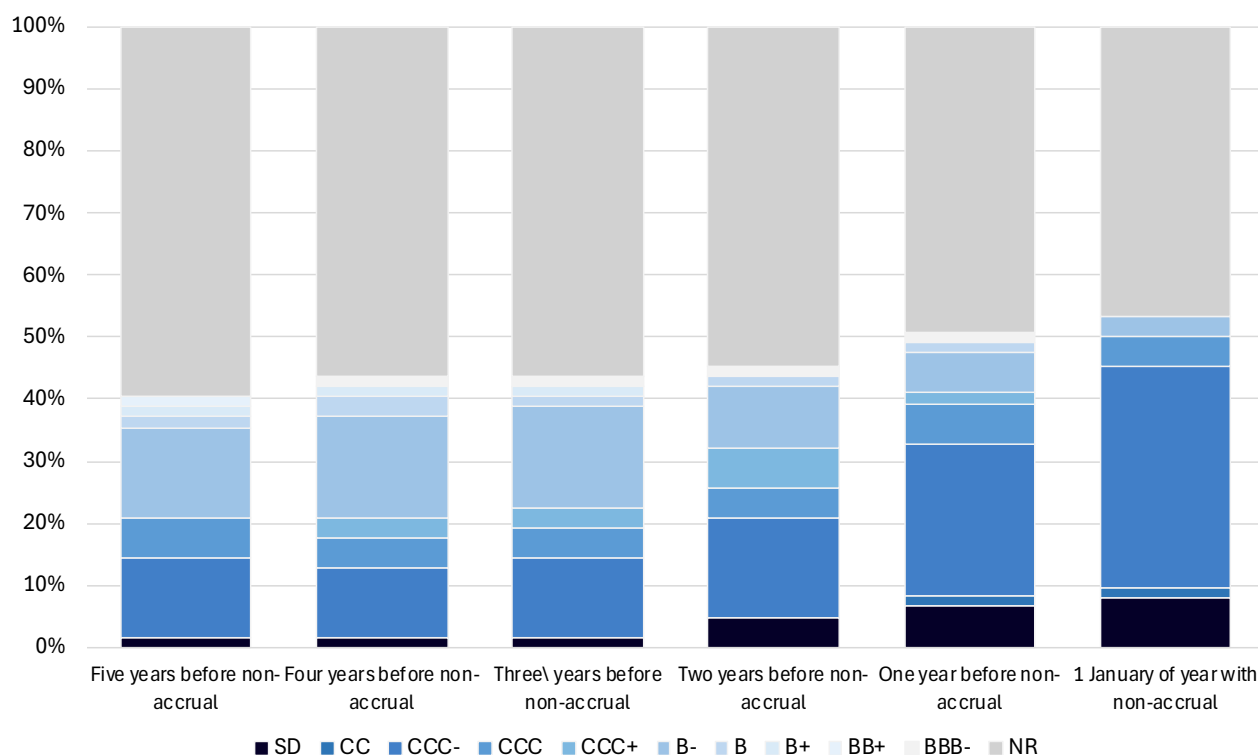
From\To	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	CC	C	SD	N-AC	NR	# Obs
AAA																									0
AA+																									0
AA																							0.0%		3
AA-																							0.0%		29
A+																							0.0%		35
A																							0.0%		82
A-																							0.0%		132
BBB+																							0.0%		126
BBB																							0.0%		175
BBB-																							0.4%		232
BB+																							0.0%		191
BB																							0.0%		200
BB-																							0.0%		261
B+																							0.0%		374
B																							0.3%		398
B-																							1.1%		445
CCC+																							0.6%		156
CCC																							2.1%		47
CCC-																							2.3%		643
CC																							7.7%		13
C																							12.5%		16
SD																							16.0%		25
N-AC													0.3%		0.6%	0.6%			4.0%	0.3%			89.5%	4.8%	354
NR																							2.0%		1,401

5.2.3 Five-Year Rating Migration to Non-Accrual

Figure 24 illustrates the evolution of GEMs ratings for countries during the five years leading to a non-accrual event.

Only the ratings for countries that entered non accrual status are included.

