



Default and Recovery Statistics

PRIVATE LENDING
1994-2025

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

Private lending 1994-2025

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

initiative, 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 1994 to 2025, provided by 22 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

The figures and tables in this report provide insights into the composition and credit performance of the GEMs dataset for lending to private counterparts. The publication provides detailed statistics on default and recovery experience across a range of geographic, sector, and borrower characteristics.

Statistical measures are provided on the underlying distributions of results, allowing readers to assess the significance of the averages presented for default and recovery rates. Annual default rate distributions are generally assumed to follow a normal distribution; accordingly, 90% confidence intervals are reported alongside the corresponding mean default rate. In contrast, recovery rate distributions are summarised according to their empirical distribution

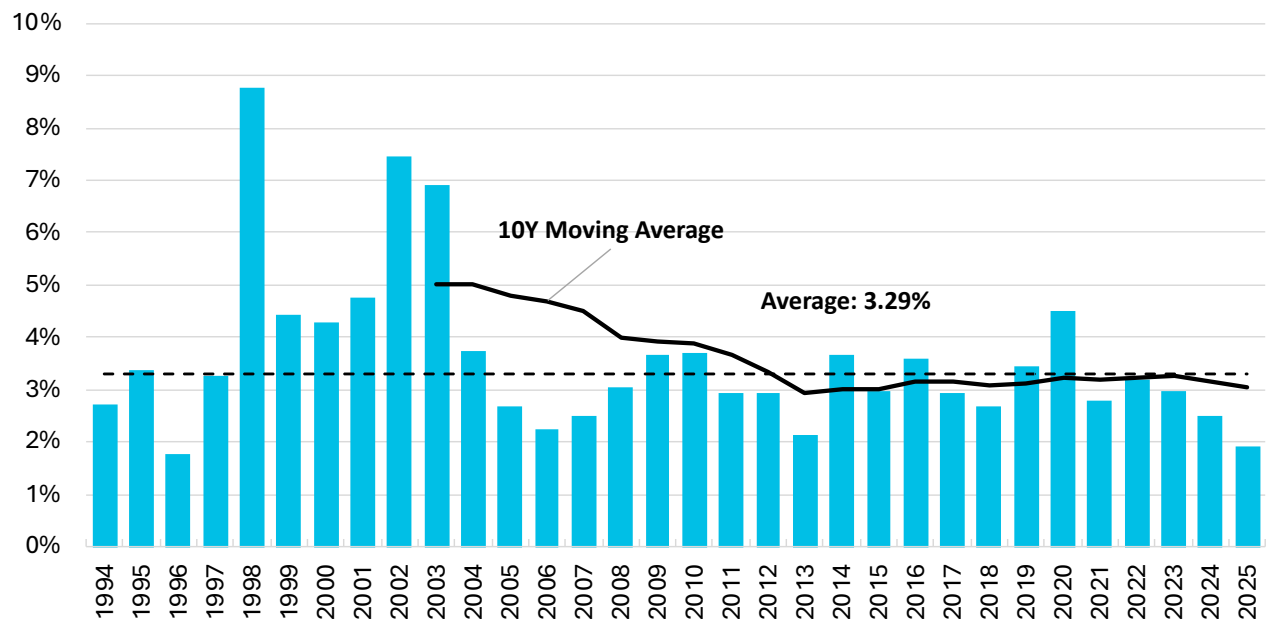
by means of selected distributional percentiles, with particular emphasis on the median and the interquartile range.

The dataset covers 10,409 private counterparts, with observations spanning the 32-year period from 1994 to 2025. Across the full reporting period, 1,988 defaults were recorded over 60,361 observations. The resulting overall average annual default rate is 3.3%, with a 90% confidence interval of 3.0% to 3.6% (Table 1; for more information, refer to Section 3). This year's report also includes new metrics, some of which include, cumulative contract lifetime default rates, default and recovery outcomes for lending supported by insurance or guarantees, and analysis of recovery outcomes by lender action including resolution type.

Table 1: Overall average default rate

Counterparts	Signed amount (€m)	Defaults	
		/ observations	Average DR (90% CI)
10,409	437,516	1,988 / 60,361	3.29% (2.95%–3.64%)

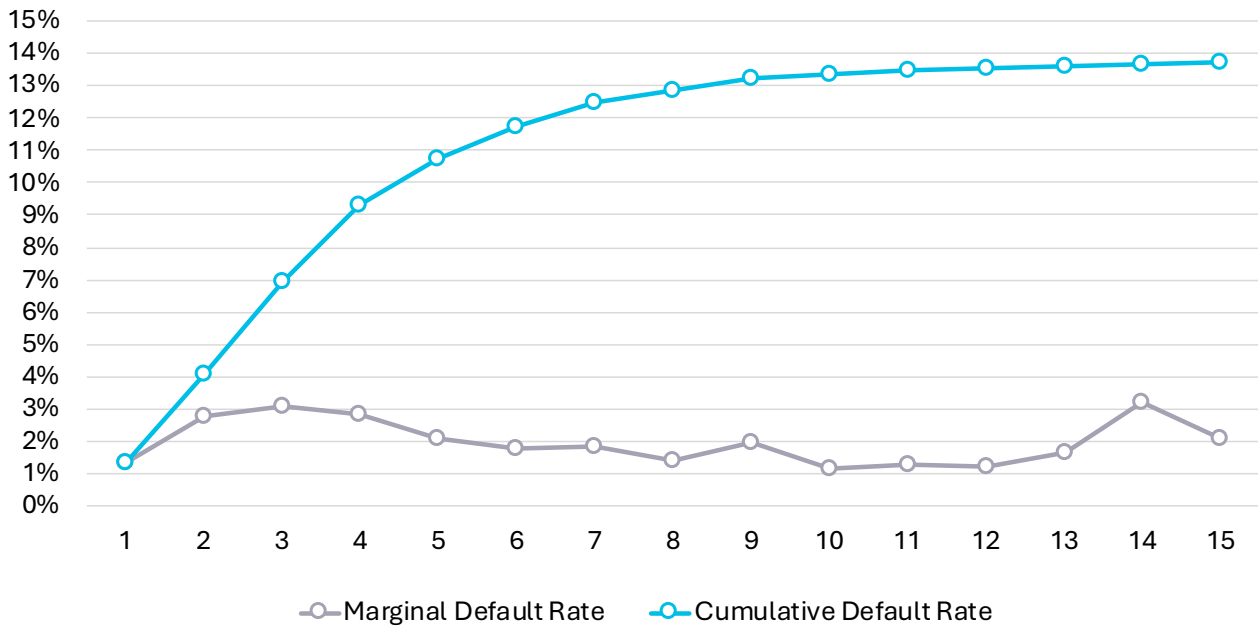
Figure 1: Annual default rates over time



The cumulative contract lifetime default rate, reported for the first time this year, rises relatively quickly during the first years of a contract, reaching 10.6% by year 5 and 13.3% by year 10.

The curve subsequently flattens, reaching approximately 13.6% by year 15, with minimal observed defaults thereafter (Figure 2).

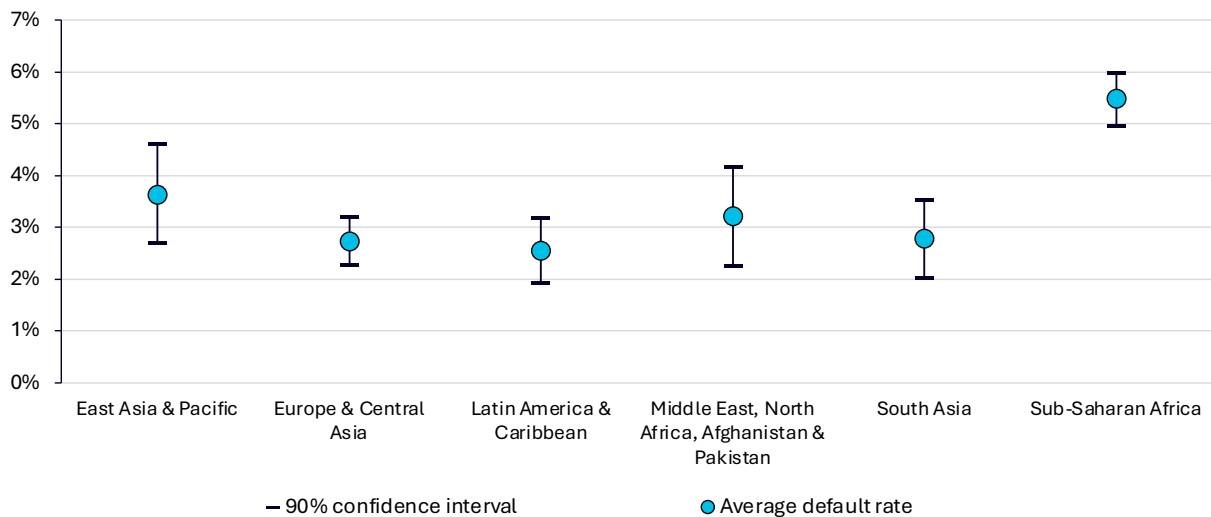
Figure 2: Lifetime default rates



Default rates vary by credit quality, geography and sector. Observed data by World Bank region records the average annual default rates range from 2.6% in Latin America & Caribbean to 5.5% in Sub-Saharan Africa. By income group, aver-

age default rates increase from 1.7% for high-income countries to 6.7% for low-income countries. Financial institutions record an average default rate of 1.8%, compared with 4.0% for non-financial institutions.

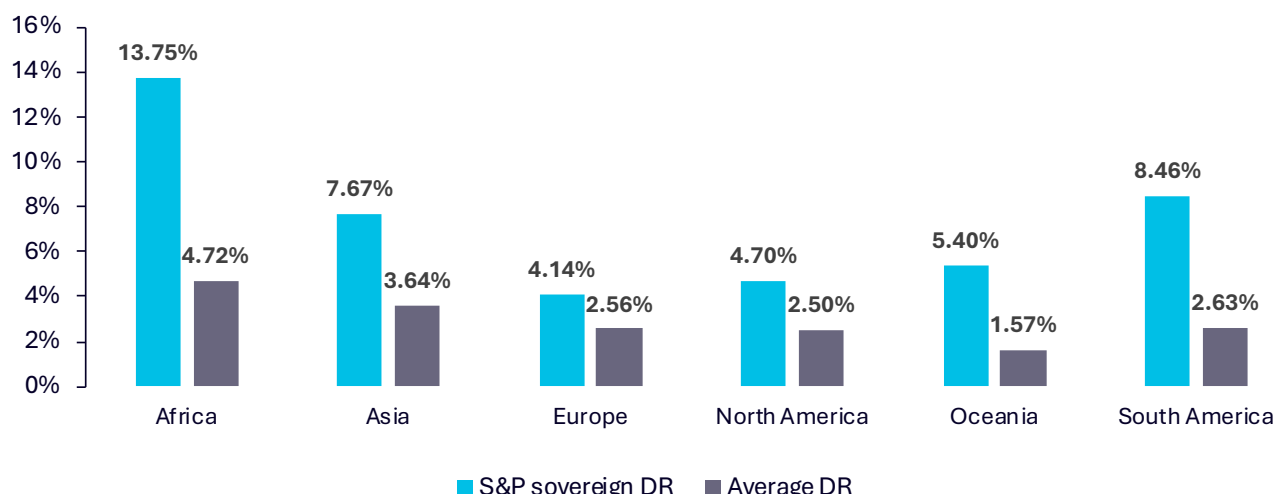
Figure 3: Default rates by World Bank region



The GEMs results can also be compared against observed sovereign default experience for the regions where the GEMs counterparts are domiciled. Across income groups, private counterparts default rates are recorded as below the corresponding S&P sovereign default rates with the most pronounced differences in the low-income group. A similar pattern is observed across several of the World Bank region groupings,

where the GEMs private counterparts default rates are below the corresponding S&P sovereign default rates, particularly in Sub-Saharan Africa. East Asia & Pacific is the exception, with GEMs private counterparts recorded defaults at 3.6% compared with 3.1% for sovereigns. These comparisons provide additional context for assessing private credit risk in emerging and developing markets.

Figure 4: Default Rates vs Sovereign DRs by Continent



GEMs default rates must be considered alongside recovery outcomes and project characteristics. Across 1,659 defaulted contracts, representing

approximately EUR 26.7 billion of signed amounts, the average recovery rate is 69.8% (Table 2).

Table 2: Overall average recovery rate

Number of Defaulted Contracts	Signed Amount (€m)	Average RR	Median RR (IQR)	P10–P90 Range
1,659	26,653	69.8%	86.1% (44.3%–99.2%)	5.9%–100.0%

Recovery rates also vary across regions, but the range is narrower than observed for default rates. Average regional recovery rates range from 68.9% in Latin America & Caribbean to 74.8% in the Middle East, North Africa, Afghanistan & Pakistan, with Sub-Saharan Africa recording an average recovery rate of 72.0%. Low, lower middle, and upper middle-income countries each record average recovery rates of approximately 70.0%.

The combination of default and recovery statistics therefore provides a more complete view of observed credit outcomes. For example, Sub-Saharan Africa records the highest regional average default rate at 5.5%, while also recording an average recovery rate of 72.0%. Similarly, low-income countries record the highest average default rate by income group at 6.7%, while their average recovery rate is 71.3%.

Project characteristics are also associated with differences in observed outcomes. Reported for the first time this year, lending supported by in-

surance or guarantees records an average default rate of 2.4%, compared with 3.5% without these enhancements. Average recovery rates are 78.0% with insurance or guarantees and 70.1% without them. See 3.2.12 and 4.12 for further detail. Senior secured lending records an average recovery rate of 74.5%, compared with 65.4% for senior unsecured and 60.9% for subordinated lending.

Recovery outcomes differ materially by actions taken by the lender during a default and by the resolution type. These statistics are presented below for the first time in this year's publication. Contracts returning to performing status record an average recovery rate of 90.4%, compared with 44.4% for contracts that are closed out, often after write-down or write-off. These results illustrate the importance of considering default frequency, recovery severity and transaction structure together when assessing observed credit performance in emerging and developing markets.

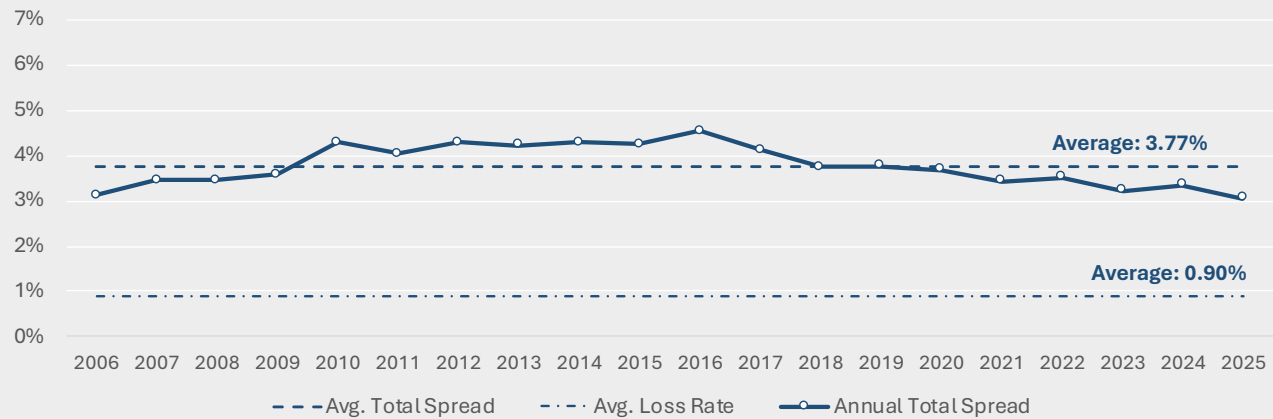
Pilot Returns Analysis (2006-2025)

During the 2026 submission window selected GEMs members submitted spreads data, used to calculate returns, on a pilot basis. A total of eight members submitted spreads data, covering approximately 50% of the total private lending contracts in the GEMs database. This Analysis presents the preliminary findings from the aggregation of this contractual spreads data, covering the 2006-2025 period. The full set of aggregate statistics displayed in the charts included in this Appendix are available in the data package accompanying this report.

Total Spread is defined as the contractual percentage spread over the interest rate index, excluding any fees (for fixed-rate loans, this is the percentage spread over the interest index considered when establishing the fixed rate; for

lending guarantees, this is the percentage guarantee premium). Average Annual Total Spread is the average total spread across all contracts signed during the prior year. Average Total Spread is the average of annual total spreads over the period. Total spreads within a contract are weighted based on disbursed amounts. Total spreads are averaged across contracts without applying any weights, including for size, currency, tenor, or reference rate type. Average Loss Rate is defined as the product of Average Default Rate and the complement of Average Recovery Rate. Average Default Rate is the percentage of active counterparts that defaulted during the period. Average Recovery Rate is the average recovery across all contracts that defaulted during the period.

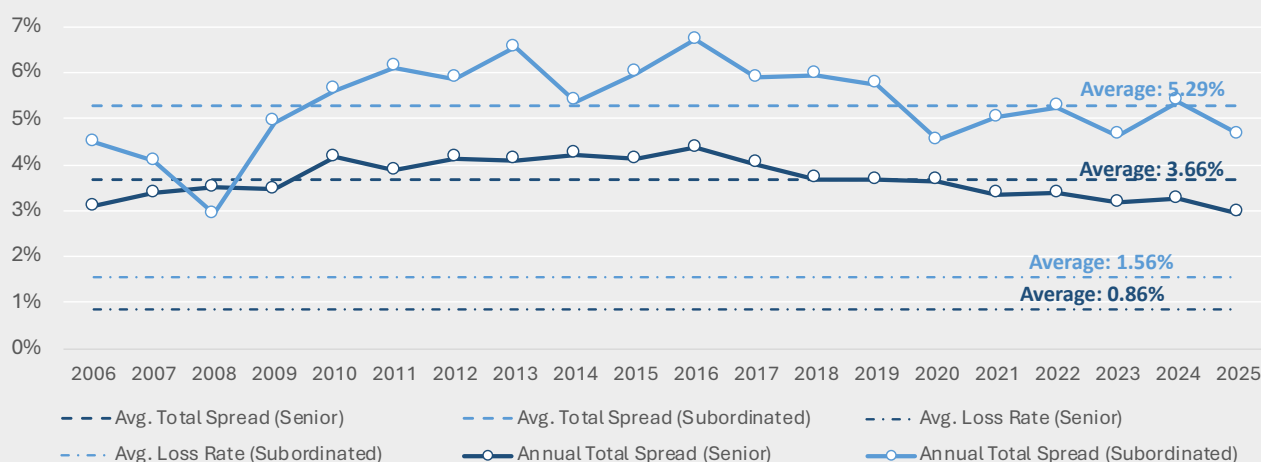
Figure 5: Total spread vs. Loss Rate



Over the 2006-2025 period the average total spread was 3.77%, and the average loss rate was 0.90%, with an average difference of 287 bps over the period. Total spreads

exhibit a downward trend toward the end of the period and peaks following the Global Financial Crisis in 2009-2010 and the 2015-2016 global stock market selloff.

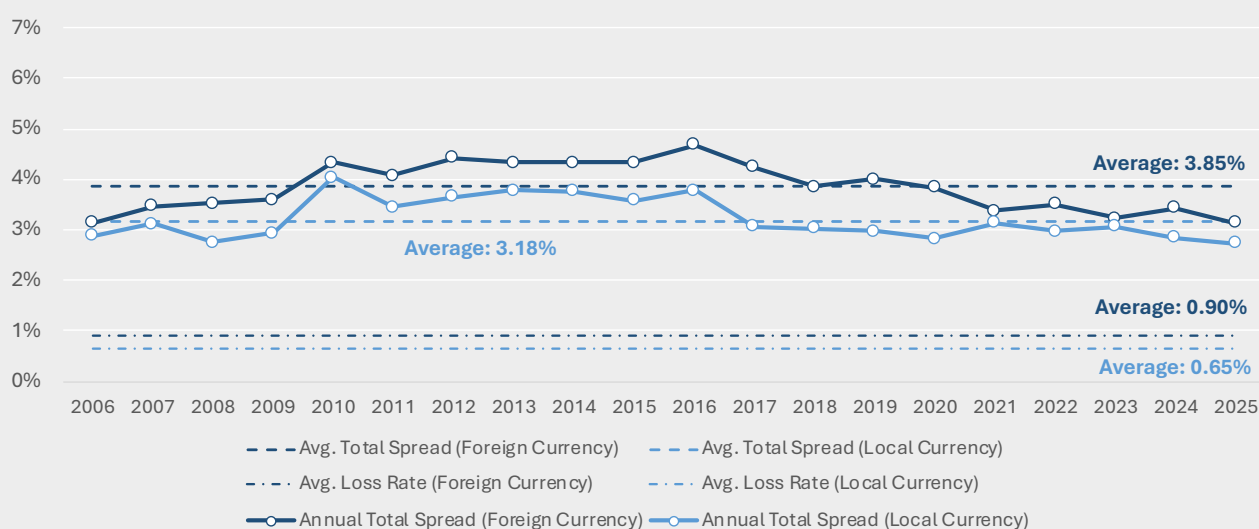
Figure 6: Total Credit spread by Seniority



Over the 2006-2025 period the average total spreads for senior and subordinated contracts were 3.66% and 5.29%, respectively, reflecting the typically higher credit risk and operational costs of subordinated contracts (e.g., the average loss rates for senior and subordinated loans over the period were 0.86% and 1.56%, respec-

tively). The difference between the average annual total spreads for senior and subordinated contracts fluctuated between -58 bps (2008) and 246 bps (2013), with an average difference of 163bps. Average annual total spreads for subordinated contracts exhibit a notably higher fluctuation during the period.

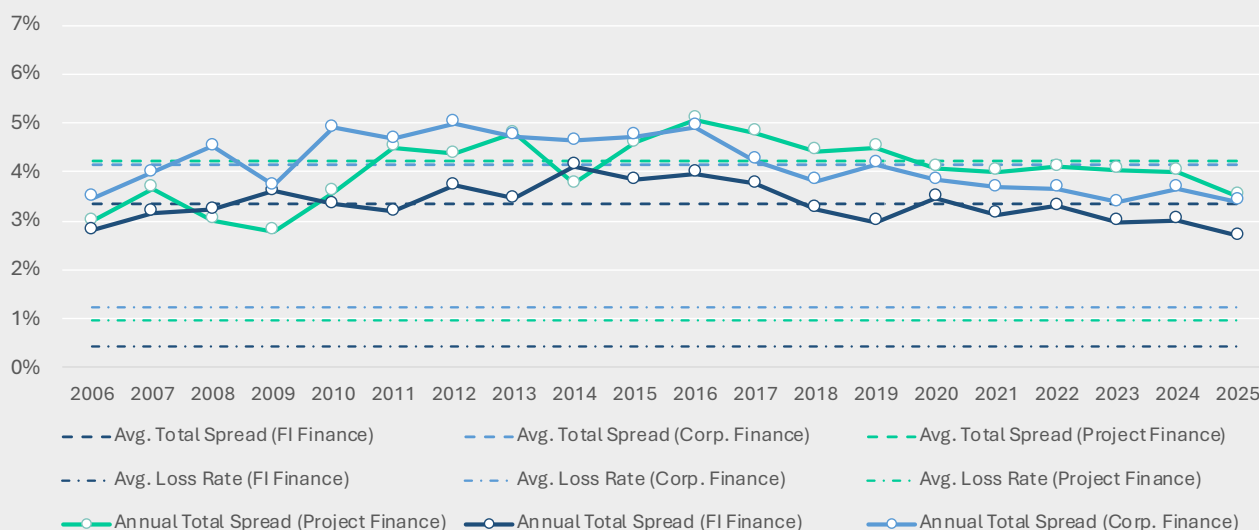
Figure 7: Total spread by Currency Type (Foreign, Local)



Over the 2006-2025 period the average total spreads for foreign and local currency contracts were 3.85% and 3.18%, respectively, reflecting the typically lower credit risk of contracts denominated in local currency (e.g., the average loss rates for foreign and local currency loans over the period were 0.90% and 0.65%, respectively). The difference between the average annual total spreads for foreign and local currency

contracts fluctuated between 15 bps (2023) and 116 bps (2017) during the period, with an average difference of 67bps. Both time series exhibit similar fluctuations, with a degree of convergence toward the end of the period. Contracts denominated in local currencies under a fixed-exchange regime (i.e., "pegged" currencies) are excluded from the analysis.

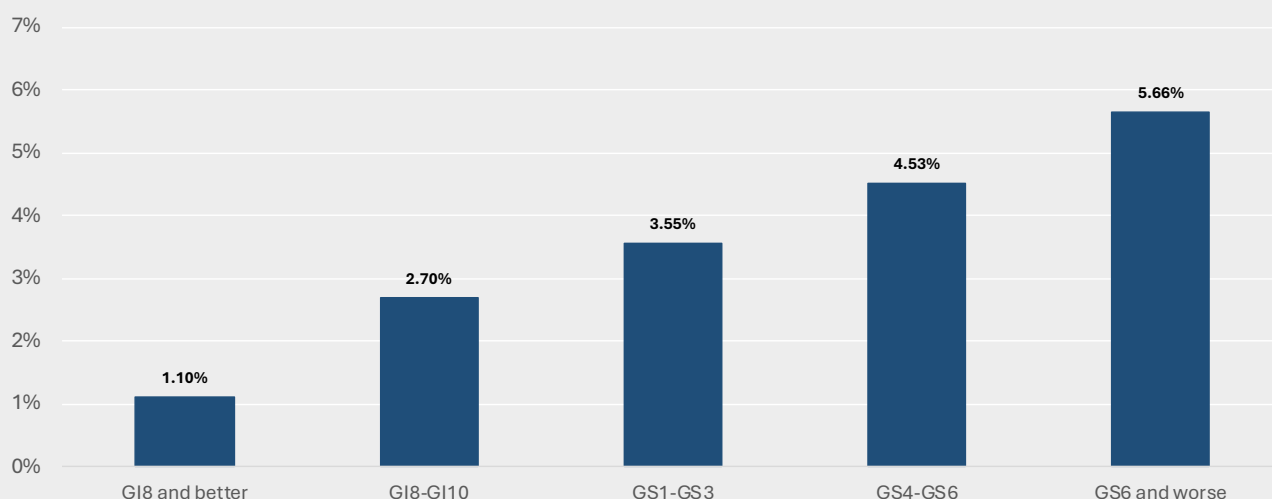
Figure 8: Total spread by Project Type



Over the 2006-2025 period the average total spreads for Financial Institution Finance, Corporate Finance and Project Finance contracts were 3.34%, 4.14% and 4.24%, respectively. The difference between the average annual total spreads for the three project types fluctuated between 60 bps (2020, Project Finance vs. Corp. Finance) and 156 bps (2010, Corp. Finance vs. FI Finance) during the period, with an average difference of 90 bps (Project Finance vs. FI Finance). The time series exhibit dissimilar

fluctuations and crossovers early in the period, but stabilize after 2016, with average annual total spreads for FI Finance lower than those for Corp. Finance, which in turn are lower than those for Project Finance. The average loss rates for FI Finance, Corp. Finance and Project Finance over the period were 0.45%, 1.25% and 0.95%, respectively. Project types for which sufficient total spread data is not available (e.g., Real Estate, Structured Finance) are excluded from the analysis.

Figure 9: Total spread by GEMs Credit Rating



Over the 2006-2025 period the average total spreads by GEMs credit rating ranged from 1.1% for ratings above GI8 to 5.7% for ratings below

GS6. Average spreads increase as the GEMs credit ratings decrease, reflecting the higher credit risk of lower ratings.

2. Characteristics of the Private Counterparty

2.1 Definition

The GEMs risk database collects credit information on standard debt products of member multilateral development banks (MDBs) and development finance institutions (DFIs). This report presents statistics on private counterparts, including a wide range of entities, such as financial institutions and companies. In parallel, separate reports are published with statistics for public counterparts and for sovereign and sovereign guaranteed lending.

This publication excludes equity and non-standard lending products, and operations provided by GEMs member institutions outside of their ordinary capital lending window.

A materiality threshold for identifying defaults may be applied by each contributing institution in accordance with its own procedures, and these thresholds may be reassessed over time. As a result, changes in reported default rates and recovery rates may not only reflect changes in underlying credit quality, but also changes in methodologies or materiality thresholds used by contributing institutions. For example, changes in materiality thresholds may reduce the number of exposures classified as defaults, leading to lower reported default rates compared to previous years despite no underlying change in credit risk. Similarly, the removal of default events may also impact on the observed recovery rates. This may potentially limit direct comparability with prior periods.

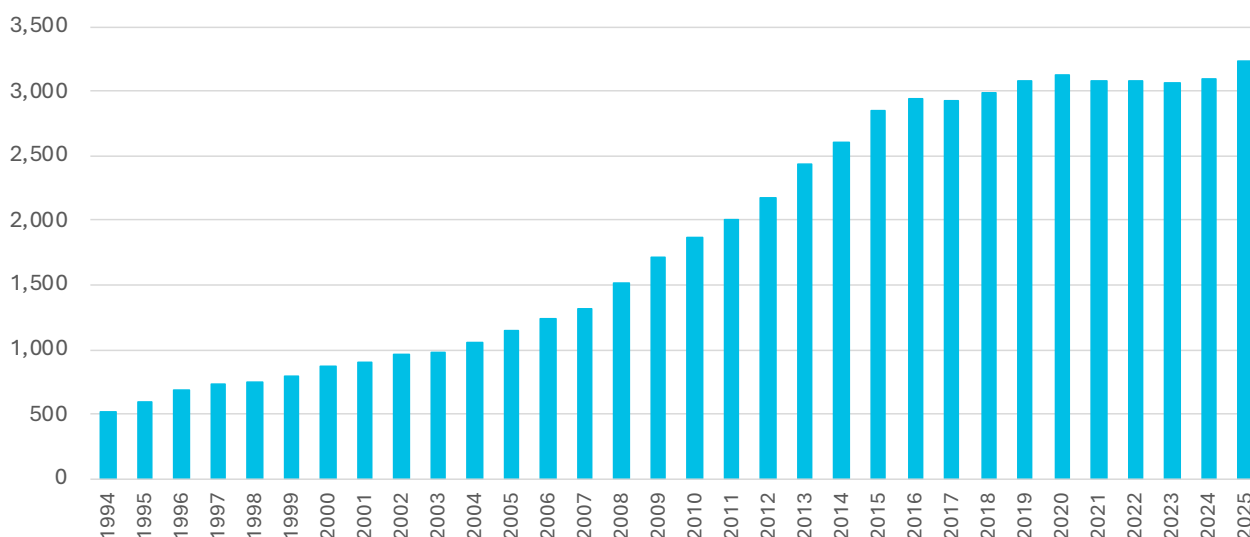
2.2 Counterparties in the Dataset

The dataset includes 10,409 private counterparts from a total of 159 developing countries. Countries classified as developed under the GEMs country classification methodology are excluded (see Analysis 7.4). For EU member countries that joined after 2000 (Bulgaria, Croatia, Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia), data is excluded starting from the most recent year in which all three classification sources—the Human Development Index, World Bank Group

country classification, and IMF classification—classified the country as developed.

The private counterparts included in the dataset have not necessarily been active throughout the 32-year reporting period. The number of active counterparts has grown steadily since 1994, reflecting the wider reach and increased lending by MDBs and DFIs, with signs of stabilisation after 2020 (Figure 10).