Figure 24: Five-Year Rating Migration to Non-Accrual



5.2.4 Two-Year Rating Migration Rates

Table 29: Two-Year Rating Migration Rates

From/to	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	CC	C	SD	NR	# Obs
AAA																								0
AA+																								0
AA	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3
AA-	0.0%	0.0%	13.8%	55.2%	27.6%	0.0%	0.0%	0.0%	0.0%	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	29
A+	0.0%	0.0%	0.0%	38.2%	41.2%	14.7%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	34
A	0.0%	0.0%	0.0%	1.3%	20.0%	58.8%	8.8%	0.0%	7.5%	1.3%	1.3%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	80
A-	0.0%	0.0%	0.0%	0.0%	0.8%	18.5%	67.7%	8.5%	3.1%	0.8%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	130
BBB+	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	17.4%	60.3%	15.7%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	121
BBB	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.4%	16.7%	58.3%	11.9%	5.4%	1.8%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	168
BBB-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	4.5%	18.1%	57.0%	11.8%	1.8%	1.8%	0.5%	0.9%	1.4%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.5%	221
BB+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	4.4%	26.6%	50.0%	10.3%	4.4%	2.2%	0.5%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	184
BB	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.7%	22.2%	50.5%	13.4%	5.7%	0.0%	1.0%	0.0%	0.5%	0.5%	0.0%	0.0%	0.0%	0.5%	194
BB-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	2.9%	2.0%	15.0%	49.2%	18.3%	7.3%	2.9%	0.4%	0.4%	0.0%	0.0%	0.0%	1.2%	0.0%	246
B+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.8%	3.1%	14.2%	57.1%	15.0%	5.9%	1.4%	0.8%	1.1%	0.3%	0.0%	0.0%	0.0%	359
B	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.5%	6.7%	14.1%	51.9%	14.8%	4.6%	1.5%	1.8%	0.5%	1.0%	1.0%	0.0%	391
B-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	7.3%	12.3%	59.1%	5.9%	2.6%	8.0%	0.5%	0.2%	1.2%	0.5%	423
CCC+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	1.3%	0.7%	16.8%	17.5%	42.3%	8.7%	8.1%	0.7%	2.0%	1.3%	0.0%	149
CCC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.6%	11.6%	32.6%	14.0%	9.3%	7.0%	4.7%	9.3%	0.0%	43
CCC-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.7%	1.3%	2.8%	9.1%	2.4%	0.3%	82.1%	0.3%	0.0%	0.3%	0.7%	619
CC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.3%	8.3%	33.3%	16.7%	25.0%	0.0%	8.3%	0.0%	0.0%	12
C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%	6.3%	18.8%	18.8%	25.0%	0.0%	18.8%	6.3%	0.0%	16
SD	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	8.0%	16.0%	4.0%	20.0%	12.0%	8.0%	28.0%	0.0%	25
NR	0.0%	0.0%	0.0%	0.1%	0.0%	0.3%	0.6%	0.4%	0.6%	1.3%	0.9%	2.0%	1.4%	1.6%	1.4%	1.6%	0.6%	0.0%	3.8%	0.0%	0.1%	0.1%	83.1%	1,396

5.2.5 Ten-Year Rating Migration Rates

Table 30: Ten-Year Rating Migration Rates

From/to	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	CC	C	SD	NR	# Obs
AAA																								0
AA+																								0
AA	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3
AA-	0.0%	0.0%	3.7%	11.1%	29.6%	44.4%	0.0%	3.7%	3.7%	0.0%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	27
A+	0.0%	0.0%	12.5%	0.0%	25.0%	20.8%	25.0%	4.2%	8.3%	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	24
A	0.0%	0.0%	8.0%	12.0%	21.3%	0.0%	17.3%	5.3%	2.7%	1.3%	12.0%	4.0%	5.3%	6.7%	2.7%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	75
A-	0.0%	0.9%	2.7%	9.1%	9.1%	10.0%	32.7%	9.1%	7.3%	10.0%	8.2%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	110
BBB+	0.0%	0.0%	0.0%	3.5%	8.1%	9.3%	11.6%	23.3%	14.0%	12.8%	10.5%	0.0%	5.8%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	86
BBB	0.0%	0.0%	0.0%	0.0%	0.9%	7.1%	8.0%	16.1%	22.3%	14.3%	4.5%	4.5%	5.4%	7.1%	2.7%	1.8%	0.9%	0.9%	2.7%	0.0%	0.9%	0.0%	0.0%	112
BBB-	0.0%	0.0%	0.0%	0.0%	0.6%	4.8%	5.4%	10.2%	14.5%	21.7%	13.3%	8.4%	6.6%	9.0%	2.4%	0.6%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	166
BB+	0.0%	0.0%	0.0%	0.0%	2.2%	5.8%	5.8%	8.0%	19.0%	11.7%	9.5%	9.5%	8.8%	2.9%	8.0%	5.8%	2.2%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	137
BB	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	1.4%	4.7%	12.8%	16.9%	12.8%	18.2%	3.4%	16.9%	3.4%	4.7%	1.4%	0.7%	0.0%	0.0%	0.7%	0.0%	1.4%	148
BB-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.6%	9.9%	4.9%	5.6%	14.2%	11.1%	14.8%	9.9%	11.1%	8.6%	4.3%	2.5%	0.0%	0.6%	1.2%	0.0%	162
B+	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.4%	0.0%	2.1%	4.6%	3.3%	4.2%	8.7%	25.7%	18.7%	14.5%	5.0%	2.5%	2.1%	2.1%	1.2%	4.2%	0.4%	241
B	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	1.8%	4.6%	0.5%	2.8%	10.6%	17.5%	25.8%	15.7%	5.1%	2.8%	6.0%	1.4%	1.8%	3.2%	0.0%	217
B-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	2.0%	2.0%	1.6%	14.3%	12.7%	13.9%	25.7%	4.5%	1.6%	16.3%	0.4%	0.4%	2.9%	1.2%	245
CCC+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	1.3%	3.9%	5.1%	2.6%	25.6%	33.3%	18.0%	1.3%	5.1%	0.0%	0.0%	2.6%	0.0%	78
CCC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%	17.7%	5.9%	5.9%	5.9%	5.9%	35.3%	11.8%	0.0%	5.9%	0.0%	17
CCC-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	4.8%	7.1%	10.1%	21.6%	3.5%	2.8%	47.4%	0.5%	1.4%	0.0%	0.7%	435
CC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	0.0%	0.0%	0.0%	20.0%	20.0%	20.0%	20.0%	0.0%	0.0%	0.0%	5
C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%	0.0%	12.5%	12.5%	12.5%	0.0%	37.5%	0.0%	0.0%	12.5%	0.0%	0.0%	0.0%	0.0%	8
SD	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	20.0%	6.7%	13.3%	20.0%	0.0%	26.7%	0.0%	6.7%	0.0%	0.0%	15
NR	0.0%	0.0%	0.0%	0.3%	0.6%	1.8%	2.5%	1.5%	1.8%	4.8%	4.3%	5.0%	4.7%	7.6%	7.5%	7.0%	3.0%	0.5%	14.8%	0.1%	0.1%	0.4%	31.8%	1,355

6. Methodology

6.1 Default Rate Methodology

The annual default rates and their averages and confidence intervals presented in this publica-

tion are derived for the respective dimensions and categories using the equations below:

The default count for each year is calculated as:

Equation 1: Default count for year i

$$d_i = \sum_{j=1}^{w_i} \frac{\text{MDB } d_{i,j}}{\text{MDB } n_{i,j}}$$

d_i = Number of new defaults of counterparts during year i

w_i = Number of performing counterparts as of 1 January of year i

$\text{MDB } d_{i,j}$ = Number of MDBs that country j defaulted to during year i

$\text{MDB } n_{i,j}$ = Number of MDBs with lending to country j as of 1 January of year i

Annual default rates are averaged using the number of performing countries as of

1 January each year as weights:

Equation 2: Annual default rate for year i

$$x_i = \frac{d_i}{w_i}$$

d_i = Number of new defaults of counterparts during year i

w_i = Number of performing counterparts as of 1 January of year i

Annual default rates are averaged using the number of performing countries as of

1 January each year as weights:

Equation 3: Average annual default rate

$$\bar{x}^* = \frac{\sum_{i=1}^N w_i x_i}{\sum_{i=1}^N w_i}$$

N = Number of years

Standard deviations of annual default rates are calculated using the number of performing

countries as of 1 January each year as weights:

Equation 4: Standard deviation of annual default rates

$$\sigma = \sqrt{\frac{\sum_{i=1}^N w_i (x_i - \bar{x}^*)^2}{\frac{N-1}{N} \sum_{i=1}^N w_i}}$$

N = Number of years

w_i = Number of performing counterparts as of 1 January of year i

x_i = Default rate for year i

$\bar{x}^*$ = Weighted mean of the annual default rates

Equation 5: Confidence intervals for annual default rates

$$CI_{upper} = \bar{x}^* + z * \frac{\sigma}{\sqrt{N}}$$

$$CI_{lower} = \bar{x}^* - z * \frac{\sigma}{\sqrt{N}}$$

z^* = z^* -value from the standard normal distribution for the chosen confidence interval

6.2 Default Rates by Credit Rating

The calculation of default rates by credit rating for sovereign and sovereign-guaranteed lending in GEMs follows a static cohort approach. Under this method, cohorts of countries with the same credit rating are established as of 1 January each year. The default behaviour of countries within each cohort is then tracked through the end of the observation period.