Figure 10: Number of counterparts over time



3. Default Rate Statistics

3.1 Default Rate Methodologies

Default rates in this publication are calculated following three different approaches:

- Annual default rates are calculated at the counterparts level and are provided for various dimensions and combinations thereof. They reflect the observed default frequencies of counterparts defaulting in a given year for the reported dimensions. Detailed calculations can be found in Section 6.1.3.
- Default rates by cohorts are also calculated at the counterparts level and report on observed default frequencies by credit rating agencies. They illustrate the default behaviour of cohorts of counterparts that started with the same credit rating over a multi-year horizon. Detailed calculations can be found in Section 6.1.4.

- Contract lifetime default rates are calculated at the contract level and are provided for geographic and sector dimensions. They assess the frequency of defaults during the life of contracts. Detailed calculations can be found in Section 6.1.5.

About 30% of counterparts have multiple contracts with individual member institutions. For the first two types of default rates, the contract-level categories for the dimensions have been used to establish the categories for the counterparts. In the few cases (0-5%) where the contracts of counterparts belong to different categories, these were excluded from the calculations for the categories and were only reported in the overall totals.

3.2 Annual Default Rates

3.2.1 Overall Default Rate

Table 3: Overall Default Rate statistics

Counterparts	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
10,409	437,516	1,988 / 60,361	3.29% (2.95%–3.64%)

Across the full reporting period, 1,988 defaults were recorded across 60,361 observations, corresponding to an overall default rate of 3.3%.

Table 4 presents annual default rates for private counterparts from 1994 to 2025. Over this period, the total signed amount increased from EUR 6,483 million to EUR 168,879 million, while annual observations rose from 519 to 3,240.

Both signed amounts and observation counts increased in most years of the period.

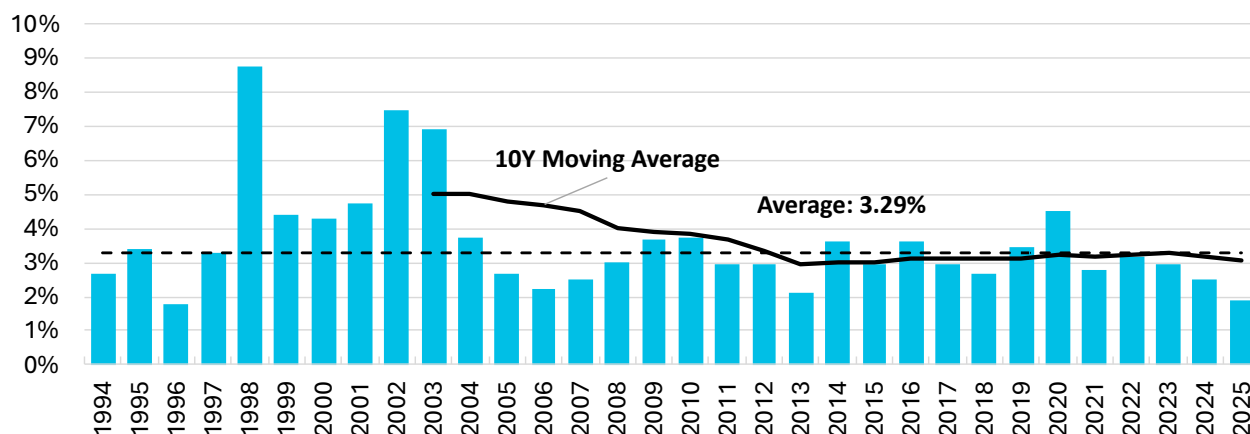
In 2025, the total signed amount increased from EUR 159,196 million to EUR 168,879 million, while observations rose from 3,101 to 3,240. Defaults continued their downward trend with the annual default rate reducing from 2.5% to 1.9%.

Table 4: Annual default rates

Year	Counterparts	Signed amount (€m)	Defaults / observations	Annual Default Rate
1994	519	6,483	14 / 519	2.70%
1995	591	8,050	20 / 591	3.38%
1996	681	10,001	12 / 681	1.76%

Year	Counterparts	Signed amount (€m)	Defaults / observations	Annual Default Rate
1997	733	11,287	24 / 733	3.27%
1998	753	12,321	66 / 753	8.76%
1999	792	13,004	35 / 792	4.42%
2000	864	14,394	37 / 864	4.28%
2001	907	16,038	43 / 907	4.74%
2002	964	18,713	72 / 964	7.47%
2003	984	19,771	68 / 984	6.91%
2004	1,048	24,249	39 / 1,048	3.72%
2005	1,151	28,001	31 / 1,151	2.69%
2006	1,246	31,319	28 / 1,246	2.25%
2007	1,321	34,458	33 / 1,321	2.50%
2008	1,518	41,792	46 / 1,518	3.03%
2009	1,719	53,226	63 / 1,719	3.66%
2010	1,862	60,902	69 / 1,862	3.71%
2011	2,006	68,144	59 / 2,006	2.94%
2012	2,173	76,422	64 / 2,173	2.95%
2013	2,437	93,264	52 / 2,437	2.13%
2014	2,601	99,365	95 / 2,601	3.65%
2015	2,851	112,891	85 / 2,851	2.98%
2016	2,941	119,245	106 / 2,941	3.60%
2017	2,932	134,248	86 / 2,932	2.93%
2018	2,982	139,114	80 / 2,982	2.68%
2019	3,085	145,520	106 / 3,085	3.44%
2020	3,133	146,735	141 / 3,133	4.50%
2021	3,078	140,013	86 / 3,078	2.79%
2022	3,084	140,442	98 / 3,084	3.18%
2023	3,064	147,485	91 / 3,064	2.97%
2024	3,101	159,196	77 / 3,101	2.48%
2025	3,240	168,879	62 / 3,240	1.91%

Figure 11: Annual Default Rates



3.2.2 Default Rates by Region

3.2.2.1 Default Rates by World Bank Region

The statistics in this section are based on the World Bank classification of countries to regions.

Europe & Central Asia and Latin America & Caribbean account for 54% of private counterparts and 44.4% of observed defaults. Consistent with the previous year, Sub-Saharan Africa records the highest average default rate

at 5.5%, followed by East Asia & Pacific at 3.6% and the Middle East, North Africa, Afghanistan & Pakistan at 3.2%.

Across all regions, the average default rate is 3.29%, with a 90% confidence interval of 2.95% to 3.64%.

Table 5: Default Rates by World Bank Region

Region	Counterparts	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
East Asia & Pacific	938	42,808	177 / 4,858	3.64% (2.69%–4.60%)
Europe & Central Asia	3,485	140,544	557 / 20,341	2.74% (2.28%–3.20%)
Latin America & Caribbean	2,131	85,516	326 / 12,756	2.56% (1.93%–3.18%)
Middle East, North Africa, Afghanistan & Pakistan	835	33,791	171 / 5,316	3.22% (2.26%–4.17%)
South Asia	694	38,132	103 / 3,710	2.78% (2.03%–3.52%)
Sub-Saharan Africa	1,720	47,964	562 / 10,240	5.49% (4.97%–6.00%)
Overall (including omitted categories)	10,409	437,516	1,988 / 60,361	3.29% (2.95%–3.64%)

Figure 12: Default Rates by World Bank Region

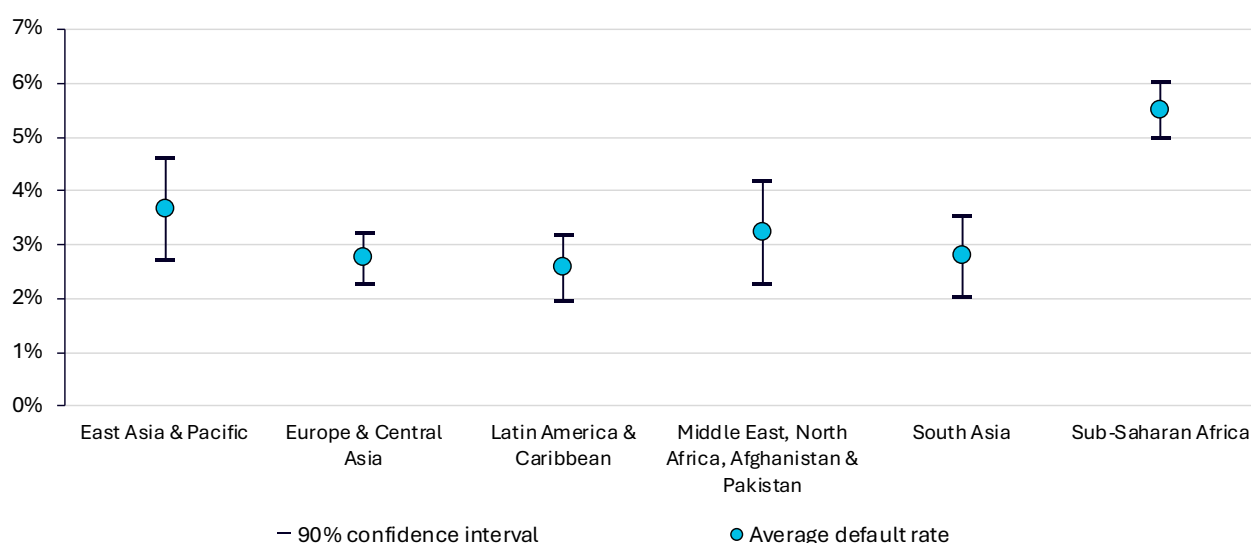


Table 6: Annual Default Rates by World Bank Region

Year	East Asia & Pacific	Europe & Central Asia	Latin America & Caribbean	Middle East, North Africa, Afghanistan & Pakistan	South Asia	Sub-Saharan Africa
1994	2.33%	5.21%	1.04%	5.26%	0.00%	3.48%
1995	5.88%	3.15%	2.43%	0.00%	0.00%	6.72%
1996	1.69%	3.37%	0.46%	4.76%	0.00%	0.79%
1997	4.29%	2.07%	2.20%	1.35%	10.00%	6.15%
1998	20.78%	7.69%	1.38%	22.37%	8.82%	8.15%
1999	4.29%	6.25%	1.75%	2.53%	0.00%	8.27%
2000	6.33%	4.33%	3.31%	0.00%	3.03%	7.09%
2001	8.57%	3.34%	2.86%	4.94%	12.12%	6.83%
2002	7.04%	2.51%	12.79%	11.49%	8.33%	7.23%
2003	15.15%	3.26%	10.46%	2.25%	6.06%	10.00%
2004	8.93%	0.00%	3.81%	8.00%	10.00%	6.02%
2005	3.03%	0.82%	2.04%	3.41%	2.04%	8.38%
2006	5.06%	0.53%	2.46%	3.30%	3.51%	5.99%
2007	4.49%	1.51%	1.60%	6.52%	1.64%	5.20%
2008	3.00%	2.31%	2.35%	3.67%	4.11%	5.53%
2009	2.84%	2.26%	4.88%	4.39%	3.00%	4.92%
2010	2.58%	4.90%	2.37%	1.68%	0.92%	4.01%
2011	2.37%	2.76%	0.32%	4.24%	4.24%	4.97%
2012	0.59%	2.36%	3.93%	2.36%	0.00%	6.49%
2013	2.08%	1.35%	2.86%	1.94%	3.40%	2.43%
2014	5.21%	3.35%	1.62%	2.34%	4.32%	5.22%
2015	3.14%	3.30%	2.14%	2.05%	0.55%	4.76%
2016	2.35%	3.02%	3.17%	2.83%	1.94%	7.20%
2017	1.35%	2.65%	2.51%	0.88%	0.00%	6.71%
2018	2.14%	1.97%	2.00%	1.27%	1.88%	6.84%
2019	3.17%	2.28%	2.91%	4.75%	3.91%	5.86%
2020	4.94%	4.70%	3.51%	6.88%	4.60%	4.78%
2021	7.20%	2.15%	1.38%	0.91%	3.23%	4.42%
2022	1.90%	6.81%	0.77%	0.59%	7.32%	1.90%
2023	1.09%	1.28%	2.44%	4.14%	1.00%	6.75%
2024	1.43%	1.45%	1.22%	1.78%	0.00%	6.58%
2025	2.10%	1.36%	0.75%	0.89%	0.86%	3.98%

3.2.2.2 Default Rates by Continent

Table 7 presents default rates by continent. The assignment of individual countries to their respective continents is detailed in Annex 7.2.

Table 7: Default Rates by Continent

Continent	Counterparts	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
Africa	2,127	66,853	611/12,774	4.78% (4.34%–5.23%)
Asia	2,342	100,287	467 / 12,675	3.68% (2.80%–4.57%)
Europe	3,167	135,696	487 / 18,825	2.59% (2.14%–3.04%)
North America	939	27,927	146 / 5,880	2.48% (1.94%–3.03%)
Oceania	36	404	5 / 191	2.62% (0.65%–4.58%)
South America	1,192	57,588	180 / 6,876	2.62% (1.77%–3.46%)
Overall (including omitted categories)	10,409	437,516	1,988 / 60,361	3.29% (2.95%–3.64%)

Figure 13: Default Rates by Continent

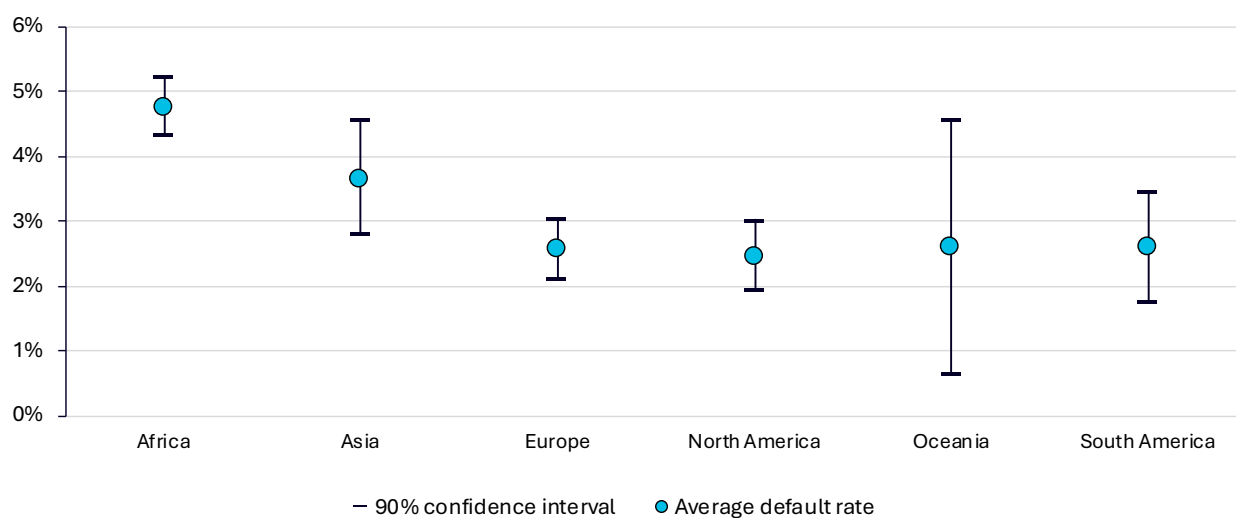


Table 8 : Annual Default Rates by Continent

Year	Africa	Asia	Europe	North America	Oceania	South America
1994	4.35%	1.12%	5.26%	1.75%	0.00%	0.74%
1995	5.63%	2.70%	3.17%	0.00%	0.00%	3.55%
1996	1.35%	2.33%	3.41%	0.00%	0.00%	0.67%
1997	5.26%	4.70%	2.11%	1.37%	0.00%	2.60%
1998	7.10%	22.29%	7.43%	1.52%	0.00%	1.32%
1999	7.55%	1.95%	5.98%	0.00%	25.00%	2.55%
2000	6.06%	3.66%	4.43%	2.41%	0.00%	3.77%
2001	6.52%	7.50%	3.42%	3.70%	12.50%	2.44%

Year	Africa	Asia	Europe	North America	Oceania	South America
2002	7.69%	8.93%	2.58%	4.65%	0.00%	16.86%
2003	8.81%	8.64%	3.09%	8.89%	0.00%	11.41%
2004	4.72%	10.56%	0.00%	7.53%	0.00%	1.40%
2005	6.94%	2.92%	0.85%	1.98%	0.00%	2.08%
2006	5.12%	4.76%	0.19%	1.89%	0.00%	2.90%
2007	4.07%	6.55%	0.89%	2.68%	0.00%	0.72%
2008	4.78%	4.25%	2.12%	2.08%	0.00%	2.52%
2009	4.35%	3.64%	2.11%	8.41%	10.00%	2.78%
2010	3.94%	3.27%	4.31%	5.36%	0.00%	0.55%
2011	4.79%	3.56%	2.69%	0.00%	0.00%	0.51%
2012	5.71%	1.40%	2.30%	6.29%	0.00%	2.35%
2013	2.37%	2.50%	1.26%	4.49%	0.00%	1.75%
2014	4.97%	3.94%	3.43%	1.62%	0.00%	1.61%
2015	4.86%	1.66%	3.38%	2.59%	0.00%	1.53%
2016	6.90%	2.24%	2.95%	2.10%	0.00%	4.61%
2017	5.88%	0.93%	2.64%	2.09%	0.00%	3.04%
2018	5.63%	1.49%	2.14%	2.19%	0.00%	1.75%
2019	4.88%	5.12%	1.66%	3.04%	0.00%	2.76%
2020	4.18%	6.22%	4.89%	3.09%	0.00%	4.01%
2021	3.43%	5.31%	1.25%	1.14%	0.00%	1.66%
2022	1.57%	4.67%	6.07%	0.90%	0.00%	0.64%
2023	5.58%	2.52%	1.15%	2.78%	0.00%	2.11%
2024	5.09%	1.50%	1.37%	1.29%	25.00%	1.16%
2025	3.43%	1.15%	1.45%	0.34%	0.00%	1.08%

3.2.3 Default Rates by Sector

3.2.3.1 Default Rates by GICS Sector

Among private borrowing obligations, the financial sector – the one with the most obligations – accounts for approximately 32% of counterparts, yet records the lowest average default rate at 1.8%.

The three largest sectors, financials, utilities and consumer staples together represent around 59% of observations. Consumer discretionary, healthcare sectors and real estate record the highest average default rates, at 5.52%, 5.14% and 5.12%, respectively.

Table 9: Default Rates by Sector

GICS Sector	Counterparts	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
Communication Services	307	11,783	62 / 1,490	4.16% (3.27%–5.06%)
Consumer Discretionary	890	33,677	256 / 4,635	5.52% (4.67%–6.38%)
Consumer Staples	1,326	38,469	347 / 6,867	5.05% (4.38%–5.73%)
Energy	272	15,862	41 / 1,638	2.50% (1.81%–3.20%)
Financials	3,319	159,503	362 / 19,820	1.83% (1.55%–2.11%)
Health Care	263	8,781	66 / 1,283	5.14% (3.42%–6.87%)
Industrials	901	34,258	182 / 4,923	3.70% (3.11%–4.28%)
Information Technology	61	1,349	12 / 270	4.44% (2.40%–6.49%)
Materials	962	33,759	245 / 5,594	4.38% (3.67%–5.09%)
Others	512	23,795	109 / 3,578	3.05% (2.17%–3.93%)
Real Estate	208	7,002	46 / 898	5.12% (4.02%–6.23%)
Utilities	1,400	62,460	243 / 9,043	2.69% (2.29%–3.08%)
Overall (including omitted categories)	10,409	437,516	1,988 / 60,361	3.29% (2.95%–3.64%)

Figure 14: Default Rates by Sector

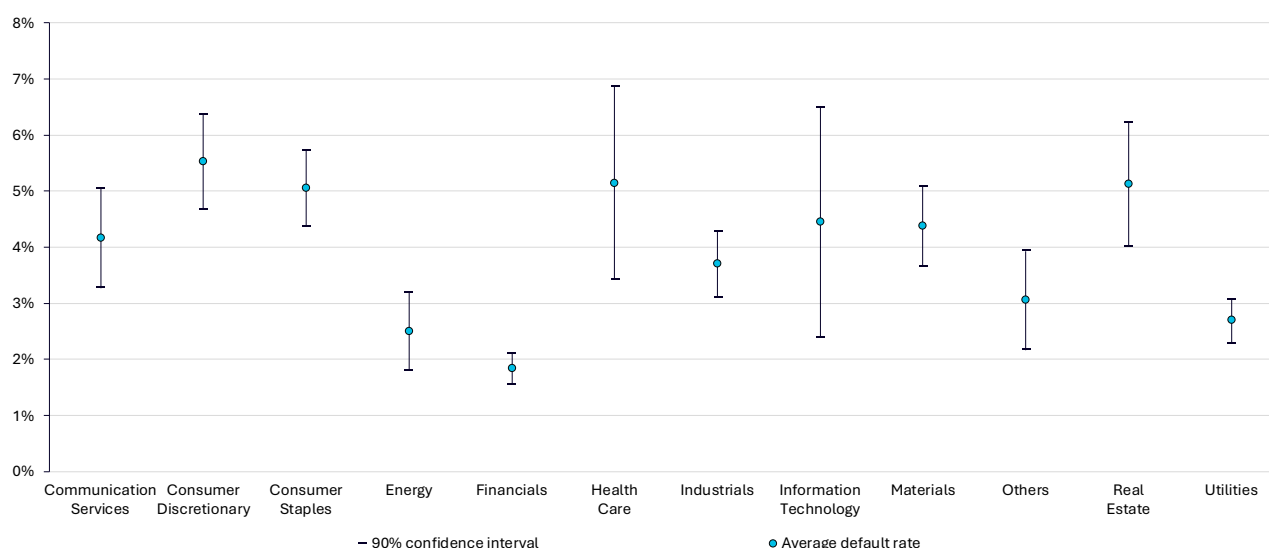


Table 10: Annual Default Rates by Sector

Year	Communication Services	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Information Technology	Materials	Others	Real Estate	Utilities
1994	0.00%	3.26%	2.74%	0.00%	0.00%	0.00%	4.55%	0.00%	3.01%	8.11%	0.00%	0.00%
1995	0.00%	2.15%	10.84%	0.00%	0.00%	16.67%	2.22%	0.00%	3.50%	2.08%	0.00%	3.23%
1996	0.00%	4.26%	1.22%	0.00%	0.81%	20.00%	0.00%	0.00%	0.64%	4.69%	0.00%	2.50%
1997	0.00%	8.42%	7.78%	0.00%	0.66%	0.00%	1.79%	0.00%	3.29%	1.39%	0.00%	0.00%
1998	3.57%	12.35%	4.85%	4.35%	7.14%	75.00%	11.67%	0.00%	11.03%	14.47%	0.00%	0.00%
1999	10.00%	7.14%	7.34%	0.00%	3.26%	33.33%	3.64%	0.00%	2.67%	5.41%	0.00%	1.69%
2000	2.86%	8.33%	5.83%	7.14%	2.02%	0.00%	5.00%	0.00%	5.19%	3.53%	0.00%	0.00%
2001	5.71%	9.28%	8.26%	0.00%	1.81%	30.00%	4.84%	0.00%	3.25%	6.38%	0.00%	1.37%
2002	0.00%	17.82%	5.13%	0.00%	6.45%	18.18%	9.68%	0.00%	8.75%	3.00%	9.09%	7.79%
2003	10.26%	10.42%	14.66%	3.23%	3.35%	25.00%	9.09%	12.50%	5.19%	2.83%	0.00%	8.22%
2004	4.55%	3.19%	7.34%	5.26%	3.34%	7.14%	5.63%	33.33%	1.29%	1.59%	7.69%	1.37%
2005	6.82%	4.04%	3.51%	9.09%	1.15%	7.14%	2.53%	0.00%	1.68%	2.44%	0.00%	3.61%
2006	2.56%	1.94%	7.26%	0.00%	1.70%	0.00%	0.00%	0.00%	2.66%	1.61%	0.00%	2.15%
2007	2.27%	7.69%	2.13%	0.00%	1.49%	0.00%	2.20%	16.67%	2.07%	2.80%	0.00%	4.17%
2008	3.45%	4.50%	6.96%	2.00%	1.76%	0.00%	4.90%	0.00%	2.46%	2.70%	0.00%	2.75%
2009	3.75%	4.72%	3.45%	1.75%	3.00%	3.57%	6.96%		6.86%	2.46%	0.00%	1.40%
2010	0.00%	6.62%	7.77%	1.69%	1.51%	5.88%	2.40%	0.00%	8.82%	3.13%	9.76%	1.16%
2011	5.75%	0.72%	4.07%	3.28%	1.67%	4.88%	6.33%	0.00%	3.17%	2.33%	7.84%	2.51%
2012	5.68%	3.90%	4.80%	1.67%	1.29%	4.55%	2.27%	0.00%	4.41%	4.44%	14.00%	0.83%
2013	3.75%	3.72%	4.23%	4.11%	0.61%	3.92%	2.76%	0.00%	2.27%	0.00%	8.00%	1.97%
2014	4.62%	5.64%	3.69%	6.49%	1.24%	3.64%	6.22%	14.29%	7.96%	1.29%	4.00%	3.24%
2015	1.59%	1.96%	6.03%	6.58%	1.59%	7.46%	4.60%	0.00%	4.98%	1.24%	2.04%	1.46%
2016	6.78%	5.85%	3.40%	1.25%	2.32%	5.41%	4.44%	0.00%	5.08%	1.30%	2.08%	5.46%
2017	12.5%	4.95%	2.97%	2.38%	1.86%	4.76%	3.00%	0.00%	4.04%	1.97%	4.88%	2.81%
2018	0.00%	3.96%	3.58%	2.60%	0.98%	7.14%	2.70%	5.56%	4.97%	4.14%	8.33%	2.69%
2019	6.82%	6.80%	5.40%	0.00%	2.37%	8.57%	3.46%	5.56%	5.65%	4.41%	5.13%	1.73%
2020	5.26%	7.92%	5.29%	4.11%	2.08%	4.17%	4.21%	6.67%	7.02%	12.7%	5.00%	4.59%
2021	5.88%	4.79%	5.26%	1.52%	1.52%	1.35%	3.50%	5.88%	4.52%	1.72%	9.52%	2.06%
2022	0.00%	3.59%	7.71%	1.69%	1.83%	3.75%	3.49%	6.67%	5.45%	0.00%	6.98%	2.56%
2023	2.70%	4.95%	6.18%	3.13%	1.93%	3.61%	1.47%	0.00%	2.68%	0.98%	4.00%	3.21%
2024	6.67%	5.45%	1.98%	0.00%	2.08%	2.11%	2.96%	0.00%	1.32%	1.96%	3.92%	2.40%
2025	1.89%	6.06%	2.75%	0.00%	1.00%	2.08%	1.43%	5.00%	2.52%	0.00%	1.64%	2.00%

3.2.3.2 Default Rates by Sector Groupings

Default rates by sector groupings are displayed in Table 11. Assignments of individual GICS, NACE¹ and NAICS² codes to sectors and sector groupings can be found in Annex 7.3.

Table 11: Default Rates by GEMs Sector Grouping

Counterpart GEMs Sector Grouping	Counterparts	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
Banking	2,227	117,943	225 / 14,198	1.58% (1.29%–1.88%)
Infrastructure	2,244	101,873	431 / 13,812	3.12% (2.73%–3.51%)
Non-Bank Financials	1,141	44,705	146 / 5,764	2.53% (2.11%–2.95%)
Renewables	804	26,849	133 / 5,090	2.61% (2.09%–3.13%)
Services	935	26,741	171 / 4,688	3.65% (3.09%–4.21%)
Overall (including omitted categories)	10,409	437,516	1,988 / 60,361	3.29% (2.95%–3.64%)

Figure 15: Default Rates by GEMs Sector Grouping

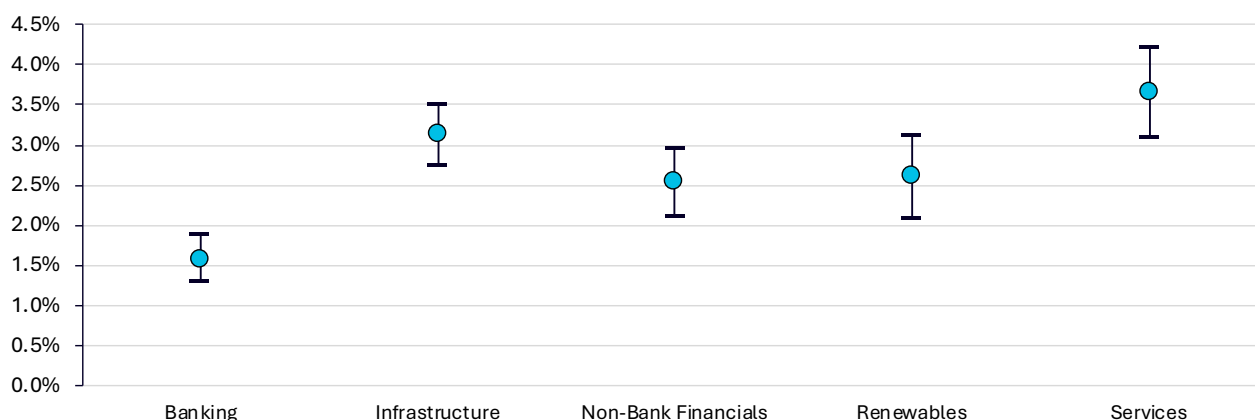


Table 12: Annual Default Rates by GEMs Sector Grouping

Active Year	Banking	Infrastructure	Non-Bank Financials	Renewables	Services
1994	0.00%	0.00%	0.00%	0.00%	0.00%
1995	0.00%	1.69%	0.00%	0.00%	3.70%
1996	0.93%	1.27%	0.00%	0.00%	0.00%
1997	0.00%	1.09%	5.26%	0.00%	4.88%
1998	6.54%	3.85%	13.33%	0.00%	10.87%
1999	2.92%	2.52%	7.69%	0.00%	6.82%
2000	1.65%	2.84%	6.25%	0.00%	5.88%
2001	1.47%	5.23%	5.88%	9.09%	3.77%

¹ Nomenclature of Economic Activities (NACE) is the European statistical classification of economic activities.

² The North American Industry Classification System (NAICS) is the standard used by US federal statistical agencies in classifying business establishments for the purpose of collecting, analysing and publishing statistical data related to the US business economy.

Active Year	Banking	Infrastructure	Non-Bank Financials	Renewables	Services
2002	6.25%	6.10%	8.33%	0.00%	5.08%
2003	2.97%	9.58%	6.06%	10.00%	9.84%
2004	3.10%	4.02%	4.76%	0.00%	6.06%
2005	1.00%	5.35%	2.08%	0.00%	4.17%
2006	1.41%	1.55%	3.33%	7.14%	1.41%
2007	1.75%	3.47%	0.00%	0.00%	1.23%
2008	1.67%	2.98%	3.30%	3.70%	1.85%
2009	2.12%	1.99%	6.78%	2.44%	6.72%
2010	0.93%	0.86%	3.88%	2.08%	2.76%
2011	1.19%	3.69%	3.62%	0.00%	6.37%
2012	1.11%	2.87%	2.56%	2.30%	4.09%
2013	0.46%	1.88%	1.11%	1.65%	3.68%
2014	1.79%	3.76%	0.44%	5.16%	5.13%
2015	1.16%	2.73%	3.02%	2.30%	3.55%
2016	2.28%	4.97%	2.33%	6.51%	3.48%
2017	1.61%	3.40%	2.59%	3.70%	5.56%
2018	0.91%	2.51%	1.35%	2.79%	2.97%
2019	1.20%	3.01%	4.28%	1.16%	2.78%
2020	1.82%	5.05%	2.44%	5.56%	3.23%
2021	1.39%	2.62%	1.72%	1.67%	3.75%
2022	1.87%	2.47%	1.98%	1.83%	1.23%
2023	1.31%	2.94%	2.81%	2.73%	2.06%
2024	1.76%	2.73%	2.52%	1.08%	4.17%
2025	0.75%	1.84%	1.35%	1.23%	0.77%

3.2.3.3 Default Rates by Financial Industries Sector

Table 13: Default Rates by Financial Industries Sector

Financial Industries Sector	Counterparts	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
Financial Institutions	3,319	159,503	362 / 19,820	1.83% (1.55%–2.11%)
Non-Financial Institutions	7,093	276,871	1,619 / 40,467	4.00% (3.61%–4.39%)

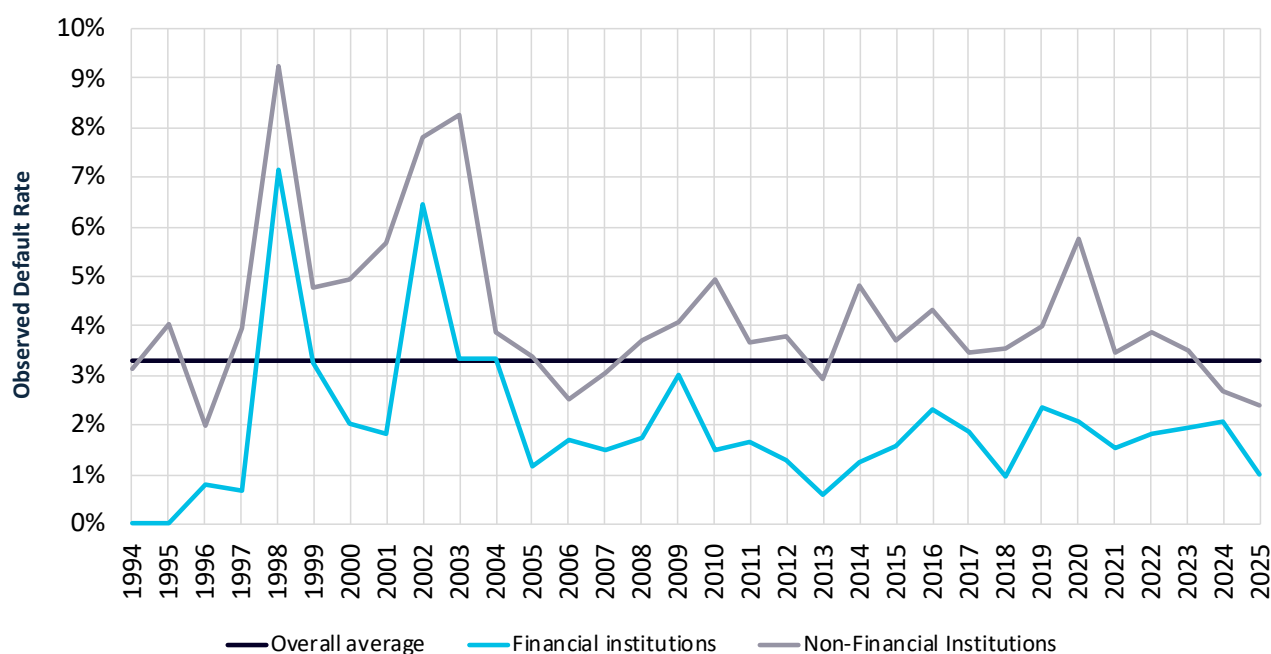
Table 14: Annual Default Rates by Financial Industries Sector

Year	Financial Institutions	Non-Financial Institutions
1994	0.00%	3.15%
1995	0.00%	4.03%
1996	0.81%	1.97%
1997	0.66%	3.95%
1998	7.14%	9.23%
1999	3.26%	4.77%
2000	2.02%	4.95%
2001	1.81%	5.69%
2002	6.45%	7.82%
2003	3.35%	8.25%
2004	3.34%	3.87%
2005	1.15%	3.37%
2006	1.70%	2.52%
2007	1.49%	3.06%
2008	1.76%	3.69%
2009	3.00%	4.06%
2010	1.51%	4.92%
2011	1.67%	3.66%
2012	1.29%	3.81%
2013	0.61%	2.92%
2014	1.24%	4.80%
2015	1.59%	3.71%
2016	2.32%	4.32%
2017	1.86%	3.47%
2018	0.98%	3.53%
2019	2.37%	4.00%
2020	2.08%	5.75%
2021	1.52%	3.45%
2022	1.83%	3.87%
2023	1.93%	3.51%
2024	2.08%	2.69%
2025	1.00%	2.39%

Figure 16 presents annual default rates for financial and non-financial institutions from 1994 to 2025. Financial institutions generally record lower default rates over time compared with

non-financial institutions. This is benchmarked against the black dashed line which represents the overall average default rate across the reporting period.

Figure 16: Annual Default Rates by Financial Industries Sector



3.2.4 Default Rates by World Bank Region and Sector

3.2.4.1 Default Rates by World Bank Region and GICS Sector

Table 15 presents average default rates and confidence intervals by World Bank region and sector. Financials and utilities generally show lower

default rates. Wider confidence intervals reflect regional market differences, smaller samples and sector specific characteristics.

Table 15: Average Default Rates and 90% Confidence Intervals by World Bank Region and GICS Sector

GICS Sector / Region	East Asia & Pacific	Europe & Central Asia	Latin America & Caribbean	Middle East, North Africa, Afghanistan & Pakistan	South Asia	Sub-Saharan Africa
Communication Services	1.53% (0.00% - 3.20%)	1.85% (0.51% - 3.18%)	3.65% (1.95% - 5.35%)			7.48% (5.31% - 9.65%)
Consumer Discretionary	5.71% (3.90% - 7.53%)	4.30% (3.15% - 5.44%)	2.80% (1.62% - 3.98%)	8.10% (4.65% - 11.55%)	5.28% (2.75% - 7.81%)	9.79% (8.14% - 11.44%)
Consumer Staples	3.95% (2.37% - 5.53%)	4.85% (3.54% - 6.16%)	3.91% (2.76% - 5.06%)	4.23% (1.80% - 6.66%)	2.84% (1.33% - 4.36%)	9.55% (7.85% - 11.26%)
Energy		2.82% (1.72% - 3.91%)	1.63% (0.21% - 3.06%)	3.40% (1.60% - 5.20%)		1.01% (0.28% - 1.74%)
Financials	2.62% (1.30% - 3.93%)	1.14% (0.83% - 1.45%)	1.42% (0.70% - 2.14%)	3.75% (2.36% - 5.14%)	2.11% (0.74% - 3.49%)	2.65% (2.04% - 3.27%)
Health Care	3.28% (0.00% - 7.84%)	3.97% (2.63% - 5.31%)	5.91% (2.67% - 9.16%)	5.56% (1.71% - 9.40%)	4.04% (0.00% - 9.52%)	13.79% (9.23% - 18.36%)
Industrials	6.09% (3.78% - 8.40%)	3.99% (3.04% - 4.95%)	1.96% (1.26% - 2.66%)	4.89% (2.63% - 7.15%)	2.54% (1.15% - 3.93%)	6.32% (4.15% - 8.48%)
Information Technology		2.52% (0.92% - 4.12%)				
Materials	6.61% (4.77% - 8.45%)	3.51% (2.53% - 4.49%)	3.56% (2.09% - 5.03%)	4.93% (2.98% - 6.88%)	3.33% (1.52% - 5.14%)	6.16% (4.87% - 7.45%)
Others		1.89% (0.82% - 2.96%)	4.25% (2.57% - 5.93%)	3.63% (0.69% - 6.57%)		4.12% (3.09% - 5.16%)
Real Estate	4.82% (0.63% - 9.00%)	3.89% (2.46% - 5.32%)	5.10% (0.38% - 9.83%)			9.22% (6.15% - 12.29%)
Utilities	1.37% (0.67% - 2.07%)	3.93% (2.81% - 5.05%)	2.62% (1.74% - 3.50%)	0.56% (0.12% - 0.99%)	1.99% (1.22% - 2.76%)	4.57% (3.66% - 5.48%)

3.2.4.2 Default Rates by World Bank Region and Sector Groupings

Table 16: Average Default Rates and 90% Confidence Intervals by World Bank Region and GEMs Sector

Region / GEMs Sector Grouping	Banking	Infrastructure	Non-Bank Financials	Renewables	Services
East Asia & Pacific	2.48% (0.57%-4.40%)	2.35% (1.22%-3.47%)	2.79% (1.35%-4.23%)	0.76% (0.14%-1.38%)	3.51% (1.84%-5.19%)
Europe & Central Asia	1.14% (0.86%-1.42%)	3.46% (2.59%-4.34%)	1.27% (0.13%-2.41%)	5.58% (3.90%-7.26%)	2.39% (1.55%-3.24%)
Latin America & Caribbean	0.85% (0.04%-1.67%)	2.85% (2.22%-3.48%)	2.59% (1.70%-3.47%)	2.51% (1.48%-3.53%)	2.54% (1.97%-3.11%)
Middle East, North Africa, Afghanistan & Pakistan	3.33% (1.91%-4.75%)	1.09% (0.60%-1.57%)	4.52% (2.22%-6.83%)	0.17% (0.04%-0.31%)	3.79% (1.66%-5.92%)
South Asia	2.72% (0.67%-4.77%)	2.09% (1.23%-2.96%)	1.65% (0.58%-2.72%)	1.98% (1.06%-2.91%)	3.88% (1.42%-6.33%)
Sub-Saharan Africa	2.37% (1.78%-2.97%)	5.37% (4.31%-6.43%)	3.80% (2.56%-5.04%)	3.87% (3.03%-4.71%)	7.19% (5.37%-9.02%)

3.2.4.3 Default Rates by World Bank Region and Financial Industries Sector

Table 17: Average Default Rates and 90% Confidence Intervals by World Bank Region and Financial Industries Sector

Region / Financial Industries Sector	Financial Institutions	Non-Financial Institutions
East Asia & Pacific	2.62% (1.30%–3.93%)	4.00% (3.06%–4.94%)
Europe & Central Asia	1.14% (0.83%–1.45%)	3.73% (3.08%–4.38%)
Latin America & Caribbean	1.42% (0.70%–2.14%)	3.05% (2.39%–3.71%)
Middle East, North Africa, Afghanistan & Pakistan	3.75% (2.36%–5.14%)	3.06% (2.00%–4.11%)
South Asia	2.11% (0.74%–3.49%)	3.13% (2.26%–4.00%)
Sub-Saharan Africa	2.65% (2.04%–3.27%)	6.60% (6.06%–7.15%)

3.2.5 Default Rates by Country

The average default rates and confidence intervals by country are presented in Table 18. The results show variation across countries. Wider confidence intervals are generally observed for

countries with fewer observations, while countries with larger datasets provide closer confidence intervals.

Table 18: Default Rates by Country

ISO country code - ISO country name	Counterparties	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
AL-Albania	61	1,022	18 / 318	5.66% (3.54%–7.78%)
AM-Armenia	130	5,583	10 / 807	1.24% (0.72%–1.76%)
AR-Argentina	221	6,506	57 / 1,328	4.29% (2.17%–6.41%)
AZ-Azerbaijan	137	2,971	32 / 728	4.40% (2.65%–6.14%)
BA-Bosnia and Herzegovina	86	2,114	16 / 669	2.39% (0.71%–4.08%)
BD-Bangladesh	110	3,571	12 / 605	1.98% (0.40%–3.56%)
BF-Burkina Faso	55	531	27 / 292	9.25% (6.59%–11.91%)
BG-Bulgaria	119	3,926	22 / 817	2.69% (1.08%–4.31%)
BJ-Benin	35	321	27 / 226	11.95% (8.15%–15.74%)
BO-Bolivia	38	464	11 / 247	4.45% (2.15%–6.75%)
BR-Brazil	333	20,244	37 / 1,860	1.99% (1.33%–2.64%)
BY-Belarus	59	1,286	14 / 315	4.44% (1.50%–7.39%)
CD-Congo, Demo- cratic Republic of	31	704	6 / 147	4.08% (2.13%–6.04%)
CI-Cote D'Ivoire	130	3,374	51 / 757	6.74% (5.13%–8.34%)
CL-Chile	93	10,456	16 / 495	3.23% (1.72%–4.75%)
CM-Cameroon	58	1,343	15 / 362	4.14% (2.27%–6.01%)

ISO country code - ISO country name	Counterparties	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
CN-China	265	12,082	39 / 1,309	2.98% (2.02%–3.94%)
CO-Colombia	140	6,316	16 / 723	2.21% (1.11%–3.32%)
CR-Costa Rica	104	2,181	9 / 723	1.24% (0.39%–2.10%)
CZ-Czech Republic	34	534	7 / 138	5.07% (2.39%–7.75%)
DO-Dominican Republic	63	1,583	11 / 454	2.42% (0.70%–4.14%)
EC-Ecuador	82	3,792	6 / 502	1.20% (0.00%–2.60%)
EG-Egypt	230	9,290	29 / 1,336	2.17% (1.30%–3.04%)
GA-Gabon	27	589	3 / 99	3.03% (0.71%–5.35%)
GE-Georgia	188	5,927	21 / 1,100	1.91% (0.84%–2.98%)
GH-Ghana	90	2,511	31 / 545	5.69% (4.16%–7.22%)
GN-Guinea	20	632	7 / 107	6.54% (1.72%–11.36%)
GT-Guatemala	77	3,046	7 / 443	1.58% (0.90%–2.26%)
HN-Honduras	75	1,637	9 / 475	1.89% (0.73%–3.06%)
HR-Croatia	63	2,846	11 / 435	2.53% (1.52%–3.54%)
HT-Haiti	26	202	13 / 168	7.74% (4.18%–11.30%)
HU-Hungary	62	1,830	5 / 343	1.46% (0.59%–2.32%)
ID-Indonesia	139	6,752	31 / 736	4.21% (1.72%–6.71%)
IN-India	489	32,197	65 / 2,534	2.57% (1.74%–3.39%)
JM-Jamaica	39	753	5 / 262	1.91% (0.09%–3.72%)
JO-Jordan	113	3,276	13 / 779	1.67% (0.38%–2.96%)
KE-Kenya	148	4,647	28 / 835	3.35% (2.27%–4.43%)
KG-Kyrgyzstan	72	507	1 / 409	0.24% (0.00%–0.53%)
KH-Cambodia	42	1,299	3 / 270	1.11% (0.36%–1.87%)
KZ-Kazakhstan	142	6,866	14 / 851	1.65% (0.75%–2.54%)
LB-Lebanon	53	1,831	33 / 361	9.14% (3.03%–15.26%)
LK-Sri Lanka	56	1,744	18 / 335	5.37% (0.69%–10.06%)
MA-Morocco	87	3,290	8 / 508	1.57% (0.80%–2.35%)
MD-Moldova	73	1,730	9 / 523	1.72% (0.65%–2.79%)
ME-Montenegro	33	631	6 / 273	2.20% (0.69%–3.70%)
MG-Madagascar	41	995	15 / 237	6.33% (2.45%–10.21%)
MK-Macedonia, Former Yugoslav Republic of	47	744	5 / 322	1.55% (0.01%–3.09%)
ML-Mali	55	436	41 / 348	11.78% (8.47%–15.10%)
MM-Myanmar	40	1,691	24 / 166	14.46% (5.03%–23.88%)
MN-Mongolia	96	3,852	16 / 590	2.71% (1.53%–3.89%)

ISO country code - ISO country name	Counterparties	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
MU-Mauritius	32	928	7 / 250	2.80% (0.94%–4.66%)
MW-Malawi	20	159	6 / 117	5.13% (2.51%–7.74%)
MX-Mexico	249	9,502	47 / 1,295	3.63% (2.55%–4.71%)
MZ-Mozambique	35	1,037	16 / 270	5.93% (3.91%–7.94%)
NG-Nigeria	142	8,224	41 / 858	4.78% (3.55%–6.01%)
NI-Nicaragua	83	1,646	16 / 585	2.74% (1.35%–4.12%)
NP-Nepal	25	420	6 / 141	4.26% (0.82%–7.69%)
PA-Panama	68	2,842	8 / 380	2.11% (0.81%–3.40%)
PE-Peru	134	4,881	19 / 788	2.41% (1.49%–3.33%)
PH-Philippines	87	4,823	24 / 457	5.25% (2.91%–7.59%)
PK-Pakistan	138	3,656	42 / 925	4.54% (1.76%–7.32%)
PL-Poland	200	11,682	17 / 1,077	1.58% (0.89%–2.27%)
PS-Palestinian Territory (West Bank and Gaza)	29	391	15 / 172	8.72% (3.65%–13.79%)
PY-Paraguay	58	2,334	1 / 332	0.30% (0.00%–0.73%)
RO-Romania	215	9,461	12 / 1,255	0.96% (0.40%–1.51%)
RS-Serbia	145	8,222	19 / 963	1.97% (1.28%–2.66%)
RU-Russian Federation	426	16,204	57 / 2,411	2.36% (1.27%–3.46%)
RW-Rwanda	37	469	12 / 204	5.88% (1.56%–10.21%)
SI-Slovenia	24	397	0 / 104	0.00% (0.00%–0.00%)
SK-Slovakia	24	501	1 / 125	0.80% (0.00%–2.04%)
SN-Senegal	101	1,977	42 / 685	6.13% (4.93%–7.34%)
SV-El Salvador	88	2,239	1 / 626	0.16% (0.00%–0.32%)
TG-Togo	31	998	9 / 182	4.95% (2.42%–7.47%)
TH-Thailand	76	5,943	13 / 430	3.02% (1.39%–4.65%)
TJ-Tajikistan	73	473	20 / 411	4.87% (2.79%–6.94%)
TM-Turkmenistan	45	225	30 / 230	13.04% (6.86%–19.23%)
TN-Tunisia	83	6,141	12 / 648	1.85% (1.11%–2.59%)
TR-Turkey	485	38,519	64 / 2,998	2.13% (1.50%–2.77%)
TT-Trinidad and Tobago	21	511	8 / 121	6.61% (2.27%–10.95%)
TZ-Tanzania	64	1,969	19 / 343	5.54% (2.77%–8.31%)
UA-Ukraine	325	11,303	115 / 1,689	6.81% (3.95%–9.67%)
UG-Uganda	73	1,521	19 / 504	3.77% (2.19%–5.35%)
UY-Uruguay	56	1,818	7 / 387	1.81% (0.00%–4.50%)

ISO country code - ISO country name	Counterparties	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
UZ-Uzbekistan	128	3,643	19 / 466	4.08% (1.35%–6.80%)
VE-Venezuela	23	612	8 / 129	6.20% (2.03%–10.37%)
VN-Vietnam	112	4,798	15 / 502	2.99% (1.26%–4.72%)
XK-Kosovo	37	484	5 / 249	2.01% (0.39%–3.63%)
ZA-South Africa	198	10,031	41 / 1,359	3.02% (2.30%–3.73%)
ZM-Zambia	66	1,125	22 / 376	5.85% (3.67%–8.03%)
ZW-Zimbabwe	43	486	14 / 199	7.04% (3.88%–10.19%)
Overall	10,409	437,516	1,988 / 60,361	3.29% (2.95%–3.64%)

Table 19: Annual Default Rates by Country

ISO country code - ISO country name	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
AL-Albania	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
AM-Armenia								0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
AR-Argentina	0.00%	1.47%	0.00%	1.41%	1.82%	3.85%	6.52%	2.13%	32.00%	25.81%	3.85%	4.00%	10.00%	0.00%	13.04%	0.00%
AZ-Azerbaijan					0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.94%	2.13%
BA-Bosnia and Herzegovina					0.00%	0.00%	30.00%	22.22%	14.29%	0.00%	0.00%	0.00%	0.00%	3.85%	0.00%	0.00%
BD-Bangladesh	0.00%	0.00%	0.00%	100.00%			0.00%	25.00%	0.00%	0.00%	9.09%	0.00%	8.33%	7.69%	7.14%	0.00%
BF-Burkina Faso	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%	7.69%	15.38%	15.38%	0.00%	14.29%	7.14%
BG-Bulgaria				0.00%	33.33%	40.00%	25.00%	0.00%	0.00%	15.00%	0.00%	0.00%	0.00%	0.00%	5.71%	0.00%
BJ-Benin	0.00%	0.00%	0.00%	0.00%	12.50%	0.00%	25.00%	20.00%	0.00%	22.22%	0.00%	22.22%	0.00%	16.67%	0.00%	0.00%
BO-Bolivia	0.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	9.09%	12.50%	25.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%
BR-Brazil	0.00%	0.00%	0.00%	5.26%	0.00%	0.00%	1.69%	0.00%	5.63%	5.88%	0.00%	1.69%	0.00%	1.92%	1.75%	5.88%
BY-Belarus											0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CD-Congo, Democratic Republic of	0.00%	0.00%	0.00%	0.00%	0.00%					0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%
CI-Cote D'Ivoire	7.14%	0.00%	0.00%	9.52%	10.00%	4.55%	12.00%	13.04%	10.00%	25.00%	8.33%	0.00%	10.00%	11.11%	10.00%	0.00%
CL-Chile	0.00%	0.00%	8.33%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CM-Cameroon	0.00%	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CN-China	0.00%	16.67%	16.67%	0.00%	0.00%	0.00%	0.00%	7.14%	5.26%	5.88%	0.00%	5.88%	13.04%	6.06%	0.00%	3.77%
CO-Colombia	0.00%	0.00%	0.00%	0.00%	0.00%	11.11%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CR-Costa Rica	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%
CZ-Czech Republic	16.67%	12.50%	8.33%	0.00%	11.11%	14.29%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.14%	0.00%	
DO-Dominican Republic	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.29%	0.00%	14.29%	37.50%	0.00%	8.33%	0.00%	0.00%	0.00%

ISO country code - ISO country name	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
AL-Albania	21.43%	5.88%	5.00%	8.33%	4.17%	8.70%	16.67%	20.00%	0.00%	0.00%	0.00%	8.33%	0.00%	0.00%	0.00%	0.00%
AM-Armenia	5.26%	4.08%	0.00%	1.85%	0.00%	1.82%	1.82%	0.00%	0.00%	2.44%	2.63%	0.00%	0.00%	2.78%	0.00%	0.00%
AR-Argentina	0.00%	0.00%	0.00%	5.41%	0.00%	0.00%	0.00%	0.00%	7.69%	6.00%	8.62%	3.92%	0.00%	0.00%	2.22%	2.27%
AZ-Azerbaijan	2.08%	2.17%	2.22%	4.44%	0.00%	5.77%	16.00%	20.00%	8.33%	5.00%	5.00%	0.00%	11.76%	5.88%	0.00%	0.00%
BA-Bosnia and Herzegovina	7.69%	0.00%	7.89%	0.00%	9.38%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BD-Bangladesh	0.00%	7.14%	0.00%	4.76%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.38%	6.06%	0.00%	0.00%	0.00%	2.13%
BF-Burkina Faso	0.00%	25.00%	20.00%	14.29%	0.00%	20.00%	0.00%	12.50%	11.11%	0.00%	0.00%	0.00%	0.00%	5.88%	27.78%	15.79%
BG-Bulgaria	0.00%	4.88%	0.00%	2.33%	6.67%	0.00%	2.17%	4.44%	0.00%	0.00%	5.56%	0.00%	0.00%	0.00%	5.88%	0.00%
BJ-Benin	16.67%	0.00%	50.00%	14.29%	14.29%	28.57%	16.67%	33.33%	0.00%	0.00%	28.57%	0.00%	16.67%	16.67%	11.11%	0.00%
BO-Bolivia	0.00%	11.11%	25.00%	0.00%	0.00%	0.00%	0.00%	11.11%	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%
BR-Brazil	0.00%	0.00%	3.33%	3.57%	5.77%	1.96%	7.02%	3.70%	0.00%	0.00%	1.79%	1.49%	0.00%	2.50%	0.00%	1.04%
BY-Belarus	0.00%	6.25%	11.11%	0.00%	4.17%	4.76%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	30.43%	10.00%	0.00%	
CD-Congo, Democratic Republic of	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.09%	10.00%	10.00%	9.09%	9.09%	0.00%	0.00%	0.00%	0.00%	0.00%
CI-Cote D'Ivoire	0.00%	30.00%	0.00%	0.00%	10.00%	4.17%	3.70%	3.85%	10.71%	3.33%	10.53%	4.35%	0.00%	8.16%	6.90%	4.55%
CL-Chile	0.00%	0.00%	0.00%	0.00%	5.00%	3.70%	19.35%	6.67%	3.70%	0.00%	4.55%	0.00%	0.00%	3.85%	0.00%	3.03%
CM-Cameroon	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	18.75%	7.14%	0.00%	9.52%	0.00%	0.00%	8.33%	17.39%	0.00%	5.00%
CN-China	3.57%	1.72%	0.00%	3.39%	10.00%	8.06%	1.64%	0.00%	1.56%	3.03%	3.13%	1.39%	0.00%	1.43%	1.49%	1.49%
CO-Colombia	0.00%	0.00%	0.00%	0.00%	0.00%	2.70%	2.86%	5.26%	2.63%	11.11%	10.53%	3.03%	0.00%	0.00%	0.00%	0.00%
CR-Costa Rica	0.00%	0.00%	0.00%	4.76%	0.00%	4.17%	0.00%	1.64%	0.00%	0.00%	1.82%	0.00%	0.00%	0.00%	2.33%	0.00%
CZ-Czech Republic																
DO-Dominican Republic	0.00%	0.00%	5.00%	0.00%	0.00%	8.33%	0.00%	4.76%	4.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EC-Ecuador	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.23%	0.00%	0.00%	0.00%	0.00%	0.00%	2.70%	0.00%	0.00%	0.00%

ISO country code - ISO country name	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EC-Ecuador	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	20.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%
EG-Egypt	12.50%	0.00%	10.00%	0.00%	0.00%	5.88%	0.00%	7.14%	17.65%	5.56%	0.00%	4.35%	0.00%	0.00%	3.70%	4.00%
GA-Gabon	0.00%	0.00%	0.00%	0.00%	0.00%			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
GE-Georgia					0.00%	0.00%	0.00%	25.00%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	8.82%	2.56%
GH-Ghana	11.11%	11.11%	0.00%	0.00%	14.29%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
GN-Guinea	0.00%	0.00%	0.00%	75.00%	50.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
GT-Guatemala	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
HN-Honduras		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
HR-Croatia			0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	6.25%	5.88%	0.00%	6.67%	0.00%	6.67%	0.00%	5.56%
HT-Haiti			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
HU-Hungary	0.00%	0.00%	5.56%	5.88%	0.00%	0.00%	0.00%	9.09%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ID-Indonesia	0.00%	0.00%	0.00%	0.00%	41.38%	6.25%	6.25%	7.14%	7.14%	0.00%	13.33%	0.00%	0.00%	0.00%	0.00%	0.00%
IN-India	0.00%	0.00%	0.00%	7.41%	10.00%	0.00%	0.00%	9.52%	13.64%	11.76%	13.04%	3.45%	0.00%	0.00%	4.44%	3.39%
JM-Jamaica	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	50.00%	0.00%	0.00%	14.29%	0.00%	12.50%	0.00%	0.00%	0.00%	0.00%
JO-Jordan	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%	9.09%	12.50%	0.00%	0.00%	0.00%	0.00%
KE-Kenya	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	12.50%	16.67%	0.00%	11.11%	0.00%	11.11%	0.00%	0.00%	7.69%	0.00%
KG-Kyrgyzstan			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
KH-Cambodia												0.00%	0.00%	0.00%	0.00%	0.00%
KZ-Kazakhstan				0.00%	0.00%	0.00%	11.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.09%
LB-Lebanon	0.00%	0.00%	0.00%	0.00%	9.09%	0.00%	0.00%	14.29%	15.38%	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%
LK-Sri Lanka	0.00%			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MA-Morocco	9.09%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MD-Moldova			0.00%	0.00%	0.00%	16.67%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

ISO country code - ISO country name	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
EG-Egypt	8.70%	4.55%	0.00%	0.00%	9.52%	4.55%	4.17%	3.45%	2.22%	2.68%	1.77%	0.88%	0.89%	0.00%	0.00%	0.83%
GA-Gabon	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.33%	7.69%	0.00%
GE-Georgia	4.88%	6.38%	0.00%	0.00%	0.00%	0.00%	0.00%	1.45%	6.67%	0.00%	1.43%	2.86%	0.00%	0.00%	0.00%	0.00%
GH-Ghana	0.00%	0.00%	0.00%	3.57%	6.90%	6.67%	7.41%	3.33%	9.38%	3.03%	3.33%	5.88%	3.13%	19.35%	13.79%	8.33%
GN-Guinea	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.11%	11.11%	0.00%	0.00%	0.00%	0.00%
GT-Guatemala	0.00%	0.00%	0.00%	0.00%	0.00%	3.13%	3.13%	3.70%	8.00%	4.17%	4.55%	0.00%	0.00%	0.00%	0.00%	0.00%
HN-Honduras	0.00%	0.00%	0.00%	0.00%	0.00%	2.00%	4.08%	0.00%	2.22%	0.00%	0.00%	0.00%	0.00%	12.50%	5.88%	0.00%
HR-Croatia	0.00%	5.26%	5.56%	7.14%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.55%	7.14%	0.00%			
HT-Haiti	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%	5.88%	6.25%	0.00%	38.46%	8.33%	8.33%	0.00%	25.00%	0.00%	0.00%
HU-Hungary	0.00%	0.00%	6.25%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ID-Indonesia	0.00%	0.00%	5.00%	0.00%	0.00%	0.00%	4.17%	3.85%	0.00%	2.94%	14.29%	3.33%	0.00%	0.00%	5.71%	3.13%
IN-India	1.47%	5.19%	0.00%	4.04%	5.45%	0.79%	2.82%	0.00%	2.70%	5.73%	3.70%	1.97%	0.72%	1.38%	0.00%	0.00%
JM-Jamaica	0.00%	0.00%	6.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
JO-Jordan	0.00%	0.00%	0.00%	5.00%	0.00%	0.00%	0.00%	1.89%	0.00%	1.85%	1.82%	1.82%	1.75%	1.82%	0.00%	0.00%
KE-Kenya	0.00%	0.00%	4.35%	0.00%	5.41%	0.00%	8.51%	4.35%	4.55%	1.85%	1.75%	1.89%	0.00%	4.69%	0.00%	5.71%
KG-Kyrgyzstan	0.00%	0.00%	0.00%	3.70%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
KH-Cambodia	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	5.56%	0.00%	0.00%	0.00%	4.17%
KZ-Kazakhstan	6.90%	6.90%	6.90%	0.00%	4.88%	0.00%	0.00%	0.00%	0.00%	0.00%	2.08%	0.00%	0.00%	0.00%	0.00%	2.33%
LB-Lebanon	0.00%	0.00%	0.00%	0.00%	6.25%	0.00%	0.00%	0.00%	0.00%	34.62%	88.89%	0.00%	0.00%	0.00%	0.00%	0.00%
LK-Sri Lanka	0.00%	0.00%	0.00%	0.00%	5.88%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.70%	60.87%	0.00%	0.00%	10.00%
MA-Morocco	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.33%	0.00%	0.00%	0.00%	2.38%	0.00%	0.00%	5.13%	0.00%	4.76%
MD-Moldova	4.55%	4.35%	0.00%	0.00%	3.03%	10.00%	4.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ME-Montenegro	7.69%	0.00%	0.00%	0.00%	0.00%	0.00%	4.55%	0.00%	10.53%	0.00%	0.00%	5.26%	0.00%	0.00%	0.00%	0.00%