The static approach has been selected because it reflects the typical lending structure of multi-

lateral development banks (MDBs) to developing countries. At any given time, multiple loans are outstanding to each country, and new loans are often issued before or as previous loans mature. This results in continuous exposure to countries, typically without a specific final maturity.

Using the static cohort approach, the marginal default rate in $year_i$ for a cohort formed in $year_j$ for $credit\ rating_r$ is calculated as follows:

Equation 6: Marginal default rate for a static cohort

$$MDR_i^{j,r} = \frac{d_i^{j,r}}{n_i^{j,r}}$$

$d_i^{j,r}$ = Number of defaulted countries in $year_i$ for cohort $_{j,r}$

$n_i^{j,r}$ = Number of performing countries on 1 January of $year_i$ with $credit\ rating_r$

Combining all cohorts for each credit rating, the average marginal default rate in $year_i$ for all

cohorts with $credit\ rating_r$ is calculated as:

Equation 7: Marginal default rate for all static cohorts for year i

$$aMDR_i^r = \frac{\sum_{j=1}^K d_i^{j,r}}{\sum_{j=1}^K n_1^{j,r}}$$

K = Total number of cohorts for $credit\ rating$

Equation 8: Cumulative default rate for all static cohorts for year i

$$\text{for } i = 1: CDR_1^r = aMDR_1^r$$

$$\text{for } i > 1: CDR_i^r = CDR_{i-1}^r + (1 - CDR_{i-1}^r) * aMDR_i^r$$

6.3 Recovery Rates

Recovery rates are calculated individually for each default of a country and each member. According to the definition of sovereign and sovereign-guaranteed lending, all loans extended by multilateral development banks (MDBs) to a country are considered to default simultaneously and return to performing status on the same date. To date, all defaults covered by the GEMs dataset have resulted in full recovery of overdue principal and interest on a nominal basis. As a result, the only losses incurred stem from the cost of funding overdue interest, as these amounts are neither capitalised nor charged to borrowers.

As detailed in Equation 9, the recovery rate is calculated as the ratio of:

- the discounted payments received between the start and resolution of a default event, plus
- the discounted value of the remaining outstanding principal immediately after resolution of the default event, divided by
- the nominal value of the outstanding principal and interest at the start of the default event.

Discounting is performed using the applicable lending rates, with values discounted back to the time of default.

Equation 9: Calculation of recovery rates (RR)

$$RR = \frac{A + B}{C} = \frac{\sum_{i=D}^R \frac{Pmt_i}{(1+dr_i)^i} + \frac{Prn_R}{(1+dr_R)^R}}{Prn_D + Int_D}$$

D = Start of default event

R = Resolution of default event

i = Numbered period for periods starting after D and ending with R

Pmt_i = Payment of principal or interest received during period i

Prn_R = Remaining outstanding principal amount immediately after R

Prn_D = Outstanding principal amount at time of default (D)

dr_i = Discount rate applicable to payments received during period i

Once the recovery rates have been determined for each default, the results are first averaged for defaults where the same country defaulted to multiple members during the same time period to eliminate duplication and establish a recovery rate for the default event. The average recovery rates presented in this publication are then calculated as simple (unweighted) averages for these default events across the relevant dimensions and categories. Confidence intervals around those averages are not provided, as the recovery rates are not normally distributed.

Instead, the results include ranges and selected percentiles to better reflect the distribution.

For unresolved default events the calculations assume the full repayment of overdue principal and interest as of the reporting date of this publication, i.e., December 31, 2025. The resulting recovery rates for unresolved events reflect the already incurred interest-on-interest loss for the event. Note that continuation of the events beyond the reporting date gradually increases these losses until the event is resolved.



SOVEREIGN AND SOVEREIGN-GUARANTEED LENDING 1984-2025



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