ISO country code - ISO country name	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
ME-Montenegro										0.00%	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%
MG-Madagascar	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	37.50%	14.29%	0.00%	0.00%	0.00%
MK-Macedonia. Former Yugoslav Republic of			0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	14.29%	0.00%	0.00%	11.11%	0.00%	0.00%	0.00%	0.00%
ML-Mali	0.00%	0.00%	0.00%	0.00%	10.00%	33.33%	0.00%	0.00%	0.00%	28.57%	15.38%	15.38%	0.00%	10.00%	0.00%	14.29%
MM-Myanmar																
MN-Mongolia										0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.67%
MU-Mauritius	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MW-Malawi	0.00%	0.00%	0.00%	0.00%					0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MX-Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.03%	9.38%	3.23%	9.09%	3.23%	0.00%	6.06%	0.00%	18.52%
MZ-Mozambique	0.00%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%	12.50%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	9.09%
NG-Nigeria	25.00%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	12.50%	20.00%	0.00%	0.00%	9.09%	3.57%	7.69%
NI-Nicaragua						0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	22.22%
NP-Nepal	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PA-Panama	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.29%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PE-Peru	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.09%	16.67%	7.69%	6.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PH-Philippines	0.00%	9.09%	0.00%	11.11%	0.00%	0.00%	8.33%	8.33%	15.38%	38.46%	16.67%	7.14%	6.25%	9.09%	9.09%	0.00%
PK-Pakistan	0.00%	0.00%	0.00%	3.13%	44.44%	5.00%	0.00%	0.00%	4.76%	4.17%	20.00%	0.00%	7.14%	0.00%	15.00%	17.65%
PL-Poland	9.38%	3.33%	3.13%	0.00%	0.00%	4.35%	0.00%	3.57%	3.70%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PS-Palestinian Territory (West Bank and Gaza)					0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	66.67%	0.00%	0.00%
PY-Paraguay													0.00%	0.00%		0.00%
RO-Romania	0.00%	0.00%	0.00%	0.00%	11.11%	5.88%	0.00%	4.55%	4.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RS-Serbia									0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.94%

ISO country code - ISO country name	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
MG-Madagascar	0.00%	0.00%	18.18%	0.00%	0.00%	0.00%	75.00%	0.00%	25.00%	0.00%	0.00%	28.57%	0.00%	0.00%	7.14%	13.33%
MK-Macedonia. Former Yugoslav Republic of	22.22%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ML-Mali	20.00%	25.00%	0.00%	0.00%	14.29%	10.00%	6.67%	6.67%	16.67%	6.25%	6.25%	6.67%	17.65%	13.33%	46.67%	8.33%
MM-Myanmar					0.00%	0.00%	0.00%	0.00%	0.00%	3.23%	6.67%	51.72%	30.77%	14.29%	0.00%	16.67%
MN-Mongolia	0.00%	0.00%	0.00%	2.94%	7.32%	5.13%	7.50%	0.00%	7.50%	0.00%	7.89%	0.00%	0.00%	0.00%	0.00%	0.00%
MU-Mauritius	0.00%	0.00%	0.00%	0.00%	14.29%	0.00%	11.11%	0.00%	28.57%	0.00%	0.00%	0.00%	0.00%	0.00%	11.11%	11.11%
MW-Malawi	0.00%	0.00%	0.00%	14.29%	0.00%	0.00%	0.00%	16.67%	0.00%	28.57%	0.00%	10.00%	0.00%	12.50%	0.00%	0.00%
MX-Mexico	10.00%	0.00%	4.00%	11.43%	2.50%	2.00%	5.17%	5.17%	1.92%	5.26%	6.56%	4.48%	1.59%	1.56%	2.74%	1.47%
MZ-Mozambique	0.00%	0.00%	0.00%	0.00%	11.11%	18.18%	10.00%	11.11%	8.33%	0.00%	9.09%	20.00%	0.00%	0.00%	10.00%	18.18%
NG-Nigeria	0.00%	3.45%	10.00%	0.00%	2.56%	6.00%	7.27%	10.53%	5.45%	1.72%	1.92%	3.77%	2.00%	4.35%	4.76%	2.70%
NI-Nicaragua	11.11%	0.00%	0.00%	7.14%	5.26%	0.00%	0.00%	0.00%	6.00%	4.26%	6.38%	0.00%	2.38%	2.56%	0.00%	0.00%
NP-Nepal	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%
PA-Panama	0.00%	0.00%	22.22%	0.00%	0.00%	9.52%	0.00%	4.17%	0.00%	0.00%	3.85%	0.00%	0.00%	3.85%	0.00%	0.00%
PE-Peru	4.17%	0.00%	0.00%	0.00%	0.00%	0.00%	2.38%	4.76%	0.00%	0.00%	3.33%	2.94%	2.44%	6.25%	6.67%	1.92%
PH-Philippines	6.25%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.52%	0.00%	18.75%	0.00%	7.14%	0.00%	0.00%	0.00%	0.00%
PK-Pakistan	0.00%	0.00%	4.55%	0.00%	4.17%	0.00%	2.86%	0.00%	0.00%	2.33%	0.00%	0.00%	0.00%	11.86%	0.00%	0.00%
PL-Poland	4.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.52%	0.00%	0.00%	2.17%	0.00%	0.00%	3.51%	0.00%	3.13%
PS-Palestinian Territory (West Bank and Gaza)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%	20.00%	35.71%	0.00%
PY-Paraguay	0.00%	0.00%	0.00%	0.00%	0.00%	4.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RO-Romania	2.13%	2.04%	5.56%	0.00%	0.00%	0.00%	3.51%	2.27%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RS-Serbia	4.88%	0.00%	5.17%	3.33%	4.76%	3.64%	0.00%	3.85%	0.00%	0.00%	4.00%	0.00%	0.00%	0.00%	2.27%	1.85%
RU-Russian Federation	3.03%	2.52%	1.20%	0.00%	3.31%	4.62%	2.13%	4.41%	0.00%	0.00%	0.00%	4.00%	0.00%	0.00%	22.22%	0.00%

ISO country code - ISO country name	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
RU-Russian Federation	0.00%	0.00%	6.45%	2.78%	24.39%	10.26%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.79%	2.07%	2.52%
RW-Rwanda	100.00%													0.00%	0.00%	25.00%
SI-Slovenia	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
SK-Slovakia		0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
SN-Senegal	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%	11.11%	0.00%	8.33%	0.00%	10.00%	0.00%	8.33%	7.69%	17.65%	5.88%
SV-El Salvador		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TG-Togo	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	25.00%	0.00%	0.00%	16.67%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%
TH-Thailand	0.00%	10.00%	0.00%	11.76%	20.00%	0.00%	16.67%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TJ-Tajikistan					50.00%	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%	25.00%	10.00%	0.00%	6.67%
TM-Turkmenistan							0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
TN-Tunisia	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.56%	0.00%	0.00%	0.00%
TR-Turkey	3.57%	6.90%	0.00%	2.63%	0.00%	6.98%	0.00%	4.17%	0.00%	11.36%	0.00%	4.65%	0.00%	0.00%	5.77%	2.00%
TT-Trinidad and Tobago	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.11%	0.00%	14.29%	0.00%
TZ-Tanzania	0.00%	20.00%	0.00%	40.00%	20.00%	0.00%	16.67%	0.00%	66.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
UA-Ukraine			20.00%	0.00%	0.00%	11.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.17%	4.48%
UG-Uganda	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.67%	0.00%
UY-Uruguay	0.00%	33.33%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	60.00%	50.00%	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%
UZ-Uzbekistan	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	20.00%	8.33%
VE-Venezuela	10.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%	0.00%
VN-Vietnam		0.00%	0.00%	0.00%	14.29%	0.00%	12.50%	33.33%	0.00%	20.00%	0.00%	0.00%	0.00%	14.29%	11.11%	0.00%
XK-Kosovo													0.00%	0.00%	0.00%	0.00%
ZA-South Africa					0.00%	0.00%	0.00%	0.00%	15.38%	7.69%	7.14%	7.14%	7.14%	5.56%	5.00%	0.00%
ZM-Zambia	0.00%	33.33%	0.00%	0.00%	0.00%	33.33%	0.00%	11.11%	11.11%	12.50%	0.00%	0.00%	22.22%	0.00%	11.11%	8.33%
ZW-Zimbabwe	5.26%	5.00%	0.00%	0.00%	5.88%	10.00%	0.00%	0.00%	16.67%	0.00%	0.00%	40.00%	0.00%	0.00%	0.00%	50.00%

ISO country code - ISO country name	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
RW-Rwanda	0.00%	0.00%	0.00%	0.00%	0.00%	13.33%	5.56%	0.00%	0.00%	28.57%	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%
SI-Slovenia																
SK-Slovakia																
SN-Senegal	0.00%	8.33%	4.17%	3.45%	7.14%	6.67%	3.33%	3.13%	12.50%	6.67%	11.43%	8.33%	2.63%	6.98%	8.16%	2.08%
SV-El Salvador	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.92%	0.00%	0.00%	0.00%
TG-Togo	0.00%	0.00%	0.00%	12.50%	0.00%	0.00%	20.00%	11.11%	0.00%	14.29%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TH-Thailand	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.67%	5.26%	0.00%	0.00%	0.00%	0.00%	0.00%	5.71%
TJ-Tajikistan	5.88%	10.00%	5.00%	0.00%	4.35%	3.85%	11.54%	9.52%	0.00%	0.00%	0.00%	0.00%	0.00%	4.55%	5.26%	4.76%
TM-Turkmenistan	0.00%	0.00%	8.33%	0.00%	6.25%	6.67%	0.00%	0.00%	0.00%	33.33%	12.50%	38.10%	55.56%	0.00%	0.00%	0.00%
TN-Tunisia	0.00%	4.35%	0.00%	4.35%	0.00%	9.38%	3.23%	0.00%	2.50%	2.50%	4.76%	0.00%	0.00%	2.70%	0.00%	0.00%
TR-Turkey	1.72%	0.00%	1.12%	0.00%	1.49%	1.39%	2.63%	0.60%	3.66%	3.14%	5.88%	1.17%	0.61%	0.62%	1.24%	1.75%
TT-Trinidad and Tobago	25.00%	0.00%	60.00%	0.00%	0.00%	0.00%				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TZ-Tanzania	0.00%	0.00%	0.00%	0.00%	6.67%	0.00%	9.09%	0.00%	4.17%	11.11%	17.39%	5.00%	0.00%	0.00%	0.00%	0.00%
UA-Ukraine	6.76%	1.32%	0.00%	3.00%	11.76%	12.37%	4.94%	0.00%	1.25%	6.82%	19.42%	0.00%	37.76%	3.64%	5.26%	3.70%
UG-Uganda	17.65%	0.00%	15.00%	0.00%	0.00%	0.00%	0.00%	10.34%	0.00%	6.45%	0.00%	5.88%	3.13%	3.23%	0.00%	3.33%
UY-Uruguay	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
UZ-Uzbekistan	46.15%	0.00%	0.00%	4.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.17%	5.88%	2.22%	1.69%	0.00%
VE-Venezuela	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%						
VN-Vietnam	5.56%	14.29%	0.00%	4.17%	8.70%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.56%	0.00%	0.00%	0.00%
XK-Kosovo	11.11%	15.38%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.33%	0.00%	0.00%	5.56%	0.00%	0.00%	0.00%	0.00%
ZA-South Africa	5.26%	2.56%	4.88%	3.57%	1.61%	3.28%	1.43%	2.74%	2.78%	3.66%	0.00%	1.11%	1.05%	4.67%	5.22%	1.80%
ZM-Zambia	0.00%	6.67%	0.00%	0.00%	0.00%	6.67%	11.76%	0.00%	0.00%	5.56%	14.29%	5.88%	0.00%	5.26%	5.56%	0.00%
ZW-Zimbabwe	0.00%	0.00%	25.00%	0.00%	16.67%	20.00%	25.00%	33.33%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

3.2.6 Default Rates by Country and Sector

3.2.6.1 Default Rates by Country and GICS Sector

Table 20 shows the average default rates by country and GICS sector, and tables 21-24 present the average annual default rates by country and sector groupings.

Table 20: Default Rates by Country and GICS Sector

ISO country code - ISO country name / Sector	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Materials	Others	Utilities
AL-Albania				0.79%					
AM-Armenia				0.00%					
AR-Argentina		4.66%		6.35%			4.72%		4.59%
AZ-Azerbaijan				4.02%					
BA-Bosnia and Herzegovina				1.07%					
BD-Bangladesh				1.81%					0.00%
BG-Bulgaria				0.34%					3.47%
BR-Brazil	3.18%	2.82%		0.54%		1.48%	2.15%		2.04%
CI-Cote D'Ivoire		10.00%		2.36%					3.76%
CL-Chile				0.00%					6.62%
CN-China	6.45%	3.37%		0.43%	2.20%		5.58%		1.01%
CO-Colombia				1.71%		2.31%			
CR-Costa Rica				0.74%					
DO-Dominican Republic				0.73%					
EC-Ecuador		2.24%		0.00%					
EG-Egypt				0.00%			3.29%		0.00%

ISO country code - ISO country name / Sector	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Materials	Others	Utilities
GE-Georgia		3.48%		0.62%					6.84%
GH-Ghana				3.33%					
GT-Guatemala				0.43%					
HN-Honduras				0.51%					4.24%
HU-Hungary				0.63%					
ID-Indonesia		2.22%		5.63%					
IN-India	5.96%	3.85%		0.96%	4.21%	2.86%	2.88%		2.24%
JO-Jordan				0.00%					0.53%
KE-Kenya				1.56%					1.55%
KG-Kyrgyzstan				0.00%					
KH-Cambodia				0.52%					
KZ-Kazakhstan		0.77%		2.16%					0.62%
LB-Lebanon				9.18%					
LK-Sri Lanka				6.90%					
MA-Morocco				1.09%					
MD-Moldova				0.62%					
MN-Mongolia				0.54%					
MX-Mexico	2.42%	4.10%		4.40%		3.24%	2.94%		1.52%
NG-Nigeria				2.11%					
NI-Nicaragua				1.58%					
PA-Panama				0.81%					
PE-Peru		5.63%		2.21%					1.52%
PH-Philippines				5.80%					2.04%
PK-Pakistan				6.91%					1.23%
PL-Poland				0.00%				2.16%	1.50%

ISO country code - ISO country name / Sector	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Materials	Others	Utilities
PY-Paraguay				0.00%					
RO-Romania		0.71%		0.49%					2.08%
RS-Serbia		6.25%		0.00%				0.82%	
RU-Russian Federation	1.95%	1.55%		2.16%		2.83%	2.13%	3.88%	
SN-Senegal				2.44%					6.25%
SV-El Salvador				0.00%					
TH-Thailand				1.20%					2.23%
TJ-Tajikistan				2.50%					
TM-Turkmenistan		13.28%							
TN-Tunisia				0.40%					
TR-Turkey	3.40%	3.60%		0.12%	3.73%	4.27%	1.61%	1.21%	2.86%
TZ-Tanzania				2.92%					
UA-Ukraine	2.07%	6.84%		3.47%		6.56%	7.39%		21.49%
UZ-Uzbekistan		8.82%		1.29%					0.00%
VN-Vietnam				0.65%					2.30%
ZA-South Africa	4.81%		0.30%	2.62%					2.38%
ZM-Zambia				3.64%					

Footnote: Communication Services data did not meet publication threshold

3.2.6.2 Default Rates by Country and Sector Groupings

Table 21: Default Rates by Country and GEMs Sector Grouping

ISO country code - ISO country name / GEMs Sector Grouping	Banking	Infrastructure	Non-Bank Financials	Renewables	Services
AM-Armenia	0.00%				
AR-Argentina	3.53%	4.10%			
AZ-Azerbaijan	3.39%				
BA-Bosnia and Herzegovina	0.97%				
BD-Bangladesh	0.00%	0.54%			
BG-Bulgaria	0.00%	2.93%			
BR-Brazil	0.35%	2.43%	1.04%		3.20%
CI-Cote D'Ivoire	2.48%	4.30%			
CL-Chile		6.00%	2.08%		1.79%
CN-China	1.54%	1.36%	0.00%		
CO-Colombia	0.00%	3.36%	3.50%		
CR-Costa Rica	0.00%		1.62%		1.43%
EC-Ecuador	0.00%				
EG-Egypt		0.48%		0.00%	
GE-Georgia	0.73%	4.48%			
GH-Ghana	2.90%				
GT-Guatemala			0.93%		1.14%
HN-Honduras		3.74%		4.73%	
HU-Hungary	0.66%				
ID-Indonesia	4.03%	0.00%			
IN-India	2.19%	2.42%	0.35%	1.79%	5.41%

ISO country code - ISO country name / GEMs Sector Grouping	Banking	Infrastructure	Non-Bank Financials	Renewables	Services
JO-Jordan		0.75%		0.31%	
KE-Kenya	0.85%	3.45%			
KG-Kyrgyzstan	0.00%				
KZ-Kazakhstan	2.96%	0.88%			
LB-Lebanon	8.22%				
LK-Sri Lanka	7.10%				
MD-Moldova	0.77%				
MX-Mexico	2.25%	3.35%	5.24%		5.22%
NG-Nigeria	2.27%	8.04%			
PA-Panama	0.00%				
PE-Peru	1.55%	0.91%			0.00%
PH-Philippines		2.88%			
PK-Pakistan	5.19%	1.62%		0.38%	
PL-Poland	0.00%	1.71%		1.86%	
PY-Paraguay	0.00%				
RO-Romania	0.43%	1.89%	0.67%		
RS-Serbia	0.00%				
RU-Russian Federation	2.13%	1.72%			5.17%
SN-Senegal		5.30%			
SV-El Salvador	0.00%	0.50%	0.00%		0.00%
TH-Thailand		2.82%			
TN-Tunisia	0.58%				
TR-Turkey	0.17%	2.64%	0.00%	4.57%	2.70%
TZ-Tanzania	2.59%				
UA-Ukraine	3.53%	14.93%		28.75%	

ISO country code - ISO country name / GEMs Sector Grouping	Banking	Infrastructure	Non-Bank Financials	Renewables	Services
UG-Uganda		4.15%			
UY-Uruguay		0.00%			
UZ-Uzbekistan	0.72%	0.00%			
VN-Vietnam	0.75%	5.83%			
ZA-South Africa	1.64%	2.45%			

Table 22a: Annual Default Rates by Country and GEMs Sector Grouping - Banking

ISO Country Code	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
AM								0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
AR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	62.50%	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%
AZ							0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	0.00%
BA							0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%	9.09%	0.00%	0.00%
BD	0.00%	0.00%	0.00%						0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BG				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BR	0.00%	0.00%	0.00%			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CI	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CN														0.00%	0.00%	0.00%
CO		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%						0.00%	0.00%	0.00%
CR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EC											0.00%	0.00%	0.00%	0.00%	0.00%	
GE						0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.29%	0.00%
GH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%							0.00%	0.00%
HU	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ID	0.00%	0.00%	0.00%	0.00%	80.00%	0.00%	0.00%	0.00%	0.00%			0.00%	0.00%	0.00%	0.00%	0.00%
IN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.29%	0.00%	25.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
KE					0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			0.00%	0.00%	0.00%	0.00%
KG										0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
KZ				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%
LB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	22.22%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
LK				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%
MD			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MX	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NG	0.00%	0.00%	0.00%	0.00%				0.00%	0.00%	16.67%	20.00%	0.00%	0.00%	0.00%	0.00%	7.69%

ISO Country Code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Code	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
AR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
AZ	0.00%	0.00%	0.00%	0.00%	0.00%	6.67%	14.81%	21.05%	9.09%	11.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BA	0.00%	0.00%	0.00%	0.00%	7.14%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BD	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BG	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CI	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%	10.00%	0.00%	0.00%	0.00%	10.53%	4.55%
CN	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CO	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EC		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
GE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
GH	0.00%	0.00%	0.00%	12.50%	0.00%	0.00%	14.29%	0.00%	12.50%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%
HU	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%								0.00%
ID	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.50%	0.00%
IN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.56%	0.00%	0.00%	6.67%	0.00%	0.00%
KE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
KG	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
KZ	0.00%	0.00%	9.09%	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
LB	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	50.00%	100.00%					
LK	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15.38%	80.00%	0.00%	0.00%	0.00%
MD	7.69%	0.00%	0.00%	0.00%	7.69%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MX			0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.09%	0.00%
NG	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.17%	7.41%	4.00%	0.00%	0.00%	0.00%	0.00%	6.67%	0.00%	0.00%

ISO Country Code	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
PA	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PK	0.00%	0.00%	0.00%	0.00%	14.29%	0.00%	0.00%	0.00%	6.67%	8.33%	25.00%	0.00%	0.00%	0.00%	33.33%	50.00%
PL	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PY																
RO		0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RS									0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RU		0.00%	0.00%	0.00%	16.67%	23.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.49%
SV							0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TN						0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%
TR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TZ					0.00%	0.00%	100.00%				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
UA			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.26%	4.35%
UZ								0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

ISO Country Code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
PE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%	0.00%	11.11%
PK	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PY		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RO	0.00%	0.00%	4.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RS	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RU	1.69%	3.51%	1.69%	0.00%	7.69%	2.38%	3.23%	4.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	
SV	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.70%	0.00%	0.00%	0.00%	0.00%	0.00%
TZ	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.50%	0.00%	0.00%	11.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
UA	0.00%	0.00%	0.00%	11.76%	6.25%	6.67%	11.11%	0.00%	0.00%	0.00%	0.00%	0.00%	8.33%	0.00%	10.00%	11.11%
UZ	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.25%	0.00%
VN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Table 22b: Annual Default Rates by Country and GEMs Sector Grouping - Infrastructure

ISO Country Code	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
AR	0.00%	0.00%	0.00%	0.00%	7.69%	0.00%	0.00%	7.14%	13.33%	41.67%	0.00%	11.11%	0.00%	0.00%	20.00%	0.00%
BD							0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%
BG								0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BR			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.88%	0.00%	5.26%	0.00%	7.69%	0.00%	6.25%
CI	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.29%	33.33%	20.00%	0.00%	0.00%	25.00%	16.67%	0.00%
CL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CN							0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%
CO	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EG									0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
GE							0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
HN		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%
ID				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
IN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	25.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%
JO				0.00%	0.00%	0.00%										
KE	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	20.00%	0.00%
KZ													0.00%	0.00%	0.00%	0.00%
MX	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.33%	8.33%	0.00%	11.11%	0.00%	0.00%	10.00%	0.00%	0.00%
NG											0.00%	0.00%	0.00%	50.00%	0.00%	0.00%
PE					0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PH	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	40.00%	0.00%	0.00%	14.29%	0.00%	0.00%	0.00%
PK			0.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.11%
PL	0.00%				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RO						0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RU							0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.14%	5.56%

ISO Country Code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
AR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.56%	9.09%	0.00%	0.00%	0.00%	0.00%	4.17%
BD	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BG	0.00%	0.00%	0.00%	9.09%	30.00%	0.00%	0.00%	9.09%	0.00%	0.00%	8.33%	0.00%	0.00%	0.00%	0.00%	0.00%
BR	0.00%	0.00%	0.00%	0.00%	5.00%	5.56%	11.76%	0.00%	0.00%	0.00%	5.00%	5.00%	0.00%	4.76%	0.00%	0.00%
CI	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.69%	0.00%	0.00%	10.53%	5.56%	0.00%
CL	0.00%	0.00%	0.00%	0.00%	7.69%	0.00%	33.33%	8.33%	7.69%	0.00%	12.50%	0.00%	0.00%	20.00%	0.00%	0.00%
CN	0.00%	0.00%	0.00%	0.00%	3.45%	3.70%	4.17%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%
CO	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.14%	6.67%	28.57%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%
EG	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	1.33%	0.00%	0.00%	0.00%	0.00%	1.27%
GE	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.67%	22.22%	0.00%	0.00%	7.14%	0.00%	0.00%	0.00%	0.00%
HN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.53%	0.00%	5.56%	0.00%	0.00%	0.00%	0.00%	30.00%	14.29%	0.00%
ID	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
IN	0.00%	0.00%	0.00%	6.45%	4.88%	0.00%	5.08%	0.00%	1.85%	5.00%	4.92%	3.77%	0.00%	0.00%	0.00%	0.00%
JO	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.50%	2.56%	2.56%	0.00%	0.00%
KE	0.00%	0.00%	16.67%	0.00%	14.29%	0.00%	0.00%	0.00%	0.00%	5.88%	0.00%	0.00%	0.00%	0.00%	0.00%	4.35%
KZ	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.17%
MX	0.00%	0.00%	0.00%	14.29%	0.00%	0.00%	6.67%	16.67%	0.00%	0.00%	0.00%	7.69%	0.00%	4.17%	4.35%	0.00%
NG	0.00%	20.00%	40.00%	0.00%	0.00%	14.29%	0.00%	0.00%	0.00%	0.00%	0.00%	12.50%	11.11%	14.29%	0.00%	20.00%
PE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.09%	9.09%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%
PK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.23%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.77%	0.00%	0.00%
PL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	18.75%	0.00%	0.00%	7.14%	0.00%	0.00%	0.00%	0.00%	0.00%
RO	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	18.18%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RU	0.00%	0.00%	0.00%	0.00%	0.00%	6.25%	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%			

ISO Country Code	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
SN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%	20.00%	25.00%	20.00%
SV		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
TH				0.00%	50.00%	0.00%	50.00%	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
UA					0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
UG			0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%			0.00%	0.00%
UY															0.00%	0.00%
UZ																
VN			0.00%	0.00%	100.00%					100.00%						0.00%
ZA							0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%

ISO Country Code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SN	0.00%	28.57%	0.00%	0.00%	9.09%	0.00%	0.00%	0.00%	12.50%	7.69%	0.00%	5.88%	5.88%	0.00%	11.11%	0.00%
SV						0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.26%	0.00%	0.00%	0.00%
TH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.33%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%
TR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.67%	6.56%	9.84%	4.08%	0.00%	2.17%	2.17%	2.13%
UA	0.00%	0.00%	0.00%	0.00%	7.69%	14.29%	8.33%	0.00%	5.56%	9.09%	51.52%	0.00%	53.33%	16.67%	0.00%	0.00%
UG	14.29%	0.00%	28.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.11%	5.88%	6.25%	0.00%	0.00%
UY	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
UZ				0.00%	0.00%	0.00%	0.00%					0.00%	0.00%	0.00%	0.00%	0.00%
VN	25.00%	25.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	7.69%	0.00%	0.00%	0.00%
ZA	0.00%	0.00%	0.00%	0.00%	0.00%	7.69%	0.00%	13.33%	0.00%	7.69%	0.00%	0.00%	0.00%	0.00%	4.55%	0.00%

Table 22c: Annual Default Rates by Country and GEMs Sector Grouping - Non-Bank Financials

ISO Country Code	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
BR										0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CL																
CN	0.00%				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			0.00%
CO		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%								
GT																
IN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MX										0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	42.86%
RO						0.00%	0.00%	0.00%			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
SV																

ISO Country Code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Code	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.50%	0.00%	0.00%
CL						33.33%	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CO	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	12.50%	12.50%	0.00%	0.00%	0.00%	12.50%	0.00%	0.00%	0.00%	0.00%
CR				0.00%	0.00%	6.25%	0.00%	5.88%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.69%	0.00%
GT					0.00%	6.25%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
IN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MX	25.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.56%	10.53%	10.53%	0.00%	6.25%	0.00%	0.00%	6.67%
RO	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
SV		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Table 22d: Annual Default Rates by Country and GEMs Sector Grouping - Renewables

ISO Country Code	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EG																
HN																
IN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			0.00%	0.00%	0.00%
JO																
PK																
PL																
TR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%		0.00%	0.00%			0.00%
UA																

ISO Country Code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
EG									0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
HN			0.00%	0.00%	0.00%	0.00%	11.76%	0.00%	6.25%	0.00%	0.00%	0.00%	0.00%	30.00%	14.29%	0.00%
IN	0.00%	0.00%	0.00%	0.00%	4.76%	0.00%	6.45%	0.00%	3.03%	2.38%	2.22%	4.44%	0.00%	0.00%	0.00%	0.00%
JO				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.94%	0.00%	0.00%	0.00%
PK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.94%	0.00%	0.00%
PL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.33%	6.67%	6.67%	7.14%	0.00%	6.67%	6.67%	11.11%
UA					0.00%	50.00%	0.00%	0.00%	20.00%	0.00%	69.57%	0.00%	37.50%	20.00%	0.00%	0.00%

Table 22e: Annual Default Rates by Country and GEMs Sector Grouping - Services

ISO Country Code	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
BR			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.29%	0.00%	0.00%	0.00%	0.00%	0.00%	11.11%
CL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			0.00%	0.00%	0.00%	0.00%	0.00%
CR	0.00%	0.00%														
GT																
IN											0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MX	0.00%	0.00%	0.00%	0.00%	0.00%				0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%
PE					0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RU							0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.50%
SV		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%						
TR	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.67%

ISO Country Code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
BR	0.00%	0.00%	0.00%	7.69%	0.00%	10.00%	9.09%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%
CL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%	14.29%	0.00%	0.00%	0.00%	0.00%	0.00%
CR				0.00%	0.00%	5.56%	0.00%	4.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.14%	0.00%
GT	0.00%	0.00%				7.14%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
IN	0.00%	0.00%	0.00%	16.67%	40.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%
MX	33.33%	0.00%		0.00%	0.00%	0.00%	0.00%	7.69%	11.11%	0.00%	0.00%	0.00%	14.29%	0.00%	16.67%	16.67%
PE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RU	8.33%	9.09%	0.00%	0.00%	0.00%	25.00%	20.00%	0.00%	0.00%			0.00%	0.00%	0.00%		
SV						0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TR	25.00%	0.00%	0.00%	0.00%	12.50%	0.00%	0.00%	0.00%	0.00%	0.00%	8.33%	0.00%	0.00%	0.00%	0.00%	0.00%

3.2.6.3 Default Rates by Country and Financial Industries Sector

Table 23: Default Rates by Country and Financial Industries Sector

ISO country code - ISO country name / Financial Industries Sector	Financial Institutions	Non-Financial Institutions
AL-Albania	0.79%	8.85%
AM-Armenia		3.07%
AR-Argentina	6.35%	3.95%
AZ-Azerbaijan	4.02%	4.92%
BA-Bosnia and Herzegovina	1.07%	4.07%
BD-Bangladesh	1.81%	2.08%
BF-Burkina Faso		12.23%
BG-Bulgaria	0.34%	4.05%
BJ-Benin		13.97%
BO-Bolivia		6.80%
BR-Brazil	0.54%	2.34%
BY-Belarus		6.32%
CD-Congo, Democratic Republic of		5.88%
CI-Cote D'Ivoire	2.36%	8.44%
CL-Chile		4.14%
CM-Cameroon		4.36%
CN-China	0.43%	3.53%
CO-Colombia	1.71%	2.56%
CR-Costa Rica	0.74%	1.92%
CZ-Czech Republic		6.54%
DO-Dominican Republic	0.73%	3.15%
EC-Ecuador		2.01%
EG-Egypt		2.38%
GA-Gabon		3.33%
GE-Georgia	0.62%	2.93%
GH-Ghana	3.33%	6.58%
GT-Guatemala	0.43%	2.84%
HN-Honduras	0.51%	2.88%
HR-Croatia		2.65%
HT-Haiti		7.75%
HU-Hungary	0.63%	2.16%
ID-Indonesia	5.63%	3.82%
IN-India	0.96%	3.35%
JM-Jamaica		2.06%
JO-Jordan		2.02%
KE-Kenya	1.56%	4.36%

ISO country code - ISO country name / Financial Industries Sector	Financial Institutions	Non-Financial Institutions
KG-Kyrgyzstan		0.57%
KH-Cambodia	0.52%	
KZ-Kazakhstan	2.16%	1.45%
LB-Lebanon	9.18%	9.09%
LK-Sri Lanka	6.90%	
MA-Morocco	1.09%	1.85%
MD-Moldova	0.62%	3.54%
ME-Montenegro		2.58%
MG-Madagascar		7.25%
MK-Macedonia, Former Yugoslav Republic of		1.52%
ML-Mali		14.81%
MM-Myanmar		13.27%
MN-Mongolia	0.54%	3.69%
MU-Mauritius		4.29%
MX-Mexico	4.40%	3.38%
MZ-Mozambique		6.28%
NG-Nigeria	2.11%	7.44%
NI-Nicaragua	1.58%	3.64%
PA-Panama	0.81%	4.51%
PE-Peru	2.21%	2.52%
PH-Philippines	5.80%	5.02%
PK-Pakistan	6.91%	3.93%
PL-Poland		2.48%
PY-Paraguay		0.72%
RO-Romania	0.49%	1.40%
RS-Serbia		3.04%
RU-Russian Federation	2.16%	2.43%
RW-Rwanda		7.48%
SN-Senegal	2.44%	7.29%
SV-El Salvador		0.36%
TG-Togo		6.87%
TH-Thailand	1.20%	3.46%
TJ-Tajikistan	2.50%	7.11%
TM-Turkmenistan		13.45%
TN-Tunisia	0.40%	2.77%
TR-Turkey	0.12%	2.88%
TZ-Tanzania	2.92%	7.46%
UA-Ukraine	3.47%	7.58%

ISO country code - ISO country name / Financial Industries Sector	Financial Institutions	Non-Financial Institutions
UG-Uganda		4.33%
UY-Uruguay		1.49%
UZ-Uzbekistan	1.29%	5.52%
VE-Venezuela		6.40%
VN-Vietnam	0.65%	4.02%
XK-Kosovo		1.90%
ZA-South Africa	2.62%	3.11%
ZM-Zambia	3.64%	6.77%
ZW-Zimbabwe		6.62%

Table 24a: Annual Default Rates by Country and Financial Industries Sector - Financial Institutions

ISO Country Code	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
AL		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
AM								0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
AR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	66.67%	0.00%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%
AZ							0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.57%	2.70%
BA							0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%	7.69%	0.00%	0.00%
BD	0.00%	0.00%	0.00%				0.00%	100.00%	0.00%	0.00%	25.00%	0.00%	20.00%	0.00%	0.00%	0.00%
BG				0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BR	0.00%	0.00%	0.00%			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CI	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%							0.00%	0.00%	0.00%	0.00%
CN	0.00%				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CO		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
DO											100.00%		0.00%	0.00%	0.00%	0.00%
EC											0.00%	0.00%	0.00%	0.00%	0.00%	
EG									0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
GE						0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.33%	0.00%
GH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%							0.00%	0.00%
GT											0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
HN													0.00%	0.00%	0.00%	0.00%
HU	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ID	0.00%	0.00%	0.00%	0.00%	80.00%	0.00%	0.00%	0.00%	0.00%			0.00%	0.00%	0.00%	0.00%	0.00%
IN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.09%	0.00%	12.50%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%
JO								0.00%	0.00%	0.00%	0.00%	0.00%			0.00%	0.00%
KE					0.00%	0.00%	0.00%	0.00%	0.00%				0.00%	0.00%	0.00%	0.00%
KG										0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
KH												0.00%	0.00%	0.00%	0.00%	0.00%
KZ				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	17.65%
LB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	22.22%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
LK	0.00%			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%

ISO Country Code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
AL	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
AM	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
AR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.29%	0.00%	20.00%	9.09%	0.00%	0.00%	0.00%	0.00%
AZ	0.00%	2.86%	0.00%	0.00%	0.00%	8.33%	16.13%	21.05%	9.09%	11.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BA	5.26%	0.00%	0.00%	0.00%	6.25%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BD	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.09%	0.00%	0.00%	0.00%	0.00%
BG	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.17%	0.00%	0.00%
CI	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%	10.00%	0.00%	0.00%	0.00%	9.09%	3.85%
CL	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CN	0.00%	0.00%	0.00%	0.00%	0.00%	8.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CO	0.00%	0.00%	0.00%	0.00%	0.00%	6.25%	5.88%	6.25%	0.00%	0.00%	0.00%	5.26%	0.00%	0.00%	0.00%	0.00%
CR	0.00%	0.00%	0.00%	0.00%	0.00%	3.23%	0.00%	3.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.55%	0.00%
DO	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EC		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EG	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
GE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
GH	0.00%	0.00%	0.00%	11.11%	0.00%	0.00%	12.50%	0.00%	11.11%	11.11%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%
GT	0.00%	0.00%	0.00%	0.00%	0.00%	4.76%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
HN	0.00%	0.00%	0.00%	0.00%	0.00%	4.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
HU	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%								0.00%
ID	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.29%	25.00%	0.00%	0.00%	0.00%	15.38%	0.00%
IN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.17%	1.47%	0.00%	0.00%	1.67%	0.00%	0.00%
JO	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
KE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.64%	4.76%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.85%
KG	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
KH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.14%
KZ	0.00%	0.00%	8.33%	0.00%	11.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
LB	0.00%	0.00%	0.00%	0.00%	14.29%	0.00%	0.00%	0.00%	0.00%	60.00%	100.00%					

ISO Country Code	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
MA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%						0.00%	0.00%	0.00%
MD			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MN										0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.50%
MX	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	37.50%
NG	0.00%	0.00%	0.00%	0.00%				0.00%	0.00%	16.67%	16.67%	0.00%	0.00%	0.00%	0.00%	7.69%
NI							0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	28.57%
PA	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PH	0.00%		0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%	100.00%	0.00%	50.00%	0.00%	0.00%	25.00%	0.00%
PK	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	6.67%	8.33%	25.00%	0.00%	16.67%	0.00%	50.00%	50.00%
PL	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PY																
RO		0.00%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RS									0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RU		0.00%	0.00%	0.00%	23.08%	23.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.39%
SN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
SV							0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TH		0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TJ												0.00%	16.67%	0.00%	0.00%	0.00%
TN						0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%
TR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TZ					0.00%	0.00%	100.00%				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
UA			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	4.17%
UZ								0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
VN										0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%
ZA					0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%
ZM					0.00%	0.00%	0.00%	0.00%	0.00%					0.00%	0.00%	0.00%

ISO Country Code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
LK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.52%	77.78%	0.00%	0.00%	0.00%
MA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.33%	0.00%	0.00%
MD	6.67%	0.00%	0.00%	0.00%	5.56%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MX	25.00%	0.00%	16.67%	0.00%	10.00%	0.00%	0.00%	0.00%	5.26%	10.00%	10.00%	0.00%	5.00%	0.00%	3.33%	4.35%
NG	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.90%	6.90%	3.70%	0.00%	0.00%	0.00%	0.00%	4.35%	0.00%	0.00%
NI	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.76%	0.00%	0.00%	0.00%	5.26%	0.00%	0.00%	0.00%
PA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	0.00%	0.00%	4.55%	0.00%	0.00%
PE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.09%	9.09%	0.00%	14.29%	0.00%	6.67%
PH	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PK	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%
PL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PY		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RO	0.00%	0.00%	7.69%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RS	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RU	1.56%	3.28%	1.47%	0.00%	5.08%	4.17%	2.78%	7.69%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	
SN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.29%	0.00%	0.00%	18.18%	7.69%	0.00%
SV	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TH	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TJ	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	21.43%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.27%	0.00%	0.00%	0.00%	0.00%	0.00%
TZ	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.11%	0.00%	0.00%	9.09%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%
UA	0.00%	0.00%	0.00%	10.00%	5.56%	12.50%	11.11%	0.00%	0.00%	0.00%	0.00%	0.00%	7.69%	0.00%	8.33%	9.09%
UZ	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.56%	0.00%
VN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ZA	11.11%	0.00%	0.00%	0.00%	7.14%	0.00%	0.00%	0.00%	6.67%	0.00%	0.00%	0.00%	0.00%	9.52%	0.00%	0.00%
ZM	0.00%	12.50%	0.00%	0.00%	0.00%	14.29%	0.00%	0.00%	0.00%	14.29%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%

Table 24b: Annual Default Rates by Country and Financial Industries Sector - Non-Financial Institutions

ISO Country Code	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
AL	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
AM								0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
AR	0.00%	1.56%	0.00%	1.54%	2.08%	4.44%	7.69%	2.50%	24.39%	27.59%	4.35%	4.17%	11.11%	0.00%	11.76%	0.00%
AZ					0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BA					0.00%	0.00%	42.86%	40.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BD	0.00%	0.00%	0.00%	100.00%			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.50%	12.50%	0.00%
BF	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	10.00%	22.22%	22.22%	0.00%	22.22%	10.00%
BG				0.00%	50.00%	50.00%	40.00%	0.00%	0.00%	27.27%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%
BJ	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	25.00%	0.00%	28.57%	0.00%	25.00%	0.00%	20.00%	0.00%	0.00%
BO	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	12.50%	20.00%	40.00%	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%
BR	0.00%	0.00%	0.00%	5.26%	0.00%	0.00%	1.72%	0.00%	5.80%	6.25%	0.00%	1.82%	0.00%	2.22%	2.17%	7.55%
BY													0.00%	0.00%		0.00%
CD	0.00%	0.00%	0.00%	0.00%	0.00%					0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%
CI	9.09%	0.00%	0.00%	12.50%	14.29%	6.25%	15.79%	17.65%	14.29%	33.33%	12.50%	0.00%	16.67%	16.67%	12.50%	0.00%
CL	0.00%	0.00%	9.09%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CM	0.00%	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CN	0.00%	16.67%	16.67%	0.00%	0.00%	0.00%	0.00%	7.69%	5.56%	6.25%	0.00%	6.67%	13.64%	6.25%	0.00%	4.00%
CO	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%
CZ	16.67%	12.50%	8.33%	0.00%	11.11%	14.29%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.29%	0.00%	
DO	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.29%	0.00%	14.29%	28.57%	0.00%	9.09%	0.00%	0.00%	0.00%
EC	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	20.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%
EG	12.50%	0.00%	10.00%	0.00%	0.00%	5.88%	0.00%	7.14%	18.75%	6.25%	0.00%	4.76%	0.00%	0.00%	4.00%	4.35%
GA	0.00%	0.00%	0.00%	0.00%	0.00%			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
GE					0.00%	0.00%	0.00%	25.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	5.26%	4.35%
GH	16.67%	16.67%	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
GT	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

ISO Country Code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
AL	25.00%	0.00%	6.25%	11.76%	6.25%	14.29%	27.27%	42.86%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%
AM	9.52%	9.09%	0.00%	5.26%	0.00%	5.88%	5.56%	0.00%	0.00%	6.67%	6.25%	0.00%	0.00%	6.25%	0.00%	0.00%
AR	0.00%	0.00%	0.00%	6.45%	0.00%	0.00%	0.00%	0.00%	6.25%	8.11%	4.65%	2.50%	0.00%	0.00%	2.56%	2.63%
AZ	10.00%	0.00%	9.09%	16.67%	0.00%	0.00%	15.79%	18.75%	7.69%	0.00%	6.67%	0.00%	15.38%	9.09%	0.00%	0.00%
BA	10.00%	0.00%	15.00%	0.00%	12.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BD	0.00%	12.50%	0.00%	9.09%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.00%	4.55%	0.00%	0.00%	0.00%	2.78%
BF	0.00%	20.00%	25.00%	20.00%	0.00%	33.33%	0.00%	20.00%	20.00%	0.00%	0.00%	0.00%	0.00%	10.00%	20.00%	30.00%
BG	0.00%	7.69%	0.00%	3.57%	10.00%	0.00%	3.33%	6.45%	0.00%	0.00%	8.00%	0.00%	0.00%	0.00%	7.14%	0.00%
BJ	16.67%	0.00%	50.00%	14.29%	14.29%	28.57%	16.67%	33.33%	0.00%	0.00%	40.00%	0.00%	33.33%	0.00%	25.00%	0.00%
BO	0.00%	16.67%	33.33%	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BR	0.00%	0.00%	4.55%	4.88%	7.89%	2.94%	7.89%	5.56%	0.00%	0.00%	2.38%	2.08%	0.00%	1.79%	0.00%	1.47%
BY	0.00%	20.00%	0.00%	0.00%	6.25%	7.14%	0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	41.18%	14.29%	0.00%	
CD	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.50%	14.29%	12.50%	11.11%	12.50%	0.00%	0.00%	0.00%	0.00%	0.00%
CI	0.00%	33.33%	0.00%	0.00%	10.53%	5.00%	4.35%	4.76%	9.09%	4.55%	10.71%	6.67%	0.00%	13.33%	5.56%	5.00%
CL	0.00%	0.00%	0.00%	0.00%	6.25%	0.00%	27.27%	5.88%	5.88%	0.00%	9.09%	0.00%	0.00%	9.09%	0.00%	9.09%
CM	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	18.75%	7.14%	0.00%	10.00%	0.00%	0.00%	8.70%	18.18%	0.00%	5.88%
CN	3.85%	1.85%	0.00%	3.70%	11.11%	8.00%	2.22%	0.00%	2.13%	4.17%	4.08%	1.82%	0.00%	2.00%	2.17%	2.17%
CO	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.55%	4.55%	21.05%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CR	0.00%	0.00%	0.00%	16.67%	0.00%	6.25%	0.00%	0.00%	0.00%	0.00%	4.17%	0.00%	0.00%	0.00%	0.00%	0.00%
CZ																
DO	0.00%	0.00%	5.88%	0.00%	0.00%	15.38%	0.00%	11.11%	8.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EC	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.26%	0.00%	0.00%	0.00%	0.00%	0.00%	5.26%	0.00%	0.00%	0.00%
EG	10.00%	5.26%	0.00%	0.00%	10.00%	4.76%	4.55%	3.85%	2.38%	2.83%	1.90%	0.97%	0.99%	0.00%	0.00%	0.99%
GA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	9.09%	0.00%
GE	8.33%	10.34%	0.00%	0.00%	0.00%	0.00%	0.00%	2.33%	10.64%	0.00%	2.56%	5.26%	0.00%	0.00%	0.00%	0.00%
GH	0.00%	0.00%	0.00%	0.00%	10.00%	10.53%	5.26%	4.55%	8.70%	0.00%	4.35%	7.41%	4.00%	24.00%	13.04%	10.00%
GT	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.09%	10.00%	22.22%	12.50%	14.29%	0.00%	0.00%	0.00%	0.00%	0.00%
HN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.00%	0.00%	4.00%	0.00%	0.00%	0.00%	0.00%	18.75%	8.33%	0.00%
HR	0.00%	9.09%	10.00%	11.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.56%	10.00%	0.00%			

ISO Country Code	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
HN		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
HR			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%
HT			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
HU	0.00%	0.00%	0.00%	8.33%	0.00%	0.00%	0.00%	12.50%	14.29%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ID	0.00%	0.00%	0.00%	0.00%	33.33%	6.67%	6.67%	7.69%	7.69%	0.00%	13.33%	0.00%	0.00%	0.00%	0.00%	0.00%
IN	0.00%	0.00%	0.00%	10.53%	15.00%	0.00%	0.00%	10.00%	23.08%	11.11%	6.67%	4.76%	0.00%	0.00%	5.88%	4.26%
JM	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	50.00%	0.00%	0.00%	14.29%	0.00%	12.50%	0.00%	0.00%	0.00%	0.00%
JO	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	18.18%	0.00%	10.00%	14.29%	0.00%	0.00%	0.00%	0.00%
KE	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	20.00%	22.22%	0.00%	12.50%	0.00%	11.11%	0.00%	0.00%	9.09%	0.00%
KG			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
KZ					0.00%	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
LB	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	40.00%	0.00%	0.00%	66.67%	0.00%	0.00%	0.00%	0.00%	0.00%
MA	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MD				0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ME													0.00%	0.00%	0.00%	0.00%
MG	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	42.86%	0.00%	0.00%	0.00%	0.00%
MK						0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%
ML	0.00%	0.00%	0.00%	0.00%	12.50%	42.86%	0.00%	0.00%	0.00%	20.00%	20.00%	11.11%	0.00%	12.50%	0.00%	25.00%
MM																
MN															0.00%	0.00%
MU	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MX	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.23%	10.34%	3.70%	10.34%	4.17%	0.00%	8.00%	0.00%	10.53%
MZ	0.00%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%	12.50%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	10.00%
NG	33.33%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%	16.67%	6.67%	7.69%
NI						0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PA			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.29%	11.11%	9.09%	8.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PH	0.00%	9.09%	0.00%	12.50%	0.00%	0.00%	0.00%	9.09%	16.67%	33.33%	20.00%	0.00%	8.33%	14.29%	0.00%	0.00%
PK	0.00%	0.00%	0.00%	5.00%	61.90%	14.29%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%	0.00%	6.25%	13.33%
PL	9.68%	3.57%	3.33%	0.00%	0.00%	4.55%	0.00%	4.17%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PY													0.00%	0.00%		0.00%

ISO Country Code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
HT	0.00%	0.00%	0.00%	20.00%	0.00%	0.00%	7.14%	7.69%	0.00%	41.67%	0.00%	10.00%	0.00%	22.22%	0.00%	0.00%
HU	0.00%	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ID	0.00%	0.00%	6.67%	0.00%	0.00%	0.00%	6.25%	5.56%	0.00%	0.00%	11.11%	4.17%	0.00%	0.00%	0.00%	5.00%
IN	1.79%	6.15%	0.00%	4.94%	6.59%	1.04%	3.88%	0.00%	4.17%	7.45%	5.32%	3.57%	1.25%	1.18%	0.00%	0.00%
JM	0.00%	0.00%	7.14%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
JO	0.00%	0.00%	0.00%	6.25%	0.00%	0.00%	0.00%	2.27%	0.00%	2.33%	2.22%	2.17%	2.04%	2.13%	0.00%	0.00%
KE	0.00%	0.00%	7.69%	0.00%	11.76%	0.00%	4.35%	4.17%	4.17%	3.23%	2.86%	3.23%	0.00%	7.69%	0.00%	6.82%
KG	0.00%	0.00%	0.00%	7.69%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
KZ	12.50%	13.33%	5.88%	0.00%	3.13%	0.00%	0.00%	0.00%	0.00%	0.00%	2.44%	0.00%	0.00%	0.00%	0.00%	3.03%
LB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	83.33%	0.00%	0.00%	0.00%	0.00%	0.00%
MA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.33%	0.00%	0.00%	0.00%	3.85%	0.00%	0.00%	3.70%	0.00%	6.90%
MD	0.00%	12.50%	0.00%	0.00%	0.00%	23.08%	9.09%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ME	9.09%	0.00%	0.00%	0.00%	0.00%	0.00%	5.56%	0.00%	14.29%	0.00%	0.00%	7.69%	0.00%	0.00%	0.00%	0.00%
MG	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	75.00%	0.00%	25.00%	0.00%	0.00%	28.57%	0.00%	0.00%	16.67%	40.00%
MK	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ML	16.67%	40.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	25.00%	11.11%	12.50%	12.50%	33.33%	25.00%	62.50%	25.00%
MM						0.00%	0.00%	0.00%	0.00%	5.00%	10.00%	44.44%	30.00%	16.67%	0.00%	0.00%
MN	0.00%	0.00%	0.00%	4.00%	9.38%	7.14%	10.34%	0.00%	10.34%	0.00%	10.71%	0.00%	0.00%	0.00%	0.00%	0.00%
MU	0.00%	0.00%	0.00%	0.00%	22.22%	0.00%	20.00%	0.00%	66.67%	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	50.00%
MX	6.25%	0.00%	0.00%	13.79%	0.00%	2.70%	6.98%	7.32%	0.00%	2.70%	4.88%	6.67%	0.00%	2.38%	2.33%	0.00%
MZ	0.00%	0.00%	0.00%	0.00%	16.67%	28.57%	0.00%	16.67%	11.11%	0.00%	10.00%	22.22%	0.00%	0.00%	10.00%	18.18%
NG	0.00%	7.69%	23.08%	0.00%	5.26%	12.50%	7.69%	14.29%	7.14%	3.23%	3.85%	7.41%	4.17%	4.35%	9.09%	4.76%
NI	20.00%	0.00%	0.00%	10.00%	9.09%	0.00%	0.00%	0.00%	6.90%	7.14%	10.71%	0.00%	0.00%	4.35%	0.00%	0.00%
PA	0.00%	0.00%	33.33%	0.00%	0.00%	20.00%	0.00%	11.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PE	6.67%	0.00%	0.00%	0.00%	0.00%	0.00%	4.35%	8.33%	0.00%	0.00%	0.00%	0.00%	3.45%	2.94%	9.09%	0.00%
PH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15.38%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%
PK	0.00%	0.00%	5.26%	0.00%	4.35%	0.00%	2.94%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.32%	0.00%	0.00%
PL	12.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.50%	0.00%	0.00%	4.17%	0.00%	0.00%	5.13%	0.00%	4.26%
PY	0.00%	0.00%	0.00%	0.00%	0.00%	12.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RO	4.17%	4.55%	3.57%	0.00%	0.00%	0.00%	5.56%	4.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

ISO Country Code	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
RO	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00%	6.25%	6.25%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RS									0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.76%
RU	0.00%	0.00%	9.52%	4.00%	25.00%	3.85%	6.45%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.41%	3.80%	3.45%
RW		100.00%												0.00%	0.00%	25.00%
SN	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%	12.50%	0.00%	11.11%	0.00%	9.09%	8.33%	25.00%	9.09%
SV		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TG	0.00%		0.00%	0.00%	50.00%	0.00%	50.00%	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%
TH	0.00%	11.11%	0.00%	7.69%	25.00%	0.00%	22.22%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TJ					50.00%	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%	50.00%	33.33%	0.00%	33.33%
TM							0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
TN	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TR	4.76%	8.70%	0.00%	4.17%	0.00%	11.54%	0.00%	6.67%	0.00%	15.63%	0.00%	6.06%	0.00%	0.00%	6.98%	2.50%
TZ	0.00%	20.00%	0.00%	40.00%	25.00%	0.00%	0.00%	0.00%	66.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
UA			25.00%	0.00%	0.00%	12.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.33%	4.65%
UG	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.33%	0.00%
UY	0.00%	50.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	33.33%	50.00%	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%
UZ	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	37.50%	28.57%	12.50%
VE	11.11%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	16.67%	0.00%	0.00%	0.00%
VN		0.00%	0.00%	0.00%	14.29%	0.00%	12.50%	33.33%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	16.67%	0.00%
XK														0.00%	0.00%	0.00%
ZA					0.00%	0.00%	0.00%	0.00%	11.11%	11.11%	10.00%	9.09%	0.00%	6.25%	6.25%	0.00%
ZM	0.00%	33.33%	0.00%	0.00%	0.00%	40.00%	0.00%	12.50%	12.50%	12.50%	0.00%	0.00%	22.22%	0.00%	12.50%	11.11%
ZW	8.33%	7.14%	0.00%	0.00%	8.33%	11.11%	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	50.00%

ISO Country Code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
RS	7.41%	0.00%	8.11%	5.26%	7.50%	5.41%	0.00%	5.56%	0.00%	0.00%	6.06%	0.00%	0.00%	0.00%	3.85%	3.33%
RU	3.96%	2.04%	1.02%	0.00%	1.10%	4.88%	1.72%	2.38%	0.00%	0.00%	0.00%	7.69%	0.00%	0.00%	14.29%	0.00%
RW	0.00%	0.00%	0.00%	0.00%	0.00%	22.22%	10.00%	0.00%	0.00%	35.71%	0.00%	0.00%	0.00%	12.50%	0.00%	0.00%
SN	0.00%	11.11%	6.25%	4.76%	9.09%	8.33%	3.85%	3.45%	15.38%	8.00%	10.71%	10.71%	3.70%	3.13%	8.33%	2.94%
SV	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.17%	0.00%	0.00%	0.00%
TG	0.00%	0.00%	0.00%	14.29%	0.00%	0.00%	25.00%	14.29%	0.00%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TH	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.69%	6.25%	0.00%	0.00%	0.00%	0.00%	0.00%	7.41%
TJ	14.29%	22.22%	12.50%	0.00%	11.11%	9.09%	0.00%	9.09%	0.00%	0.00%	0.00%	0.00%	0.00%	7.69%	7.69%	8.33%
TM	0.00%	0.00%	9.09%	0.00%	6.67%	7.14%	0.00%	0.00%	0.00%	33.33%	12.50%	38.10%	55.56%	0.00%	0.00%	0.00%
TN	0.00%	6.25%	0.00%	5.26%	0.00%	14.29%	5.26%	0.00%	4.17%	4.55%	10.53%	0.00%	0.00%	5.56%	0.00%	0.00%
TR	2.22%	0.00%	1.61%	0.00%	2.11%	1.96%	3.77%	0.81%	4.96%	4.17%	6.99%	1.57%	0.83%	0.82%	1.77%	2.46%
TZ	0.00%	0.00%	0.00%	0.00%	12.50%	0.00%	8.33%	0.00%	7.14%	12.50%	28.57%	0.00%	0.00%	0.00%	0.00%	0.00%
UA	9.62%	1.79%	0.00%	1.25%	13.10%	12.35%	4.17%	0.00%	1.33%	7.14%	20.83%	0.00%	42.35%	4.65%	4.44%	2.33%
UG	23.08%	0.00%	13.33%	0.00%	0.00%	0.00%	0.00%	9.52%	0.00%	8.33%	0.00%	7.14%	3.57%	3.85%	0.00%	4.35%
UY	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
UZ	62.50%	0.00%	0.00%	5.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.14%	8.70%	3.23%	0.00%	0.00%
VE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%						
VN	8.33%	21.43%	0.00%	6.67%	13.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.85%	0.00%	0.00%	0.00%
XK	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%	12.50%	0.00%	0.00%	0.00%	0.00%
ZA	3.45%	3.45%	6.90%	4.76%	0.00%	4.17%	1.82%	3.45%	1.75%	4.41%	0.00%	1.32%	1.32%	3.49%	6.12%	2.08%
ZM	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	21.43%	8.33%	0.00%	7.14%	0.00%	0.00%
ZW	0.00%	0.00%	33.33%	0.00%	33.33%	0.00%	50.00%	0.00%	0.00%	0.00%			0.00%	0.00%	0.00%	0.00%

3.2.7 Default Rates by Income Group

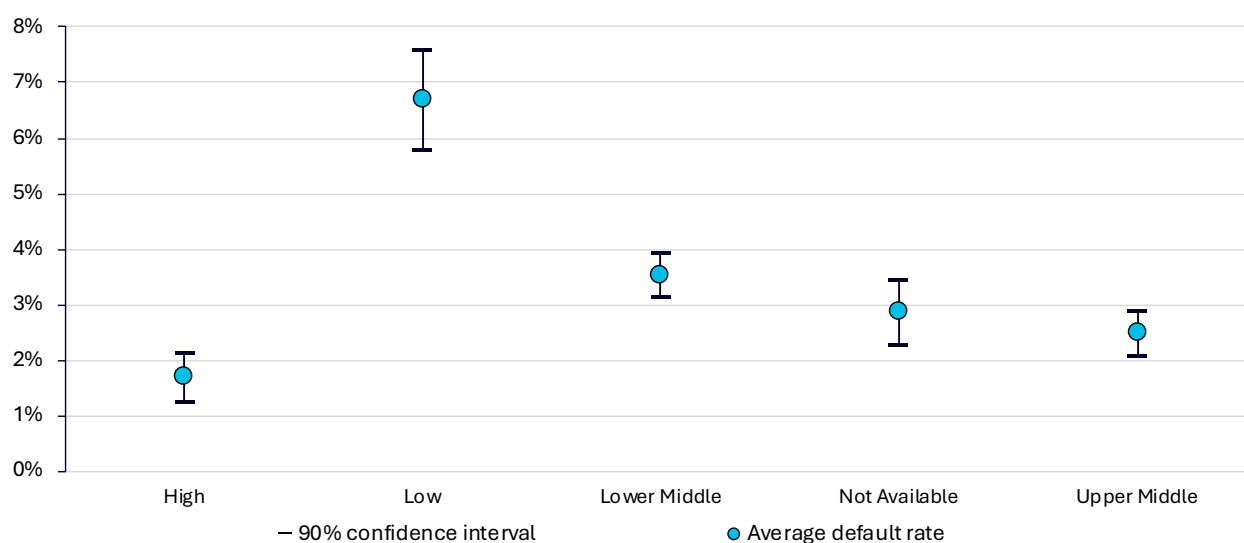
The default rates in this section are categorised according to the World Bank income group classification at the time of each default or observation. The highest average default rate of 6.7% is observed in the low-income group

countries. Consistent with the previous year, there is an inverse relationship between income classification and default rates, with average default rates increasing as income levels decline.

Table 25: Default Rates by Income Group

Income Group	Counterparts	Signed amount (€m)	Defaults / observations	Average DR (90% CI)
High	978	47,071	62 / 3,654	1.70% (1.24%–2.16%)
Upper Middle	5,045	202,152	635 / 25,307	2.51% (2.09%–2.92%)
Lower Middle	4,600	125,989	768 / 21,710	3.54% (3.13%–3.94%)
Low	1,343	13,010	429 / 6,415	6.69% (5.81%–7.57%)
Not Available	656	49,294	94 / 3,275	2.87% (2.30%–3.44%)
Overall (including omitted categories)	10,409	440,059	1,988 / 60,361	3.29% (2.95%–3.64%)

Figure 17: Default Rates by Income Group



3.2.8 Default Rates by Income Group and Region

Table 26 shows default rates by income group and World Bank regions. The highest default rate

of 10.1% is observed in the low-income group in the East Asia & Pacific region.

Table 26: Default Rates by Income Group and World Bank Region

Region / Income Group	High	Upper Middle	Lower Middle	Low	Not Available
East Asia & Pacific		2.34%	3.72%	10.11%	
Europe & Central Asia	1.33%	2.32%	4.14%	4.17%	0.00%
Latin America & Caribbean	2.38%	2.43%	2.76%	7.03%	
Middle East, North Africa, Afghanistan & Pakistan	0.35%	4.51%	2.47%	8.72%	
South Asia		0.00%	2.53%	4.38%	
Sub-Saharan Africa		3.22%	4.95%	6.93%	

3.2.9 Default Rates by Project Type

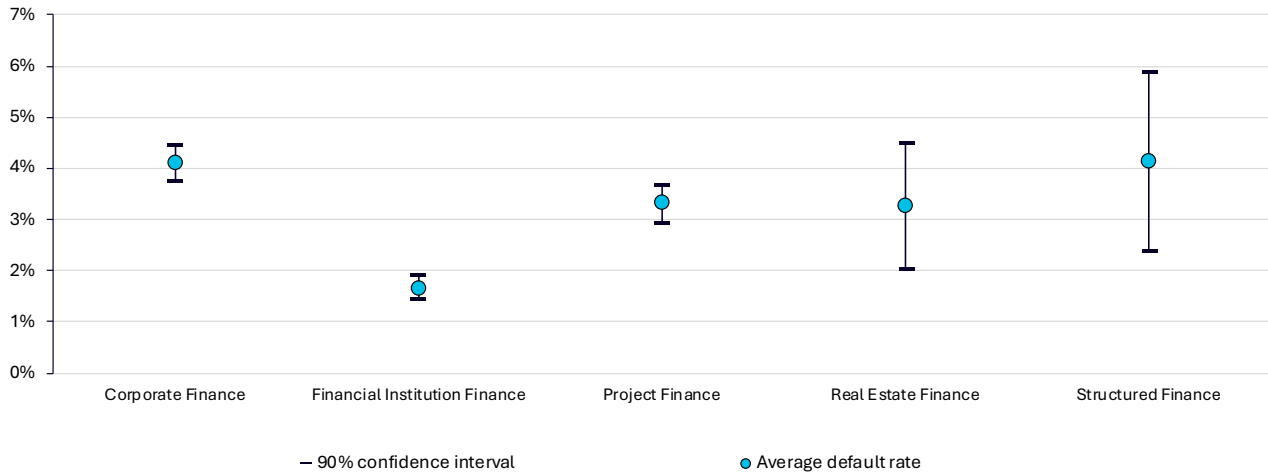
Among private counterparts, corporate finance accounts for the largest share of defaults at approximately 40%. Structured finance and corporate finance record the highest average default

rates, at 4.12% and 4.09% respectively, while financial institution finance records the lowest rate at 1.7%.

Table 27: Default Rates by Project Type

Project Type	Counterparts	Defaults / observations	Average DR (90% CI)
Corporate Finance	3,661	801 / 19,579	4.09% (3.74%–4.45%)
Financial Institution Finance	2,801	312 / 18,855	1.65% (1.42%–1.89%)
Project Finance	1,258	271 / 8,192	3.31% (2.94%–3.67%)
Real Estate Finance	137	22 / 675	3.26% (2.03%–4.49%)
Structured Finance	266	44 / 1,068	4.12% (2.37%–5.87%)
Overall (including omitted categories)	10,409	1,988 / 60,361	3.29% (2.95%–3.64%)

Figure 18: Default Rates by Project Type



3.2.10 Default Rates by Currency Type

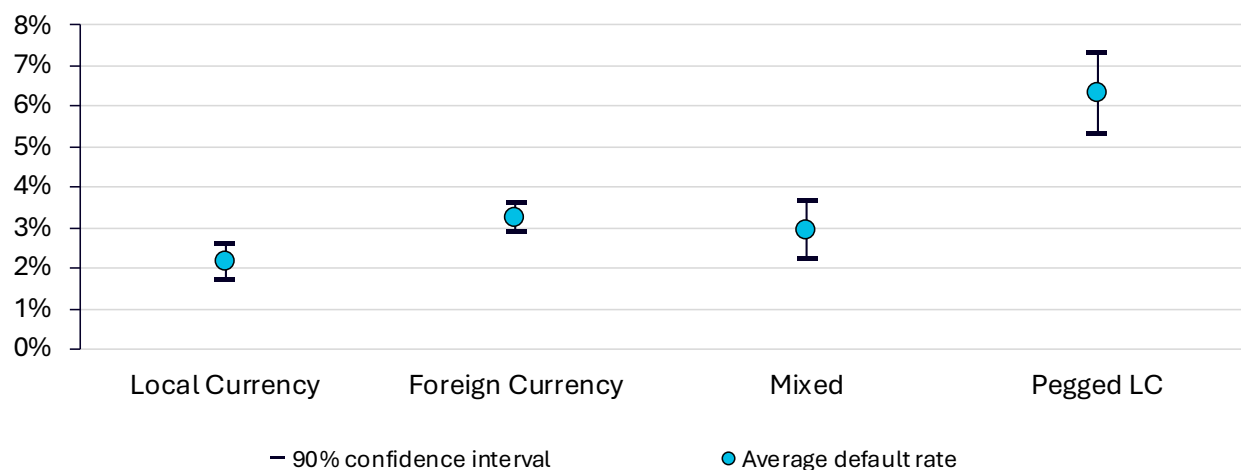
The analysis by currency type is also a new reporting dimension and provides an additional view of default behavior by distinguishing between currency types. In this data, "Pegged LC" refers to exposures where the local currency's exchange rate is fixed or formally linked to another currency, or where another country's currency is used as the local currency.

Among observed currency types, pegged local currency recorded the highest average default rate at 6.3%, whilst local currency recorded the lowest at 2.2%.

Table 28: Default Rates by Currency Type

Currency Type	Counterparts	Defaults / observations	Average DR (90% CI)
Local Currency	987	99 / 4,538	2.18% (1.74%–2.62%)
Foreign Currency	8,778	1,663 / 51,009	3.26% (2.90%–3.62%)
Mixed	538	68 / 2,313	2.94% (2.22%–3.65%)
Pegged LC	422	158 / 2,501	6.32% (5.31%–7.33%)
Overall (including omitted categories)	10,409	1,988 / 60,361	3.29% (2.95%–3.64%)

Figure 19: Default Rates by Currency Type



Reporting by currency type and region together is a new dimension added in this year's publication and there is variance in reported outcomes. Lending in local currency shows consistently lower default rates than foreign currency with

the exception of the East Asia & Pacific region. Pegged local currency was only observed in two regions and displays largely different default rates in those regions.

3.2.10.1 Default Rates by Currency Type and Region

Table 29: Default Rates by Currency Type and World Bank Region

Region / Currency Type	Local Currency	Foreign Currency	Mixed	Pegged LC
East Asia & Pacific	3.96%	3.69%	2.37%	
Europe & Central Asia	1.71%	2.88%	0.91%	
Latin America & Caribbean	1.95%	2.57%	4.36%	1.63%
Middle East, North Africa, Afghanistan & Pakistan	1.16%	3.35%	0.00%	
South Asia	1.11%	3.23%	4.94%	
Sub-Saharan Africa	3.08%	5.11%	5.98%	8.74%

3.2.11 Default Rates for Lending with Credit Enhancements

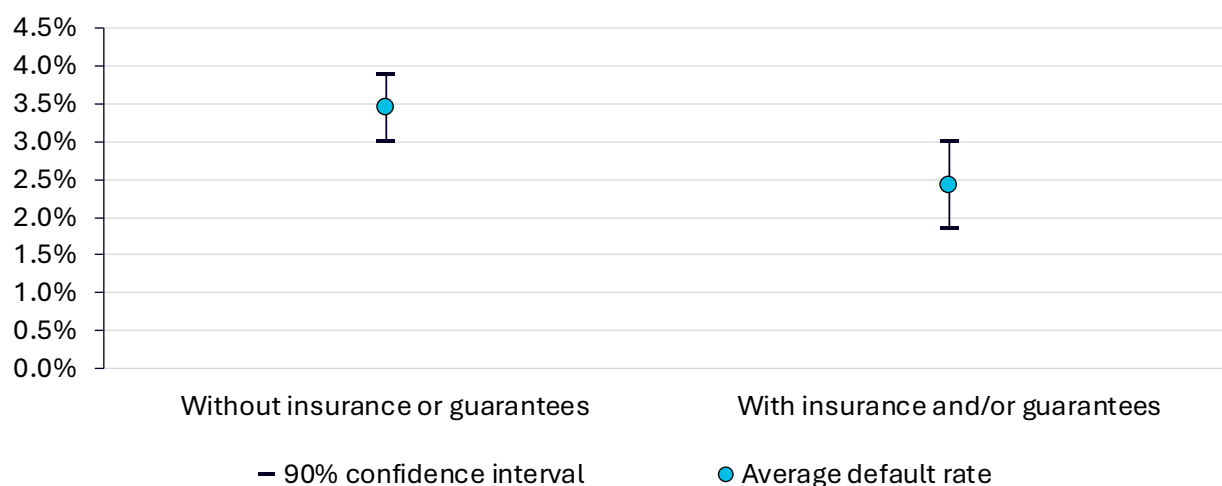
Reporting by credit enhancements is another new dimension in this years publication. Projects with insurance and guarantees recorded an average default rate of 2.4% versus 3.5% without these credit enhancements (table 30). The sub-Saharan Africa region recorded the highest default rate without credit enhancements at 6.6% (table 31). The regional outcomes consistently demonstrated that credit enhancements had

a reduction in default rates, barring Latin America & Caribbean where there was no recorded variance in default rates. By sector, the Information Technology sector recorded the highest default rate at 6.5% without credit enhancements (table 32). Reported outcomes also were consistent across sector, noting credit enhancements resulted in lower default rates, except for the Utilities Sector.

Table 30: Default Rates for Lending with Credit Enhancements

Insurance and Guarantees	Counterparts	Defaults / observations	Average DR (90% CI)
Without insurance or guarantees	7,000	1,293 / 37,514	3.45% (3.01%–3.88%)
With insurance and/or guarantees	1,169	147 / 6,066	2.42% (1.85%–3.00%)
Overall (including omitted categories)	10,409	1,988 / 60,361	3.29% (2.95%–3.64%)

Figure 20: Default Rates for Lending with Credit Enhancements



3.2.11.1 Default Rates for Lending with Credit Enhancements by Region

Table 31: Default Rates for Lending with Credit Enhancements by World Bank Region

Region / Insurance and Guarantees	Without insurance or guarantees	With insurance and/or guarantees
East Asia & Pacific	3.67%	1.16%
Europe & Central Asia	3.02%	2.80%
Latin America & Caribbean	2.53%	2.53%
Middle East, North Africa, Afghanistan & Pakistan	3.55%	2.65%
South Asia	2.70%	0.48%
Sub-Saharan Africa	6.64%	2.27%

3.2.11.2 Default Rates for Lending with Credit Enhancements by GICS Sector

Table 32: Default Rates for Lending with Credit Enhancements by GICS Sector

Counterpart Sector / Insurance and Guarantees	Without insurance or guarantees	With insurance and/or guarantees
Communication Services	5.60%	
Consumer Discretionary	5.48%	5.10%
Consumer Staples	5.43%	2.95%
Energy	2.87%	1.18%
Financials	1.96%	0.59%
Health Care	5.32%	2.65%
Industrials	3.99%	2.19%
Information Technology	6.45%	
Materials	4.42%	3.23%
Mixed	3.57%	

Counterpart Sector / Insurance and Guarantees	Without insurance or guarantees	With insurance and/or guarantees
Others	3.56%	
Real Estate	4.67%	4.58%
Utilities	2.35%	4.10%

3.2.12 Default Rates vs. Sovereign Default Rates

GEMs private-counterparty default rates were benchmarked against S&P-reported sovereign

default rates corresponding to each project country's credit rating.

3.2.12.1 Default Rates vs. Sovereign DRs by Income Group

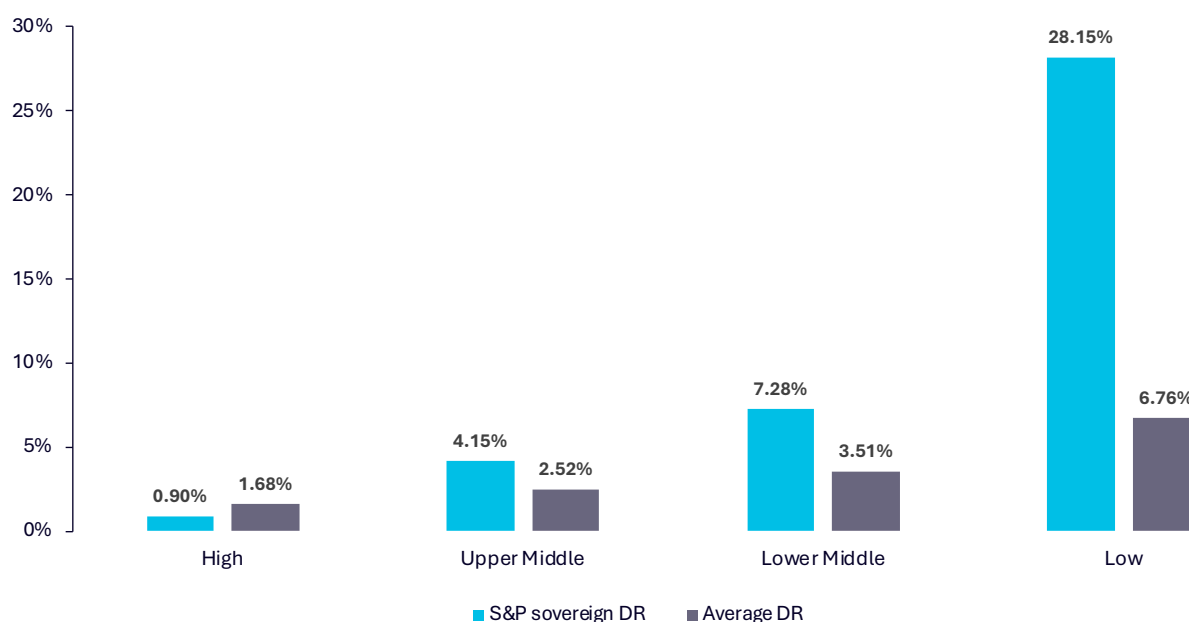
Across the income groups the greatest variation in default rates was observed in the low-income group with the GEMs result showing a rate of 6.8% in comparison to the S&P sovereign default rate of 28.2%. The difference narrowed for lower middle-income group, with GEMs result at 3.5% and S&P default rate at 7.3%. The variation

narrowed further for upper middle-income group for GEMs result at 2.5% compared to 4.2% of S&P Sovereign default rate. The high-income group was the only one where the GEMs rate, at 1.7% was above the S&P Sovereign default rate of 0.9%

Table 33: Default Rates vs Sovereign Default Rates by Income Group

Income Group	S&P sovereign DR	Average DR
High	0.90%	1.68%
Upper Middle	4.15%	2.52%
Lower Middle	7.28%	3.51%
Low	28.15%	6.76%

Figure 21: Default Rates vs Sovereign DRs by Income Group



3.2.12.2 Default Rates vs. Sovereign Default Rates by Continent

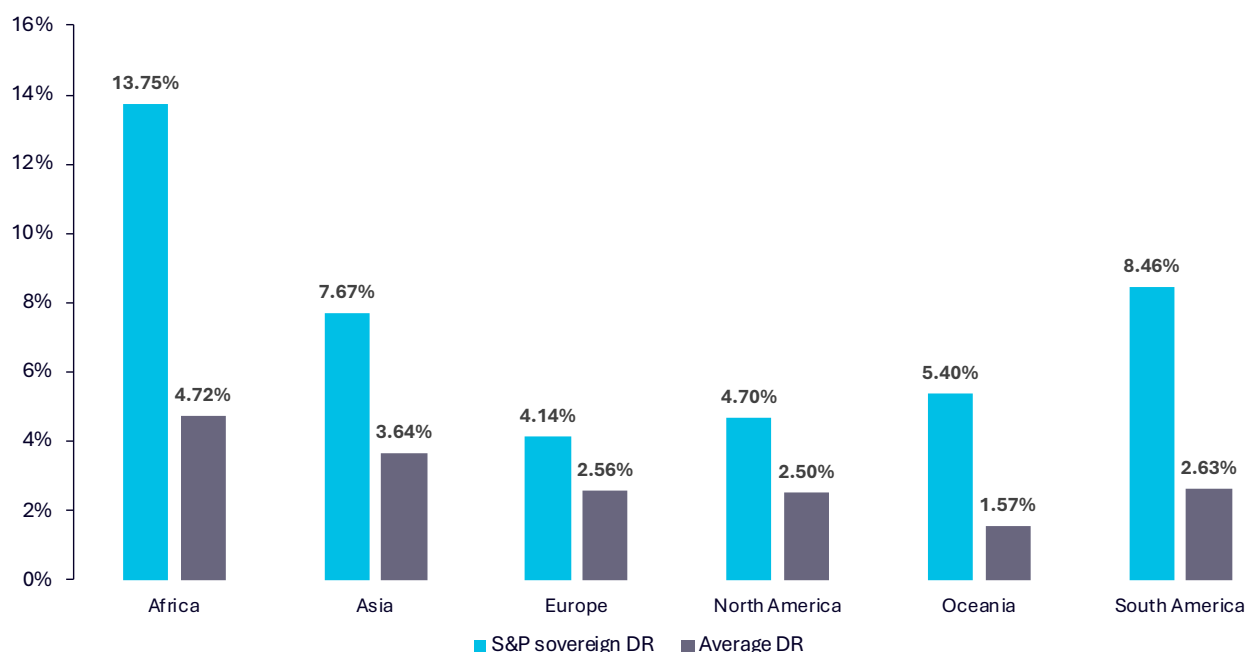
Table 34 shows the distribution of Sovereign Default Rates compared with average default across continents. S&P statistics and GEMs statistics show Africa with the highest average default rate of 13.8 and 4.7%, respectively. GEMs

statistics show Oceania has the lowest average default rate by Continent at 1.6%, while the lowest S&P Sovereign default rate was seen in Europe at 4.14%.

Table 34: Default Rates vs Sovereign Default Rates by Continent

Continent	S&P sovereign Default Rates	Average Default Rates
Africa	13.75%	4.72%
Asia	7.67%	3.64%
Europe	4.14%	2.56%
North America	4.70%	2.50%
Oceania	5.40%	1.57%
South America	8.46%	2.63%

Figure 22: Default Rates vs Sovereign DRs by Continent



3.2.12.3 Default Rates vs. Sovereign Default Rates by World Bank Region

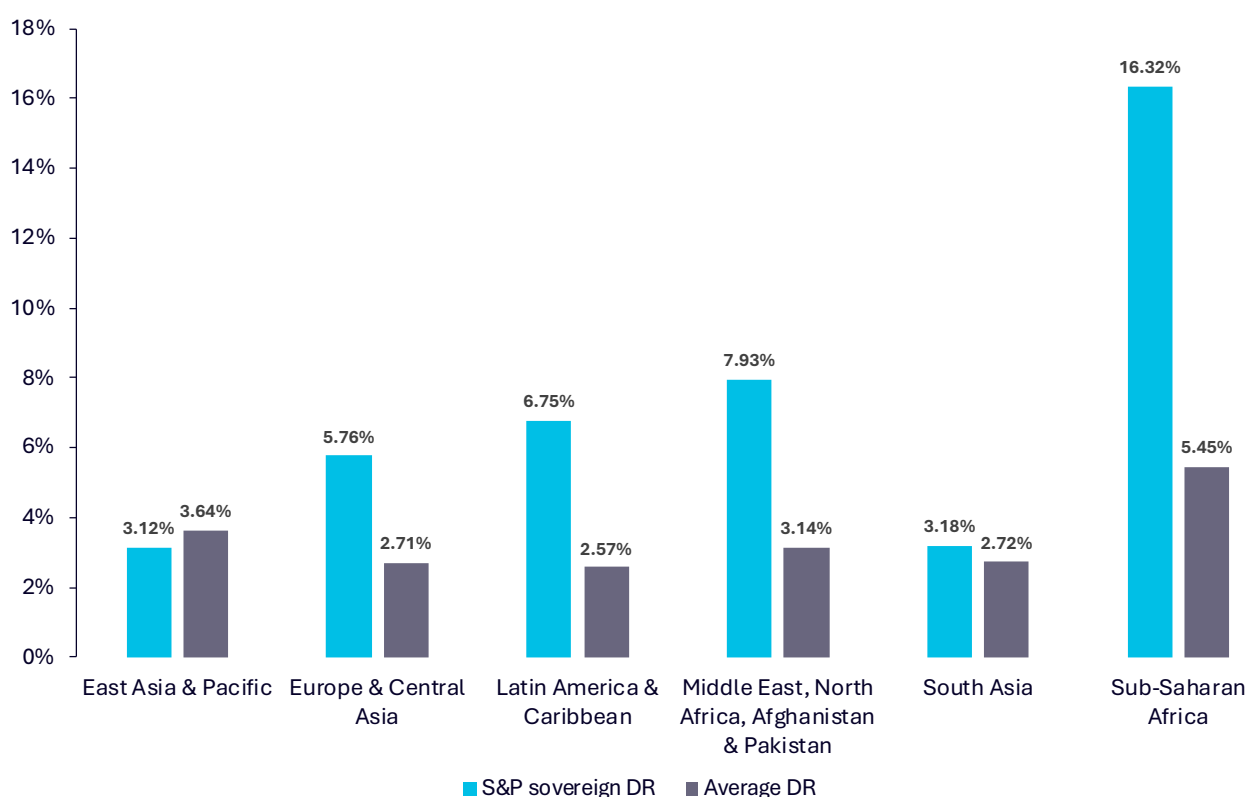
GEMs statistics show Latin America & Caribbean recorded the lowest average default rate of 2.6% in comparison to S&P default rates, which recorded East Asia & Pacific as the lowest default

region at 3.1%. S&P and GEMs statistics both denoted Sub-Saharan Africa with the highest average default rate of 16.3% and 5.5%, respectively.

Table 35: Default Rates vs Sovereign Default Rates by World Bank Region

World Bank Region	S&P sovereign DR	Average DR
East Asia & Pacific	3.12%	3.64%
Europe & Central Asia	5.76%	2.71%
Latin America & Caribbean	6.75%	2.57%
Middle East, North Africa, Afghanistan & Pakistan	7.93%	3.14%
South Asia	3.18%	2.72%
Sub-Saharan Africa	16.32%	5.45%

Figure 23: Default Rates vs Sovereign DRs by World Bank Region



3.2.12.4 Default Rates vs. Sovereign Default Rates by Sovereign Rating

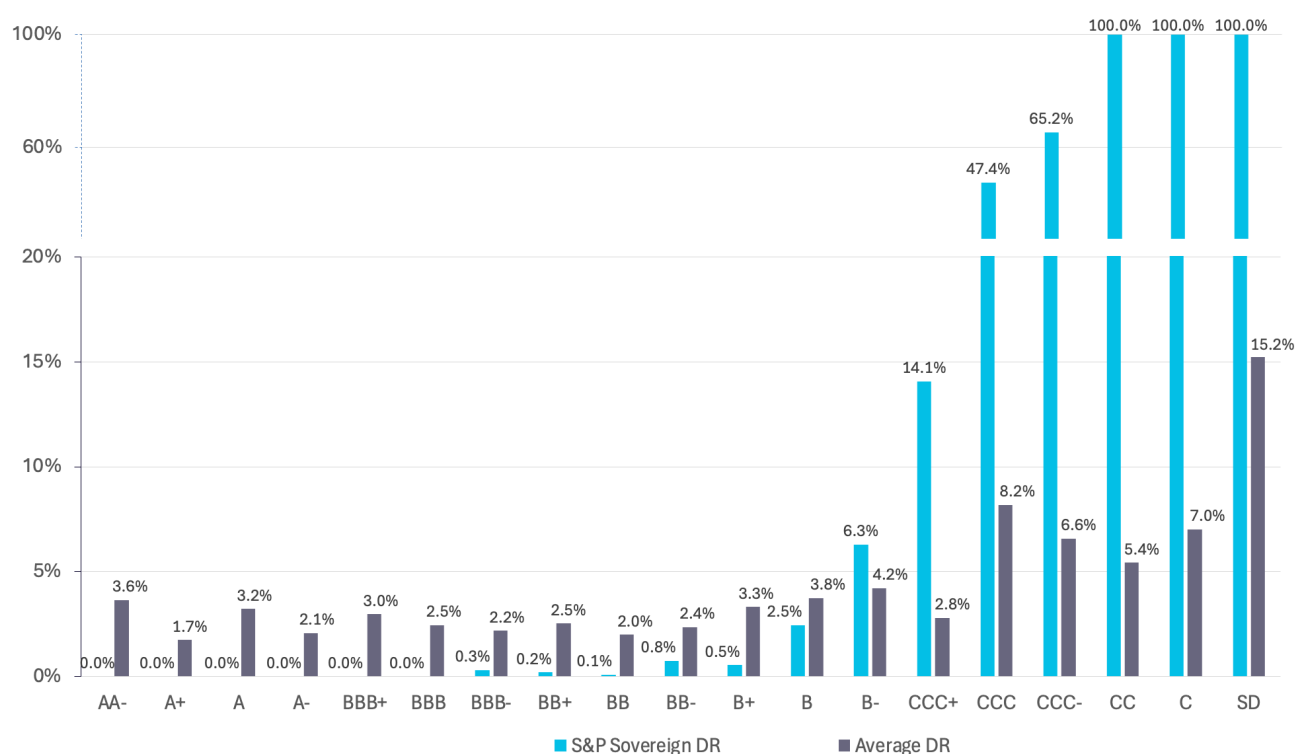
Observed outcomes show that the difference between the portfolio average default rates and the corresponding S&P sovereign default rates becomes materially larger at the lower end of the rating scale. This is particularly evident from CCC+ and below, where S&P sovereign default rates increase while observed average default rates remain comparatively lower. For exam-

ple, the observed average default rate for CCC is 8.2% compared with an S&P rate of 47.4%, increasing to a difference of more than 90 percentage points for CC. These lower rated pools also generally contain fewer observations than the most populated investment grade - B categories. The smallest pool is SD, with 230 observations.

Table 36: Default Rates vs Sovereign Default Rates by Sovereign Rating

Country Rating	S&P Sovereign Default Rates	Average Default Rates
AA-	0.00%	3.65%
A+	0.00%	1.75%
A	0.00%	3.22%
A-	0.00%	2.07%
BBB+	0.00%	2.97%
BBB	0.00%	2.45%
BBB-	0.31%	2.19%
BB+	0.20%	2.54%
BB	0.09%	1.99%
BB-	0.75%	2.36%
B+	0.54%	3.32%
B	2.46%	3.75%
B-	6.30%	4.22%
CCC+	14.07%	2.80%
CCC	47.41%	8.19%
CCC-	65.23%	6.58%
CC	100.00%	5.43%
C	100.00%	7.02%
SD	100.00%	15.22%

Figure 24: Default Rates vs Sovereign DRs by Sovereign Rating



3.3 Default Rates by Cohorts

3.3.1 Default Rates by GEMs Rating

Default rate reporting by credit rating is based on internal ratings prepared by member institutions for their borrowers. These ratings are generated by individual internal rating systems that often use different scales and are not directly comparable. To enable consistent aggregation of ratings across different members, GEMs has developed a master scale (shown in 37), which serves as the benchmark in the following process.

For each institution, internal ratings are collected for every counterparty and each year in which they were active. Using these ratings, the observed default rate for each internal rating category is calculated based on actual defaults.

The observed default rates are then mapped to the GEMs master scale to establish equivalent ratings. The GEMs equivalents across all institutions are then used to consolidate the ratings data and generate the output statistics.

This year, only high-quality internal ratings have been used for the default rate statistics presented in Section 3.1.

Figure 25 shows that most GEMs ratings are concentrated in between Gi9 to Gs9 with specific concentrations in Gs1, Gs2 and Gs3.

Figure 25: Distribution of Counterparts by GEMs Rating

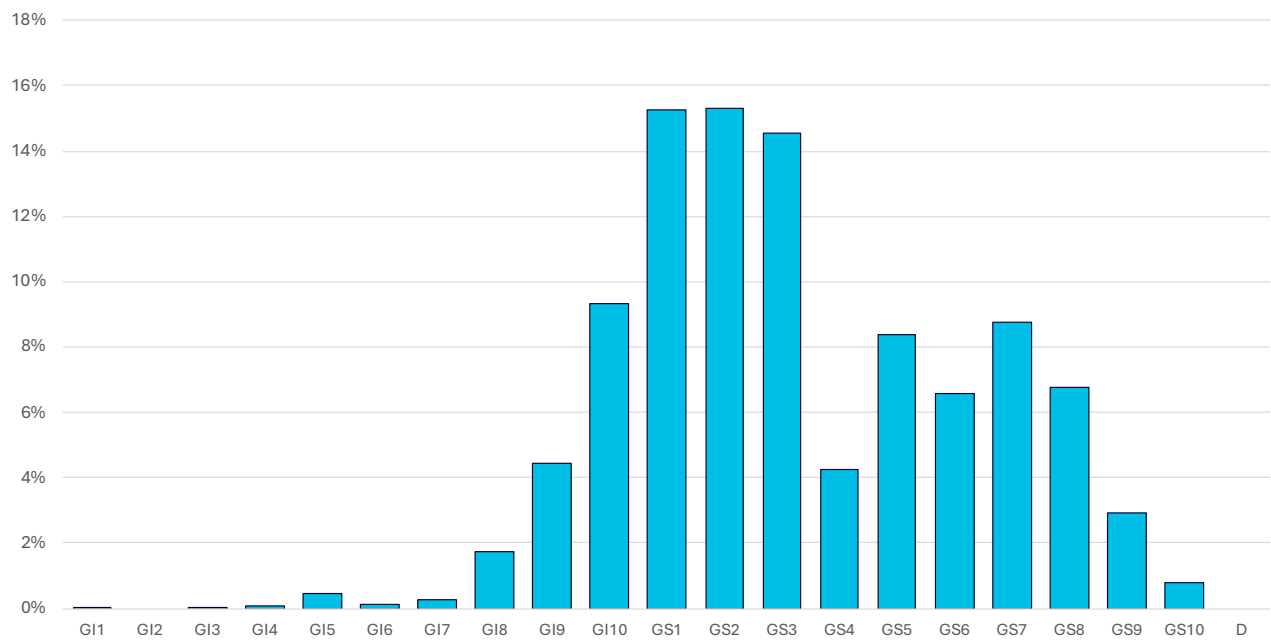


Figure 26: GEMs PD Master Scale vs. Observed Default Rate

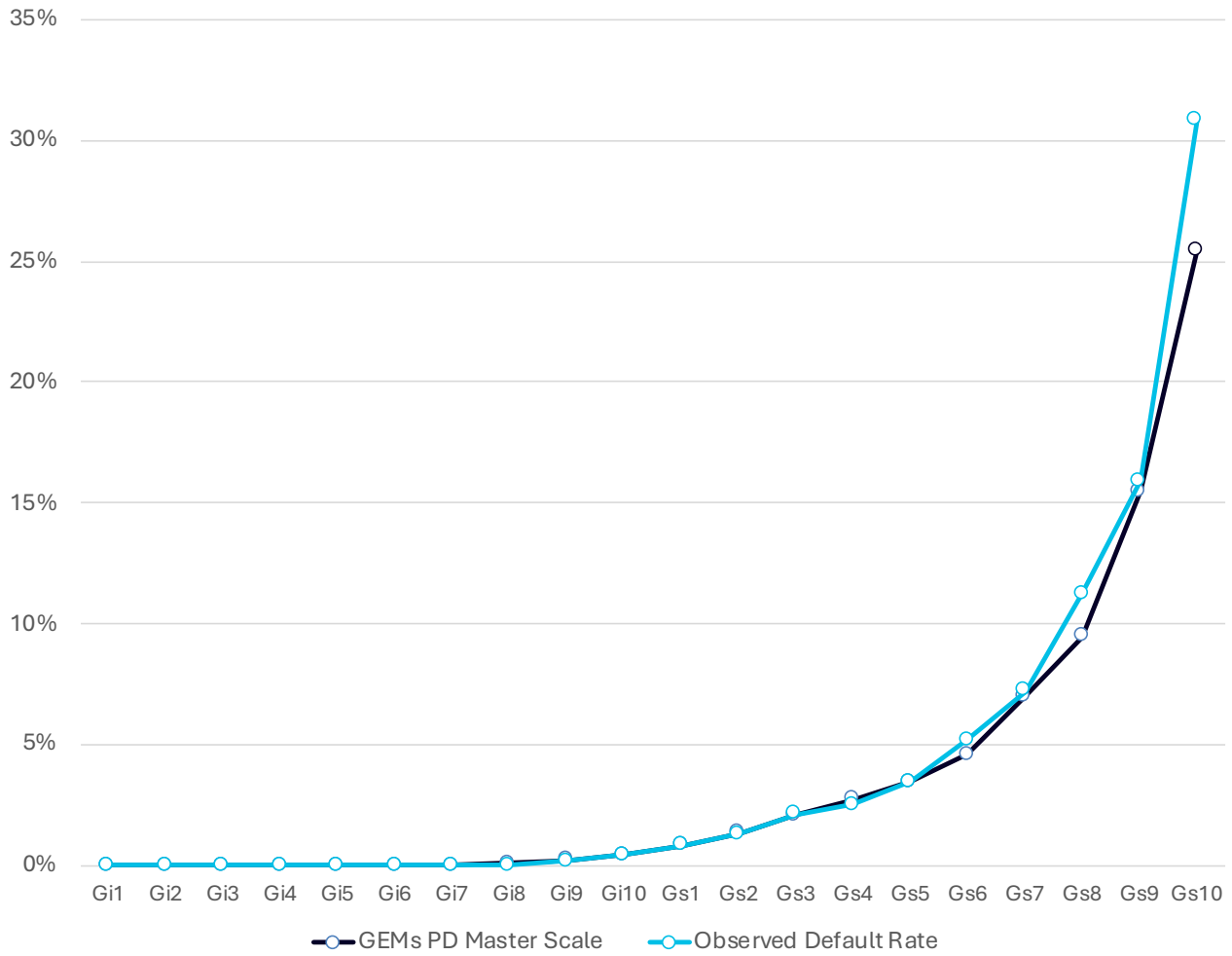


Table 37a - Marginal Default Rates by GEMs Rating

Years After Rating	Average Default Rate	Defaults	Observations	GI1	GI2	GI3	GI4	GI5	GI6	GI7	GI8	GI9	GI10
1	3.50%	1,823	52,078	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.17%	0.45%
2	3.64%	1,526	41,968	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.52%	0.57%	0.75%
3	3.42%	1,136	33,181	0.00%			0.00%	0.00%	0.00%	0.00%	0.47%	0.77%	1.12%
4	3.06%	790	25,848	0.00%			0.00%	0.00%	0.00%	0.00%	0.57%	1.06%	1.14%
5	2.69%	534	19,840	0.00%			0.00%	0.00%	0.00%	0.00%	0.73%	0.95%	1.07%
6	2.43%	366	15,083	0.00%			0.00%	0.00%	0.00%	0.00%	1.54%	0.55%	0.95%
7	2.29%	260	11,359	0.00%			0.00%	0.00%	0.00%	0.00%	0.79%	0.91%	1.12%
8	2.21%	188	8,491	0.00%			0.00%	0.00%	0.00%	6.67%	1.00%	0.47%	0.76%
9	2.06%	130	6,325	0.00%			0.00%	0.00%	0.00%	0.00%	0.00%	0.32%	1.19%
10	1.71%	81	4,731	0.00%			0.00%	0.00%	0.00%	0.00%	0.00%	0.45%	1.63%
11	1.66%	58	3,493				0.00%	0.00%	0.00%	0.00%	0.00%	0.68%	2.02%
12	1.55%	41	2,639				0.00%	0.00%	0.00%	0.00%	0.00%	1.16%	2.33%
13	1.38%	28	2,024				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.67%
14	1.26%	20	1,582				0.00%	0.00%		0.00%	0.00%	0.00%	3.51%
15	1.13%	14	1,238				0.00%	0.00%		0.00%	0.00%	0.00%	4.74%
16	1.03%	10	973				0.00%	0.00%		0.00%	0.00%	0.00%	3.75%
17	0.79%	6	759				0.00%	0.00%		0.00%	0.00%	0.00%	1.68%
18	0.68%	4	592				0.00%	0.00%		0.00%	0.00%	0.00%	0.00%
19	0.65%	3	462				0.00%	0.00%		0.00%	0.00%	0.00%	0.00%
20	0.83%	3	360				0.00%	0.00%		0.00%	0.00%	0.00%	0.00%
21	1.09%	3	275				0.00%	28.57%		0.00%	0.00%	0.00%	0.00%
22	1.42%	3	211				0.00%	0.00%			9.52%	0.00%	0.00%
23	1.88%	3	160								16.67%	0.00%	0.00%

Years After Rating	Average Default Rate	Defaults	Observations	GI1	GI2	GI3	GI4	GI5	GI6	GI7	GI8	GI9	GI10
24	1.63%	2	123								0.00%		0.00%
25	2.11%	2	95								0.00%		0.00%
26	2.92%	2	69										0.00%
27	2.02%	1	50										0.00%
28	0.00%	-	36										0.00%
29	0.00%	-	23										
30	0.00%	-	12										
31	0.00%	-	5										
32	0.00%	-	2										

Years After Rating	Average Default Rate	Defaults	Observations	GS1	GS2	GS3	GS4	GS5	GS6	GS7	GS8	GS9	GS10
1	3.50%	1,823	52,078	0.81%	1.30%	2.14%	2.50%	3.47%	5.20%	7.22%	11.24%	15.91%	30.83%
2	3.64%	1,526	41,968	1.23%	1.87%	3.20%	3.08%	4.74%	6.53%	7.15%	10.60%	12.28%	18.06%
3	3.42%	1,136	33,181	1.33%	1.95%	3.61%	3.17%	4.28%	6.34%	6.42%	9.64%	10.67%	15.60%
4	3.06%	790	25,848	1.18%	2.23%	3.53%	3.29%	3.73%	5.75%	5.77%	7.48%	8.63%	10.47%
5	2.69%	534	19,840	1.27%	2.67%	2.88%	1.20%	3.83%	5.22%	5.03%	5.11%	8.81%	3.57%
6	2.43%	366	15,083	1.21%	1.97%	3.28%	1.87%	3.76%	4.26%	3.20%	5.57%	8.82%	2.60%
7	2.29%	260	11,359	1.29%	1.96%	3.01%	0.53%	2.99%	4.42%	3.58%	4.74%	8.10%	3.70%
8	2.21%	188	8,491	1.08%	1.96%	3.31%	0.82%	4.72%	4.52%	2.71%	3.74%	5.39%	5.00%
9	2.06%	130	6,325	0.96%	2.53%	3.02%	0.00%	3.00%	5.46%	3.08%	1.72%	5.69%	0.00%
10	1.71%	81	4,731	0.64%	1.88%	2.59%	0.00%	3.20%	4.57%	1.06%	0.00%	11.83%	0.00%
11	1.66%	58	3,493	1.00%	2.05%	1.22%	0.00%	1.60%	5.50%	0.34%	0.83%	15.87%	0.00%
12	1.55%	41	2,639	1.14%	0.76%	1.15%	0.00%	4.55%	3.77%	0.82%	1.14%	12.50%	0.00%
13	1.38%	28	2,024	1.11%	0.00%	0.31%	0.00%	3.33%	3.08%	1.01%	2.96%	18.52%	0.00%
14	1.26%	20	1,582	0.78%	0.00%	0.81%	0.00%	2.56%	1.86%	0.61%	1.89%	21.05%	0.00%
15	1.13%	14	1,238	0.48%	0.00%	0.52%		0.00%	1.17%	0.78%	2.30%	24.00%	0.00%
16	1.03%	10	973	1.16%	0.00%	0.00%		0.00%	0.00%	1.12%	2.70%	0.00%	18.18%
17	0.79%	6	759	1.03%	0.00%	0.00%		0.00%	0.00%	0.00%	3.17%	0.00%	33.33%
18	0.68%	4	592	1.24%	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	50.00%
19	0.65%	3	462	1.00%	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%		100.00%
20	0.83%	3	360	1.21%	0.00%	0.00%		0.00%	2.86%	0.00%	0.00%		
21	1.09%	3	275	0.73%	0.00%	0.00%		0.00%	3.70%	0.00%	0.00%		
22	1.42%	3	211	0.89%	0.00%	0.00%		0.00%	4.65%	0.00%	0.00%		
23	1.88%	3	160	1.12%	0.00%	0.00%		0.00%	5.88%	0.00%	0.00%		
24	1.63%	2	123	1.39%		0.00%		0.00%	7.69%	0.00%	0.00%		

Years After Rating	Average Default Rate	Defaults	Observations	GS1	GS2	GS3	GS4	GS5	GS6	GS7	GS8	GS9	GS10
25	2.11%	2	95	1.72%		0.00%		0.00%	10.00%	0.00%	0.00%		
26	2.92%	2	69	2.33%		0.00%		0.00%	14.29%	0.00%	0.00%		
27	2.02%	1	50	0.00%		0.00%			20.00%		0.00%		
28	0.00%	-	36	0.00%		0.00%			0.00%		0.00%		
29	0.00%	-	23	0.00%		0.00%			0.00%		0.00%		
30	0.00%	-	12	0.00%		0.00%			0.00%		0.00%		
31	0.00%	-	5	0.00%							0.00%		
32	0.00%	-	2	0.00%							0.00%		

Table 37b - Cumulative Default Rates by GEMs Rating

Years After Rating	Average Default Rate	Defaults	Observations	G11	G12	G13	G14	G15	G16	G17	G18	G19	G110
1	3.50%	1,823	52,078	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.17%	0.45%
2	3.64%	1,526	41,968	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.52%	0.74%	1.19%
3	3.42%	1,136	33,181	0.00%			0.00%	0.00%	0.00%	0.00%	0.99%	1.51%	2.30%
4	3.06%	790	25,848	0.00%			0.00%	0.00%	0.00%	0.00%	1.55%	2.55%	3.42%
5	2.69%	534	19,840	0.00%			0.00%	0.00%	0.00%	0.00%	2.27%	3.47%	4.46%
6	2.43%	366	15,083	0.00%			0.00%	0.00%	0.00%	0.00%	3.77%	4.00%	5.36%
7	2.29%	260	11,359	0.00%			0.00%	0.00%	0.00%	0.00%	4.53%	4.87%	6.43%
8	2.21%	188	8,491	0.00%			0.00%	0.00%	0.00%	6.67%	5.48%	5.32%	7.14%
9	2.06%	130	6,325	0.00%			0.00%	0.00%	0.00%	6.67%	5.48%	5.62%	8.25%
10	1.71%	81	4,731	0.00%			0.00%	0.00%	0.00%	6.67%	5.48%	6.04%	9.74%
11	1.66%	58	3,493				0.00%	0.00%	0.00%	6.67%	5.48%	6.69%	11.57%
12	1.55%	41	2,639				0.00%	0.00%	0.00%	6.67%	5.48%	7.77%	13.63%
13	1.38%	28	2,024				0.00%	0.00%	0.00%	6.67%	5.48%	7.77%	15.94%
14	1.26%	20	1,582				0.00%	0.00%		6.67%	5.48%	7.77%	18.89%
15	1.13%	14	1,238				0.00%	0.00%		6.67%	5.48%	7.77%	22.73%
16	1.03%	10	973				0.00%	0.00%		6.67%	5.48%	7.77%	25.63%
17	0.79%	6	759				0.00%	0.00%		6.67%	5.48%	7.77%	26.88%
18	0.68%	4	592				0.00%	0.00%		6.67%	5.48%	7.77%	26.88%
19	0.65%	3	462				0.00%	0.00%		6.67%	5.48%	7.77%	26.88%
20	0.83%	3	360				0.00%	0.00%		6.67%	5.48%	7.77%	26.88%
21	1.09%	3	275				0.00%	28.57%		6.67%	5.48%	7.77%	26.88%
22	1.42%	3	211				0.00%	28.57%			14.48%	7.77%	26.88%
23	1.88%	3	160								28.74%	7.77%	26.88%

Years After Rating	Average Default Rate	Defaults	Observations	GI1	GI2	GI3	GI4	GI5	GI6	GI7	GI8	GI9	GI10
24	1.63%	2	123								28.74%		26.88%
25	2.11%	2	95								28.74%		26.88%
26	2.92%	2	69										26.88%
27	2.02%	1	50										26.88%
28	0.00%	-	36										26.88%
29	0.00%	-	23										
30	0.00%	-	12										
31	0.00%	-	5										
32	0.00%	-	2										

Years After Rating	Average Default Rate	Defaults	Observations	GS1	GS2	GS3	GS4	GS5	GS6	GS7	GS8	GS9	GS10
1	3.50%	1,823	52,078	0.81%	1.30%	2.14%	2.50%	3.47%	5.20%	7.22%	11.24%	15.91%	30.83%
2	3.64%	1,526	41,968	2.04%	3.14%	5.26%	5.50%	8.04%	11.39%	13.86%	20.65%	26.24%	43.32%
3	3.42%	1,136	33,181	3.34%	5.04%	8.69%	8.50%	11.98%	17.01%	19.39%	28.30%	34.11%	52.16%
4	3.06%	790	25,848	4.48%	7.16%	11.91%	11.51%	15.26%	21.79%	24.04%	33.67%	39.80%	57.17%
5	2.69%	534	19,840	5.69%	9.63%	14.44%	12.57%	18.51%	25.87%	27.86%	37.06%	45.10%	58.70%
6	2.43%	366	15,083	6.83%	11.41%	17.25%	14.20%	21.58%	29.03%	30.17%	40.56%	49.95%	59.77%
7	2.29%	260	11,359	8.03%	13.15%	19.74%	14.66%	23.92%	32.17%	32.67%	43.38%	54.00%	61.26%
8	2.21%	188	8,491	9.02%	14.86%	22.40%	15.36%	27.51%	35.23%	34.49%	45.50%	56.48%	63.20%
9	2.06%	130	6,325	9.90%	17.01%	24.74%	15.36%	29.68%	38.77%	36.51%	46.44%	58.96%	63.20%
10	1.71%	81	4,731	10.47%	18.57%	26.69%	15.36%	31.93%	41.57%	37.19%	46.44%	63.81%	63.20%
11	1.66%	58	3,493	11.36%	20.24%	27.58%	15.36%	33.02%	44.78%	37.40%	46.88%	69.56%	63.20%
12	1.55%	41	2,639	12.37%	20.85%	28.41%	15.36%	36.06%	46.86%	37.91%	47.49%	73.36%	63.20%
13	1.38%	28	2,024	13.34%	20.85%	28.63%	15.36%	38.19%	48.50%	38.53%	49.05%	78.29%	63.20%
14	1.26%	20	1,582	14.02%	20.85%	29.21%	15.36%	39.78%	49.46%	38.91%	50.01%	82.86%	63.20%
15	1.13%	14	1,238	14.44%	20.85%	29.58%		39.78%	50.05%	39.39%	51.16%	86.98%	63.20%
16	1.03%	10	973	15.43%	20.85%	29.58%		39.78%	50.05%	40.06%	52.48%	86.98%	69.89%
17	0.79%	6	759	16.30%	20.85%	29.58%		39.78%	50.05%	40.06%	53.98%	86.98%	79.93%
18	0.68%	4	592	17.34%	20.85%	29.58%		39.78%	50.05%	40.06%	53.98%	86.98%	89.96%
19	0.65%	3	462	18.16%	20.85%	29.58%		39.78%	50.05%	40.06%	53.98%		100.00%
20	0.83%	3	360	19.15%	20.85%	29.58%		39.78%	51.47%	40.06%	53.98%		
21	1.09%	3	275	19.74%	20.85%	29.58%		39.78%	53.27%	40.06%	53.98%		
22	1.42%	3	211	20.46%	20.85%	29.58%		39.78%	55.45%	40.06%	53.98%		
23	1.88%	3	160	21.35%	20.85%	29.58%		39.78%	58.07%	40.06%	53.98%		
24	1.63%	2	123	22.44%		29.58%		39.78%	61.29%	40.06%	53.98%		

Years After Rating	Average Default Rate	Defaults	Observations	GS1	GS2	GS3	GS4	GS5	GS6	GS7	GS8	GS9	GS10
25	2.11%	2	95	23.78%		29.58%		39.78%	65.16%	40.06%	53.98%		
26	2.92%	2	69	25.55%		29.58%		39.78%	70.14%	40.06%	53.98%		
27	2.02%	1	50	25.55%		29.58%			76.11%		53.98%		
28	0.00%	-	36	25.55%		29.58%			76.11%		53.98%		
29	0.00%	-	23	25.55%		29.58%			76.11%		53.98%		
30	0.00%	-	12	25.55%		29.58%			76.11%		53.98%		
31	0.00%	-	5	25.55%							53.98%		
32	0.00%	-	2	25.55%							53.98%		

3.4 Contract Lifetime Default Rates

3.4.1 Overall Default Rates

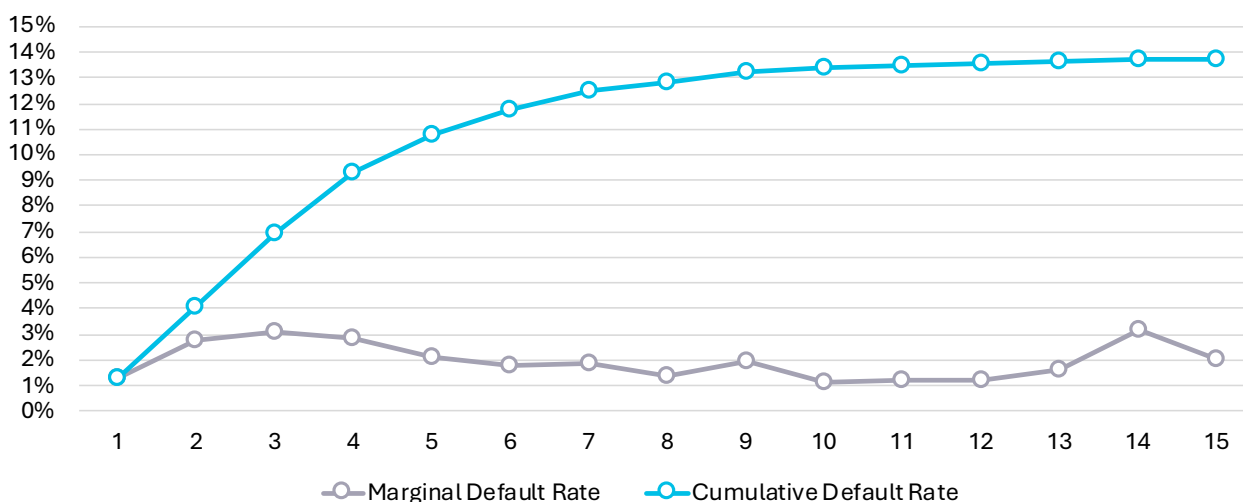
The inclusion of lifetime default rates complements point in time default measures by illustrating how credit risk accumulates over the full contractual life of an exposure. This provides a view of the long-term default experience. Marginal default rates rise in the years following signature, reaching 3.1% in year 3, then gen-

erally decline to 1.1% by year 10, before rising again in the later years (3.2% in year 14, 2.1% in year 15). Reflecting this pattern, the cumulative default rate increases most in the early years, at 6.9% by year 3, 11.8% by year 6 and 13.4% by year 10, and only marginally thereafter, ending at 13.73% by year 15.

Table 39: Contract Lifetime Marginal Default Rates

Years After Signature Date	Marginal Default Rate	Cumulative Default Rate
1	1.33%	1.33%
2	2.78%	4.09%
3	3.06%	6.93%
4	2.85%	9.29%
5	2.09%	10.74%
6	1.76%	11.74%
7	1.83%	12.46%
8	1.40%	12.86%
9	1.95%	13.22%
10	1.14%	13.37%
11	1.25%	13.49%
12	1.18%	13.55%
13	1.66%	13.62%
14	3.19%	13.70%
15	2.07%	13.73%

Figure 27: Contract Lifetime Marginal and Cumulative Default Rates



3.4.2 Default Rates by Region

3.4.2.1 Default Rates by World Bank Region

Sub-Saharan Africa records the highest marginal default rate in year 1 at 2.7% and remains elevated through the early years, peaking at 4.8% in year 3. Middle East, North Africa, Afghanistan & Pakistan peaks at 4.9% in year 3, with later spikes at 5.9% in year 13 and 9.8% in year 14. East Asia & Pacific shows its highest marginal rates in year 2 at 4.8% with no

additional defaults recorded from year 9 onwards. Europe & Central Asia has comparatively lower marginal default rates through the first decade, below 2.5%. Latin America & Caribbean displays relatively moderate marginal default rates across the period, with most annual observations below 3%.

Table 40: Contract Lifetime Marginal Default Rates by World Bank Region

Years After Signature Date	East Asia & Pacific	Europe & Central Asia	Latin America & Caribbean	Middle East, North Africa, Afghanistan & Pakistan	South Asia	Sub-Saharan Africa
1	1.00%	0.82%	1.58%	1.44%	1.05%	2.69%
2	4.75%	2.06%	2.01%	2.91%	2.85%	4.58%
3	4.63%	2.26%	2.72%	4.86%	1.79%	4.80%
4	2.31%	2.30%	2.93%	3.93%	2.50%	4.36%
5	1.70%	1.47%	2.75%	2.20%	1.94%	3.30%
6	2.90%	1.37%	1.56%	2.07%	2.01%	2.32%
7	3.53%	0.89%	1.88%	1.72%	3.23%	2.82%
8	1.78%	0.73%	1.86%	3.53%	1.43%	0.71%
9	0.00%	1.71%	1.37%	2.73%	1.53%	3.46%
10	0.00%	0.98%	1.19%	0.71%	2.20%	1.49%
11	0.00%	0.00%	0.98%	0.00%	0.00%	4.81%
12	0.00%	0.00%	1.14%	4.08%	0.00%	0.85%
13	0.00%	1.42%	0.00%	5.88%	0.00%	1.30%
14	0.00%	1.30%	1.30%	9.84%	0.00%	0.00%
15	0.00%	0.00%	1.56%	0.00%	0.00%	12.50%

3.4.2.2 Default Rates by World Bank Region (Cumulative Default Rate)

Sub-Saharan Africa records the highest cumulative default rates, reaching 17.5% by year five and 22.5% by year 15, while Middle East, North Africa, Afghanistan & Pakistan reaches 13.9% by year five and 20.4% by year 15. East Asia

& Pacific reaches 15.9% by year 8, while Latin America & Caribbean and South Asia reached 14.2% and 12.6%, respectively. Europe & Central Asia records the lowest cumulative rate at 9.3% by year 15.

Table 41: Contract Lifetime Cumulative Default Rates by World Bank Region

Years After Signature Date	East Asia & Pacific	Europe & Central Asia	Latin America & Caribbean	Middle East, North Africa, Afghanistan & Pakistan	South Asia	Sub-Saharan Africa
1	1.00%	0.82%	1.58%	1.44%	1.05%	2.69%
2	5.72%	2.88%	3.57%	4.33%	3.90%	7.23%
3	9.94%	4.99%	6.12%	8.95%	5.55%	11.59%
4	11.75%	6.91%	8.62%	12.27%	7.65%	15.17%
5	12.85%	7.92%	10.66%	13.85%	9.00%	17.54%
6	14.36%	8.67%	11.64%	15.15%	10.19%	18.95%
7	15.46%	8.97%	12.52%	16.02%	11.54%	20.29%
8	15.86%	9.14%	13.21%	17.32%	11.99%	20.55%
9	15.86%	9.38%	13.58%	18.04%	12.29%	21.38%
10	15.86%	9.47%	13.82%	18.18%	12.59%	21.64%
11	15.86%	9.47%	13.95%	18.18%	12.59%	22.22%
12	15.86%	9.47%	14.05%	18.76%	12.59%	22.28%
13	15.86%	9.51%	14.05%	19.48%	12.59%	22.34%
14	15.86%	9.53%	14.09%	20.35%	12.59%	22.34%
15	15.86%	9.53%	14.14%	20.35%	12.59%	22.47%

3.4.2.3 Default Rates by Continent

Default rates are generally highest in the earlier years after rating. Africa peaks at 4.5% in year three, while Asia peaks at 4.1% in year two. Europe remains comparatively low through most of the first decade, generally below 2.3%, while

Oceania records a 7.7% rate in year three. Later-year increases are observed in some regions, including North America, Africa, Asia and Europe.

Table 42: Contract Lifetime Marginal Default Rates by Continent

Years After Signature Date	Africa	Asia	Europe	North America	Oceania	South America
1	2.39%	1.31%	0.73%	1.26%	0.00%	1.83%
2	3.96%	4.06%	1.90%	1.69%	3.57%	2.26%
3	4.46%	3.85%	2.18%	2.57%	7.69%	2.84%
4	3.97%	2.94%	2.25%	3.76%	4.76%	2.26%
5	2.86%	2.32%	1.33%	2.97%	0.00%	2.58%
6	2.15%	2.70%	1.24%	1.16%	0.00%	1.88%
7	2.42%	3.11%	0.87%	1.75%	0.00%	1.99%
8	1.49%	1.64%	0.75%	1.57%	0.00%	2.11%
9	2.89%	2.30%	1.49%	0.69%	0.00%	2.05%
10	1.24%	1.06%	1.01%	1.32%	0.00%	1.05%
11	3.83%	0.00%	0.00%	1.10%	0.00%	0.81%

Years After Signature Date	Africa	Asia	Europe	North America	Oceania	South America
12	1.26%	2.48%	0.00%	0.89%	0.00%	1.59%
13	0.88%	5.75%	1.45%	0.00%	0.00%	0.00%
14	5.63%	3.92%	1.32%	1.72%	0.00%	0.00%
15	4.55%	0.00%	0.00%	2.04%	0.00%	0.00%

Default experience varies across continents, with most cumulative defaults occurring within the first ten years after rating. Africa records the highest cumulative default rate, reaching 15.8% by year 5 and 19.7% by year 10, before

rising to 20.7% by year 15. Asia reaches 16.2% by year 10, while North America, Oceania and South America are around 14% over the longer horizon. Europe records the lowest cumulative default rate, reaching 8.8% by year 10.

Table 43: Contract Lifetime Cumulative Default Rates by Continent

Years After Signature Date	Africa	Asia	Europe	North America	Oceania	South America
1	2.39%	1.31%	0.72%	1.26%	0.00%	1.83%
2	6.32%	5.34%	2.57%	2.94%	3.57%	4.07%
3	10.40%	8.89%	4.56%	5.36%	10.71%	6.72%
4	13.69%	11.30%	6.39%	8.61%	14.29%	8.63%
5	15.76%	12.85%	7.29%	10.82%	14.29%	10.54%
6	17.09%	14.28%	7.97%	11.55%	14.29%	11.70%
7	18.26%	15.34%	8.27%	12.39%	14.29%	12.61%
8	18.79%	15.75%	8.45%	13.03%	14.29%	13.36%
9	19.48%	16.12%	8.67%	13.24%	14.29%	13.86%
10	19.69%	16.24%	8.76%	13.55%	14.29%	14.02%
11	20.17%	16.24%	8.76%	13.76%	14.29%	14.11%
12	20.28%	16.36%	8.76%	13.87%	14.29%	14.19%
13	20.33%	16.56%	8.80%	13.87%	14.29%	14.19%
14	20.54%	16.65%	8.82%	13.97%	14.29%	14.19%
15	20.65%	16.65%	8.82%	14.08%	14.29%	14.19%

3.4.3 Default Rates by Sector

3.4.3.1 Default Rates by GICS Sector

Table 44: Contract Lifetime Marginal Default Rates by GICS Sector

Years After Signature Date	Administration	Communication Services	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Information Technology	Materials	Others	Real Estate	Utilities
1	0.00%	0.91%	1.95%	1.83%	0.72%	1.01%	1.43%	1.92%	2.13%	2.03%	0.31%	1.63%	1.58%
2	0.00%	4.56%	6.02%	3.90%	4.01%	1.45%	3.83%	4.13%	4.35%	3.71%	2.66%	7.61%	1.81%
3	0.00%	2.43%	5.41%	5.88%	3.21%	1.40%	5.21%	4.08%	0.00%	4.11%	3.90%	3.57%	4.13%
4	0.00%	5.93%	3.45%	4.87%	1.49%	1.40%	8.33%	4.38%	5.88%	3.78%	4.08%	3.62%	3.31%
5	0.00%	1.97%	4.01%	4.56%	2.38%	0.98%	4.00%	3.50%	0.00%	2.37%	1.39%	2.83%	2.72%
6		1.94%	5.00%	2.60%	2.34%	0.85%	2.11%	2.10%	4.76%	1.29%	2.87%	5.13%	1.90%
7		0.00%	3.24%	1.97%	1.98%	0.67%	2.99%	2.68%	0.00%	3.22%	2.23%	8.06%	2.13%
8		1.09%	2.09%	1.06%	1.27%	0.52%	0.00%	3.46%	0.00%	2.51%	1.78%	4.76%	1.01%
9		1.89%	4.27%	1.45%	0.00%	1.69%	3.33%	1.05%	16.67%	4.12%	1.11%	0.00%	1.23%
10		0.00%	3.00%	0.81%	0.00%	0.44%	11.76%	0.00%	0.00%	1.83%	2.91%	5.00%	0.00%
11		0.00%	0.00%	1.49%	0.00%	0.30%	0.00%	1.09%	0.00%	4.59%	0.66%	0.00%	2.20%
12		0.00%	0.00%	0.00%	0.00%	1.27%	0.00%	0.00%	0.00%	4.23%	2.97%	0.00%	0.00%
13		0.00%	0.00%	0.00%	0.00%	1.80%	0.00%	0.00%	0.00%	0.00%	2.47%	0.00%	2.88%
14		0.00%	0.00%	0.00%	18.18%	3.03%	0.00%	4.00%		3.57%	3.85%	0.00%	1.35%
15		0.00%	0.00%	0.00%	0.00%	4.00%	0.00%	5.56%		5.00%	0.00%	0.00%	0.00%

Table 45: Contract Lifetime Cumulative Default Rates by GICS Sector

Years After Signature Date	Administration	Communication Services	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Information Technology	Materials	Others	Real Estate	Utilities
1	0.00%	0.91%	1.95%	1.83%	0.72%	1.01%	1.43%	1.92%	2.13%	2.03%	0.31%	1.63%	1.58%
2	0.00%	5.45%	7.91%	5.70%	4.71%	2.46%	5.24%	6.00%	6.38%	5.72%	2.96%	9.24%	3.38%
3	0.00%	7.58%	12.84%	10.91%	7.61%	3.78%	10.00%	9.71%	6.38%	9.50%	6.71%	12.50%	7.21%
4	0.00%	12.12%	15.56%	14.57%	8.70%	4.99%	16.19%	13.15%	10.64%	12.60%	10.30%	15.22%	10.02%
5	0.00%	13.33%	18.29%	17.31%	10.14%	5.70%	18.57%	15.45%	10.64%	14.24%	11.39%	16.85%	12.05%
6		14.24%	21.14%	18.58%	11.23%	6.20%	19.52%	16.60%	12.77%	15.02%	13.42%	19.02%	13.29%
7		14.24%	22.57%	19.28%	11.96%	6.41%	20.48%	17.75%	12.77%	16.57%	14.82%	21.74%	14.41%
8		14.55%	23.22%	19.56%	12.32%	6.52%	20.48%	18.90%	12.77%	17.54%	15.76%	22.83%	14.86%
9		14.85%	24.12%	19.77%	12.32%	6.73%	20.95%	19.16%	14.89%	18.60%	16.22%	22.83%	15.32%
10		14.85%	24.51%	19.85%	12.32%	6.76%	21.90%	19.16%	14.89%	18.90%	17.16%	23.37%	15.32%
11		14.85%	24.51%	19.92%	12.32%	6.78%	21.90%	19.28%	14.89%	19.38%	17.32%	23.37%	15.88%
12		14.85%	24.51%	19.92%	12.32%	6.82%	21.90%	19.28%	14.89%	19.67%	17.78%	23.37%	15.88%
13		14.85%	24.51%	19.92%	12.32%	6.85%	21.90%	19.28%	14.89%	19.67%	18.10%	23.37%	16.33%
14		14.85%	24.51%	19.92%	13.04%	6.89%	21.90%	19.41%		19.77%	18.41%	23.37%	16.44%
15		14.85%	24.51%	19.92%	13.04%	6.93%	21.90%	19.54%		19.86%	18.41%	23.37%	16.44%

3.4.3.2 Default Rates by Sector Groupings

Table 46: Contract Lifetime Marginal Default Rates by GEMs Sector Grouping

Years After Signature Date	Banking	Infrastructure	Non-Bank Financials	Renewables	Services
1	0.90%	1.49%	1.36%	2.05%	1.51%
2	1.19%	3.06%	2.34%	1.80%	3.72%
3	0.98%	3.66%	2.84%	5.83%	2.57%
4	1.22%	4.52%	2.02%	4.26%	4.23%
5	0.79%	2.71%	1.77%	4.33%	2.79%
6	0.77%	1.89%	1.23%	2.49%	2.47%
7	0.68%	2.56%	0.61%	2.73%	1.50%
8	0.65%	1.19%	0.00%	0.00%	0.83%
9	1.39%	1.54%	2.68%	0.80%	0.66%
10	0.29%	0.48%	0.88%	0.00%	0.00%
11	0.43%	1.58%	0.00%	0.00%	0.00%
12	0.00%	0.00%	3.23%	0.00%	3.45%
13	1.69%	2.17%	1.92%	0.00%	0.00%
14	3.13%	1.92%	2.94%	0.00%	5.00%
15	3.85%	0.00%	4.17%	0.00%	6.45%

Table 47: Contract Lifetime Cumulative Default Rates by GEMs Sector Grouping

Years After Signature Date	Banking	Infrastructure	Non-Bank Financials	Renewables	Services
1	0.90%	1.49%	1.36%	2.05%	1.51%
2	2.09%	4.53%	3.69%	3.85%	5.21%
3	3.02%	7.87%	6.34%	9.23%	7.53%
4	4.09%	11.57%	8.02%	12.82%	10.89%
5	4.68%	13.48%	9.14%	15.90%	12.75%
6	5.16%	14.61%	9.70%	17.44%	14.02%
7	5.39%	15.86%	9.86%	18.72%	14.60%
8	5.54%	16.34%	9.86%	18.72%	14.83%
9	5.70%	16.82%	10.18%	18.97%	14.95%
10	5.73%	16.94%	10.26%	18.97%	14.95%
11	5.75%	17.23%	10.26%	18.97%	14.95%
12	5.75%	17.23%	10.43%	18.97%	15.18%
13	5.77%	17.47%	10.51%	18.97%	15.18%
14	5.80%	17.59%	10.59%	18.97%	15.41%
15	5.82%	17.59%	10.67%	18.97%	15.64%

Table 48: Contract Lifetime Marginal Default Rates by Financial Industries Sector

Years After Signature Date	Financial Institutions	Non-Financial Institutions
1	1.01%	1.59%
2	1.45%	3.89%
3	1.40%	4.48%
4	1.40%	4.16%
5	0.98%	3.09%
6	0.85%	2.55%
7	0.67%	2.53%
8	0.52%	1.85%
9	1.69%	2.05%
10	0.44%	1.42%
11	0.30%	1.66%
12	1.27%	1.15%
13	1.80%	1.62%
14	3.03%	3.24%
15	4.00%	1.40%

Table 49: Contract Lifetime Cumulative Default Rates by Financial Industries Sector

Years After Signature Date	Financial Institutions	Non-Financial Institutions
1	1.59%	1.01%
2	5.45%	2.46%
3	9.54%	3.78%
4	12.85%	4.99%
5	14.91%	5.70%
6	16.34%	6.20%
7	17.47%	6.41%
8	18.10%	6.52%
9	18.61%	6.73%
10	18.85%	6.76%
11	19.05%	6.78%
12	19.14%	6.82%
13	19.23%	6.85%
14	19.33%	6.89%
15	19.37%	6.93%

4. Recovery Rate Statistics

4.1 Recovery Rate Definition

The recovery rate is the ratio between the discounted cash flows received (or expected to be received) after a set discount date (for example, default date) and the outstanding amount at that

time. These cash flows can include principal, interest, penalties and fees and can originate from the debtor or potential guarantors or from the sale of collateral.

4.2 Overall Results

The average recovery rate is 69.8%. Table 50 shows recovery rates by year of default. Excluding 2025, given ongoing unresolved recoveries, the highest recovery rate average was recorded in 2020 with 81.5% based on 90 counterparts

which defaulted during that year. The lowest average recovery rate was observed in 1996 and equalled 48.0% based on 13 defaults which occurred during that year.

Table 50: Recovery Rates

Year	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10-P90 Range
1994	19	97	74.6%	94.4% (63.8%–99.2%)	10.8%–100.0%
1995	16	34	52.0%	52.1% (1.5%–97.9%)	0.0%–100.0%
1996	13	151	48.0%	51.2% (10.7%–73.7%)	3.7%–96.1%
1997	24	166	59.8%	66.6% (25.9%–99.6%)	17.1%–100.0%
1998	68	1,036	66.8%	90.9% (24.4%–100.0%)	1.3%–100.0%
1999	36	352	60.9%	76.0% (23.3%–95.9%)	6.2%–100.0%
2000	35	407	54.0%	60.8% (15.1%–84.4%)	6.6%–99.5%
2001	41	284	64.2%	68.0% (39.7%–99.9%)	3.0%–100.0%
2002	62	926	70.6%	76.9% (52.8%–99.5%)	19.5%–100.0%
2003	61	772	85.0%	99.0% (74.7%–100.0%)	51.3%–100.0%
2004	30	310	78.1%	98.9% (58.5%–99.6%)	16.5%–100.0%
2005	25	262	67.7%	90.2% (32.4%–99.4%)	10.9%–100.0%
2006	25	237	71.1%	80.9% (45.3%–100.0%)	23.0%–100.0%
2007	29	319	62.1%	69.3% (18.7%–98.9%)	1.7%–100.0%
2008	51	668	73.0%	82.3% (61.7%–99.2%)	11.7%–100.0%
2009	71	1,265	63.4%	81.3% (23.3%–99.0%)	0.0%–100.0%
2010	74	967	75.0%	89.1% (66.6%–97.9%)	22.7%–100.0%
2011	59	736	68.8%	88.0% (44.4%–96.7%)	2.8%–100.0%
2012	56	885	73.2%	91.1% (58.3%–99.4%)	5.0%–100.0%
2013	54	661	60.3%	75.5% (20.5%–88.3%)	0.6%–100.0%
2014	84	1,759	66.3%	81.9% (39.0%–96.4%)	4.9%–99.7%

Year	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10-P90 Range
2015	88	1,576	68.1%	80.3% (42.9%–99.2%)	7.7%–100.0%
2016	110	2,398	55.9%	66.7% (9.9%–96.5%)	0.0%–99.9%
2017	80	1,503	70.1%	82.6% (51.0%–99.8%)	2.5%–100.0%
2018	61	1,220	70.3%	73.8% (51.5%–97.8%)	23.1%–100.0%
2019	89	1,673	71.2%	83.7% (44.6%–98.9%)	23.6%–100.0%
2020	90	2,103	81.5%	94.3% (79.5%–99.9%)	34.1%–100.0%
2021	60	1,206	81.2%	92.0% (79.1%–98.1%)	41.8%–100.0%
2022	59	1,022	79.6%	91.9% (83.1%–98.8%)	7.9%–100.0%
2023	40	819	78.1%	92.8% (84.0%–99.2%)	0.0%–100.0%
2024	36	741	73.7%	95.9% (55.7%–99.2%)	2.1%–99.8%
2025	13	98	91.3%	99.0% (97.7%–99.9%)	96.4%–100.0%

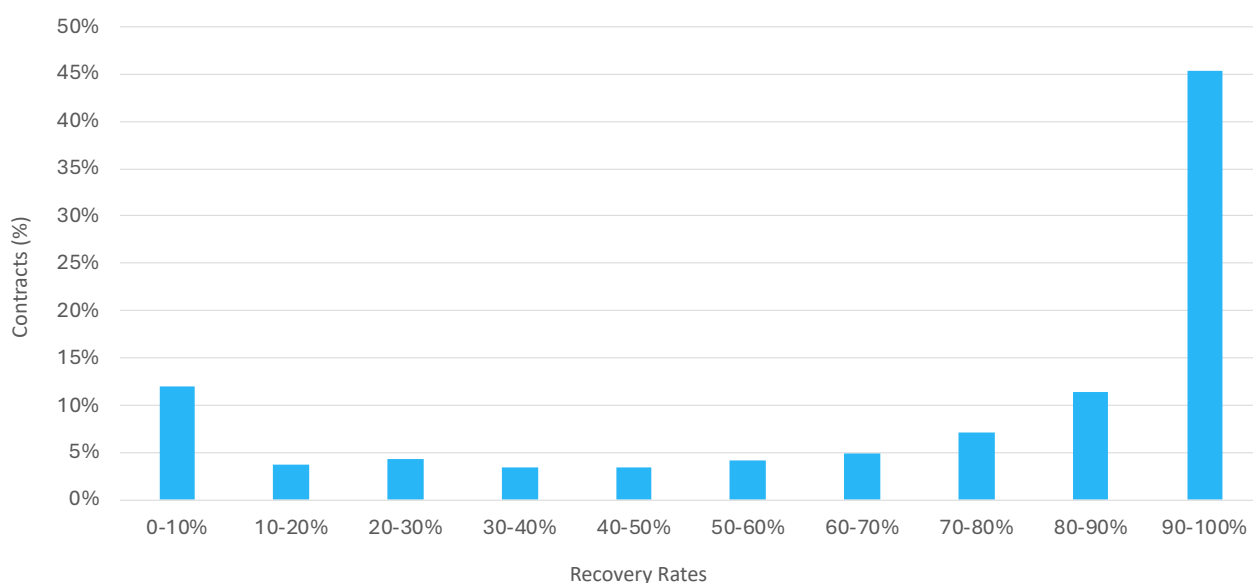
The distribution of recovery outcomes remains concentrated at the upper end of the range. 45.4% of defaulted contracts record recovery rates between 90% and 100%, while 56.7%

recover at least 80% and 63.8% recover at least 70%. At the other end of the distribution, 12.1% of contracts record recoveries below 10%, and 27.0% recover less than 50%.

Table 51: 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	200	61	72	58	57	70	82	118	188	753
% Defaulted contracts	12.1%	3.7%	4.3%	3.5%	3.4%	4.2%	4.9%	7.1%	11.3%	45.4%

Figure 28: Distribution of Recovery Rates



Default resolutions are concentrated in the earlier years following default. 23.1% of defaults are resolved within the first year, 51.4% within three years and 72.2% within five years. By year 10, 91.9% of defaults have been resolved, increasing to 97.5% by year 15. Only a small proportion of defaults remain unresolved beyond this period, with 1.3% resolved after 20 years.

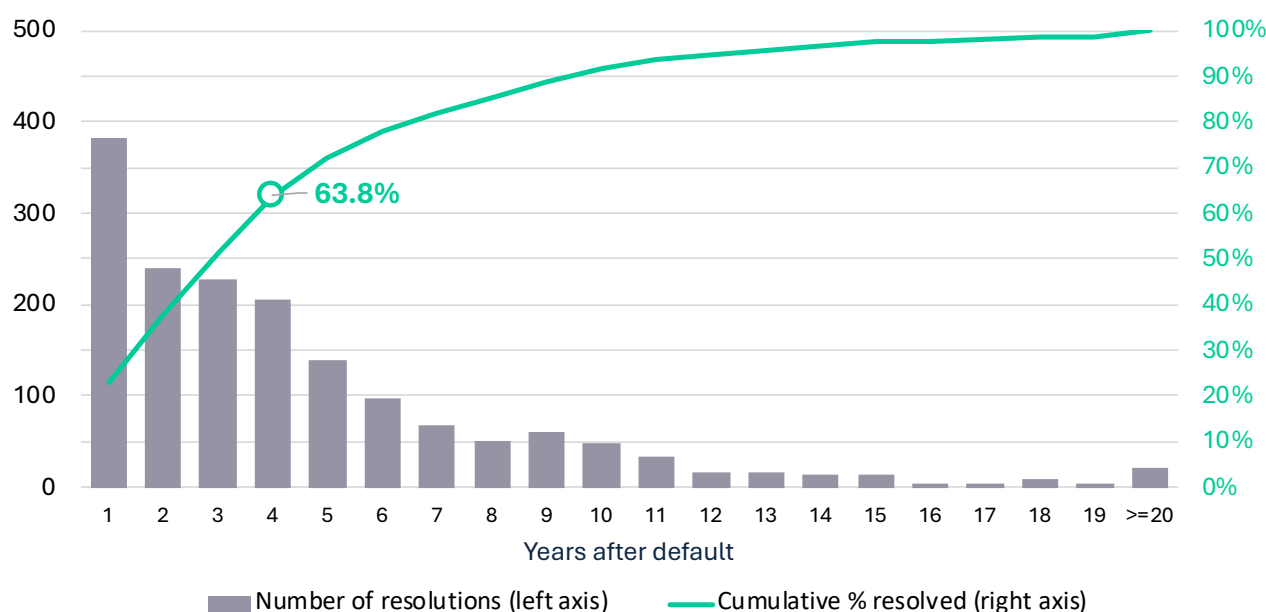
The distribution indicates that most recovery outcomes are determined within the first several years following default, while a limited number of cases require substantially longer resolution periods.

Table 52: Distribution of Years to Resolution

Number of Years	1	2	3	4	5	6	7	8	9	10
Resolutions	383	241	228	206	139	97	68	52	61	49
% Resolved	23.1%	37.6%	51.4%	63.8%	72.2%	78.0%	82.1%	85.2%	88.9%	91.9%

Number of Years	11	12	13	14	15	16	17	18	19	≥20
Resolutions	33	16	16	15	13	4	5	9	3	21
% Resolved	93.9%	94.8%	95.8%	96.7%	97.5%	97.7%	98.0%	98.6%	98.7%	100.0%

Figure 29: Recovery Rates by Years to Resolution



4.3 Recovery Rates by Region

4.3.1 Recovery Rates by World Bank Region

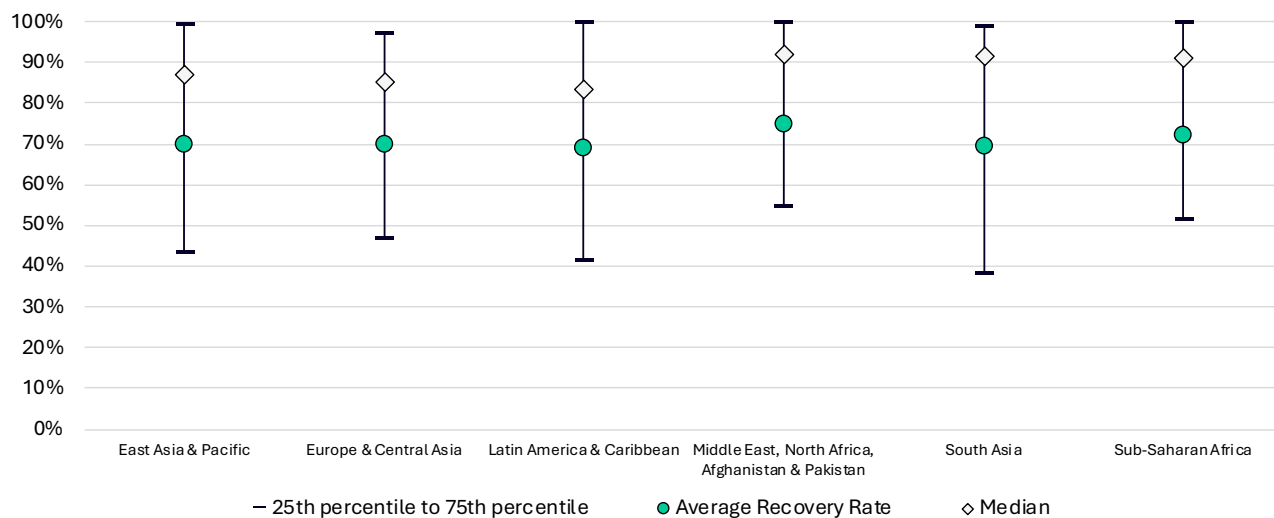
Using the World Bank regional classification, this section presents recovery rates by geographical region. The highest average recovery rate is recorded in the Middle East, North Africa,

Afghanistan & Pakistan at 74.8%, followed by Sub-Saharan Africa at 72.0%, while the lowest is in Latin America & Caribbean at 69.0% (Table 53).

Table 53: Recovery Rates by World Bank Region

Region	Number of Defaults	Signed Amount (€m)	Average RR		Median RR (IQR)	P10–P90 Range
East Asia & Pacific	143	2,390	69.9%	86.8%	(43.2%–99.1%)	22.2%–100.0%
Europe & Central Asia	534	8,654	69.6%	85.3%	(46.8%–96.9%)	8.2%–100.0%
Latin America & Caribbean	284	4,734	68.9%	83.5%	(41.4%–99.6%)	9.3%–100.0%
Middle East, North Africa, Afghanistan & Pakistan	134	3,344	74.8%	91.7%	(54.8%–100.0%)	19.5%–100.0%
South Asia	88	1,791	69.1%	91.4%	(38.3%–99.0%)	2.1%–100.0%
Sub-Saharan Africa	392	4,429	72.0%	91.0%	(51.3%–99.8%)	4.5%–100.0%
Overall (including omitted categories)	1,659	26,653	69.8%	86.1%	(44.3%–99.2%)	5.9%–100.0%

Figure 30: Recovery Rates by World Bank Region



Annual recovery rates vary across regions and years, with the level of dispersion reflecting differences in the number and characteristics of defaults observed in each year.

No single region consistently records either the highest or lowest recovery rate across the reporting period.

Table 54: Recovery Rates by World Bank Region

Year	East Asia & Pacific	Europe & Central Asia	Latin America & Caribbean	Middle East, North Africa, Afghanistan & Pakistan	South Asia	Sub-Saharan Africa
1994	28.8%	54.1%	95.8%	30.1%		96.3%
1995	20.9%	93.5%	91.9%			20.5%
1996	38.5%	25.7%	27.4%	76.0%		100.0%
1997	54.3%	80.3%	46.6%	100.0%	32.3%	63.2%
1998	62.5%	52.3%	55.2%	95.5%	74.4%	60.5%
1999	68.3%	65.5%	21.9%	97.7%		59.1%
2000	60.2%	54.7%	31.9%		34.6%	85.8%
2001	57.2%	57.7%	53.7%	83.1%	79.9%	70.6%
2002	62.3%	54.6%	76.0%	66.4%	91.3%	66.3%
2003	82.1%	75.7%	88.2%	99.6%	99.1%	83.6%
2004	99.0%	99.2%	69.7%	60.9%	49.7%	89.2%
2005	56.2%	43.6%	97.2%	82.3%		59.3%
2006	86.0%	65.9%	90.3%	62.1%	100.0%	58.8%
2007	69.1%	51.0%	65.8%	82.9%	100.0%	65.5%
2008	71.9%	75.2%	78.4%	99.0%	76.7%	61.3%
2009	63.6%	66.5%	79.9%	85.7%	33.3%	67.4%
2010	59.8%	75.4%	76.2%	33.0%	78.6%	78.4%
2011	73.3%	72.1%	100.0%	63.1%	64.4%	59.2%
2012	52.2%	78.0%	52.9%	73.8%		79.8%
2013	89.2%	43.1%	82.6%	41.1%	21.3%	63.3%
2014	74.1%	59.7%	71.4%	79.4%	61.0%	80.0%
2015	68.0%	73.4%	61.6%	41.5%	81.4%	74.0%
2016	46.5%	65.8%	57.1%	50.4%	42.5%	50.9%
2017	32.2%	71.1%	76.9%	42.0%		74.3%
2018	83.5%	73.3%	71.3%	100.0%	52.5%	64.4%
2019	74.9%	84.5%	59.5%	72.1%	23.8%	81.5%
2020	82.6%	84.7%	70.2%	65.8%	92.4%	92.2%
2021	79.6%	90.2%	36.0%	96.2%	77.2%	89.2%
2022	92.6%	71.2%	49.9%	100.0%	96.5%	100.0%
2023	43.8%	90.8%	66.2%	92.0%	97.0%	76.4%
2024	99.6%	82.2%	59.0%	50.5%		86.1%
2025	100.0%	0.0%		99.0%		98.2%

4.3.2 Recovery Rates by Continent

Table 55 presents recovery rates categorised by year of default and continent. The assignment

of individual countries to their respective continents is detailed in Annex 7.2.

Table 55: Recovery Rates by Continent

Continent	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10–P90 Range
Africa	428	5,807	71.7%	90.0% (51.4%–99.7%)	4.8%–100.0%
Asia	400	6,449	72.4%	90.5% (49.0%–99.5%)	12.1%–100.0%
Europe	459	8,319	69.0%	84.3% (45.8%–96.6%)	8.3%–100.0%
North America	135	1,766	70.5%	82.2% (51.8%–99.5%)	5.6%–100.0%
South America	149	2,968	67.5%	86.0% (31.8%–99.7%)	12.8%–100.0%
Overall (Including Omitted Categories)	1,659	26,653	69.8%	86.1% (44.3%–99.2%)	5.9%–100.0%

Figure 31: Recovery Rates by Continent

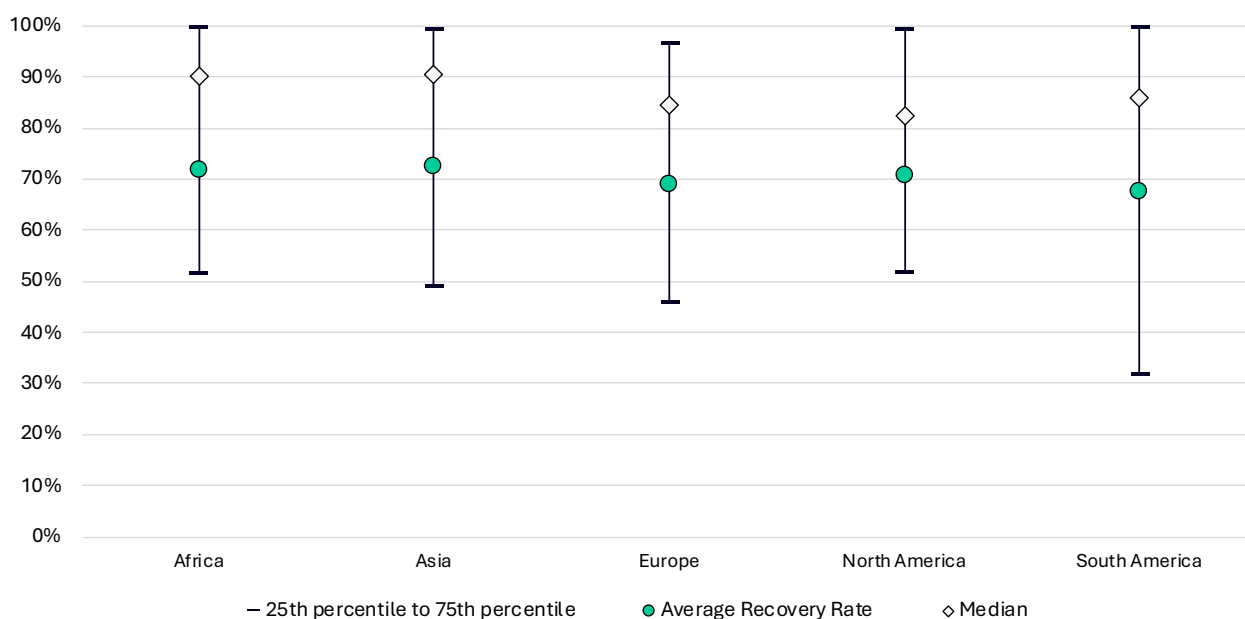


Table 56: Recovery Rates by Continent

Year	Africa	Asia	Europe	North America	South America
1994	79.8%	28.8%	54.1%	94.8%	100.0%
1995	20.5%	20.9%	93.5%		91.9%
1996	81.0%	70.2%	25.7%		27.4%
1997	63.2%	51.4%	80.3%	99.7%	28.9%
1998	60.5%	75.9%	54.9%	46.9%	59.4%
1999	62.4%	62.8%	69.0%		21.9%
2000	85.8%	56.0%	54.7%	64.2%	19.8%
2001	73.2%	74.7%	57.7%	79.8%	27.5%
2002	67.0%	70.0%	54.6%	80.3%	75.3%
2003	84.7%	84.9%	75.7%	83.6%	91.0%
2004	89.2%	71.8%	99.2%	70.5%	67.8%
2005	58.4%	77.9%	43.6%		97.2%
2006	60.0%	73.0%	99.1%	80.7%	99.8%
2007	65.6%	64.7%	52.1%	54.4%	100.0%
2008	64.7%	77.9%	76.4%	82.6%	76.0%
2009	70.6%	46.9%	71.4%	79.8%	80.0%
2010	70.2%	73.9%	74.8%	70.3%	99.5%
2011	57.1%	60.7%	77.2%		100.0%
2012	79.8%	63.5%	80.5%	35.2%	79.6%
2013	63.3%	61.9%	29.4%	81.6%	84.2%
2014	79.1%	63.7%	62.5%	84.3%	45.6%
2015	67.0%	71.4%	73.3%	67.2%	50.3%
2016	51.1%	57.2%	62.4%	64.6%	51.5%
2017	74.6%	46.6%	68.4%	78.8%	75.0%
2018	64.4%	72.6%	73.3%	83.2%	44.4%
2019	81.1%	68.2%	78.8%	50.5%	77.5%
2020	92.7%	76.9%	84.5%	60.7%	81.1%
2021	90.2%	85.8%	80.6%	99.6%	14.9%
2022	100.0%	93.0%	60.3%	22.9%	85.9%
2023	80.7%	85.5%	88.7%	66.7%	65.6%
2024	86.1%	50.0%	95.9%	39.3%	98.5%
2025	98.3%	100.0%	0.0%		

4.4 Recovery Rates by Sector

Like the annual default rates analysed in Section 3, the recovery rates by sector are classified according to the GICS 2018 framework.

4.4.1 Recovery Rates by GICS Sector

Recovery rates vary moderately across GICS sectors. The industrials sector records the lowest average recovery rate at 63.7%, followed by energy at 64.4%, while healthcare, utilities and communication services record the highest rates

at around 73%. The Financials sector accounts for the largest share of defaults, at approximately 20%, and records a recovery rate of 72.4%, against an overall average of 69.8%.

Table 57: Recovery Rates by GICS Sector

Sector	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10–P90 Range
Energy	34	1,598	64.4%	85.8% (39.3%–99.4%)	0.7%–100.0%
Materials	216	4,924	72.0%	89.5% (47.6%–100.0%)	8.5%–100.0%
Industrials	155	2,869	63.7%	81.1% (26.1%–99.7%)	1.2%–100.0%
Consumer Discretionary	198	1,695	68.1%	83.4% (40.3%–99.5%)	9.0%–100.0%
Consumer Staples	274	2,307	66.0%	82.9% (29.1%–99.0%)	5.4%–100.0%
Health Care	50	711	73.2%	80.7% (57.4%–99.2%)	15.6%–100.0%
Financials	353	4,428	72.4%	91.9% (51.9%–99.1%)	6.8%–100.0%
Communication Services	47	1,207	73.1%	87.6% (63.7%–99.7%)	3.8%–100.0%
Utilities	185	5,031	73.1%	84.3% (66.3%–98.2%)	5.6%–100.0%
Real Estate	39	652	71.4%	81.1% (54.5%–96.8%)	21.4%–99.1%
Others	102	1,187	69.7%	82.6% (47.0%–97.0%)	16.3%–99.9%
Overall (including omitted categories)	1,659	26,653	69.8%	86.1% (44.3%–99.2%)	5.9%–100.0%

Figure 32: Recovery Rates by GICS Sector

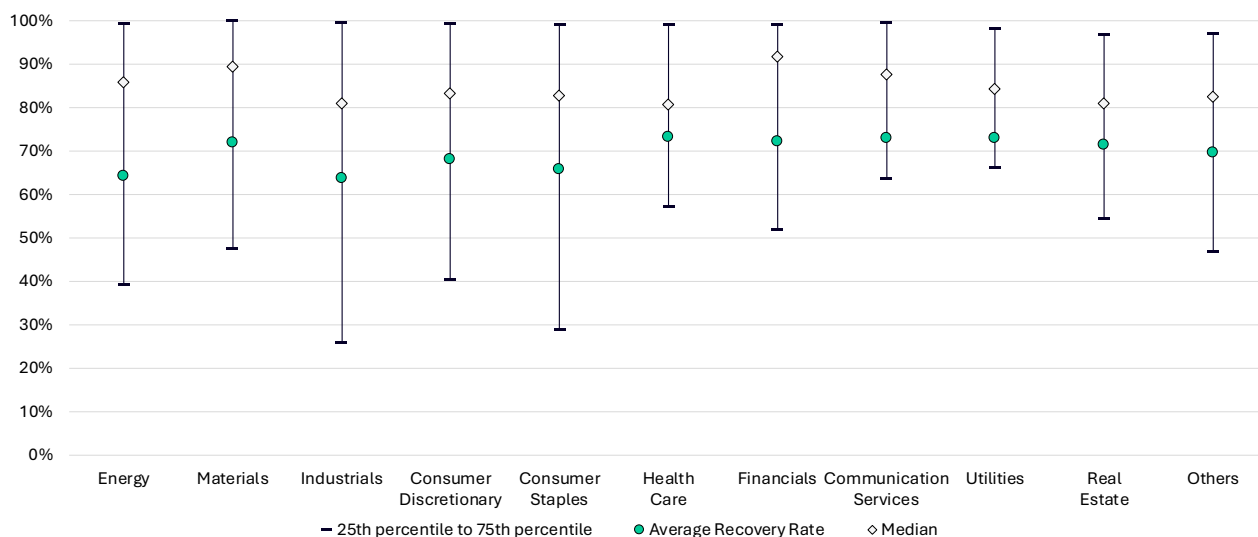


Table 58: Recovery Rates by GICS Sector

Year	Communication Services	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Materials	Others	Real Estate	Utilities
1994		93.5%	69.4%				41.8%	72.6%	80.2%		
1995		21.2%	49.3%			100.0%	36.0%	66.7%	87.1%		
1996		27.5%	14.8%		10.7%	100.0%			68.5%		100.0%
1997		54.8%	53.8%		40.7%		76.1%	67.4%	66.9%		99.7%
1998	100.0%	83.8%	33.3%	100.0%	71.7%	73.9%	59.9%	73.1%	48.1%		
1999	86.6%	50.9%	14.6%		86.0%	16.4%	44.2%	91.8%	70.3%		100.0%
2000	99.7%	49.4%	53.1%	91.3%	37.9%		46.9%	63.6%	42.6%		
2001	80.4%	62.2%	59.2%		55.3%	43.7%	88.1%	59.0%	71.6%		
2002		56.8%	47.3%		88.2%	54.4%	43.1%	84.2%	74.7%	70.2%	89.0%
2003	92.1%	64.7%	91.5%	65.7%	89.2%	66.4%	89.9%	91.7%	86.5%		89.9%
2004	82.3%	99.8%	83.2%	99.6%	79.2%		98.2%	44.2%	50.5%	94.2%	99.0%
2005	100.0%	55.4%	16.0%	99.6%	48.5%	45.5%	60.6%	66.4%	93.9%		97.2%
2006	100.0%	100.0%	57.9%		88.3%			78.1%	39.3%		46.5%
2007	18.7%	60.3%	26.9%		46.0%		100.0%	74.9%	51.2%		90.6%
2008	83.1%	71.8%	72.9%	98.4%	82.4%		50.0%	70.0%	49.5%		87.8%
2009	72.8%	89.6%	76.0%	51.8%	60.3%	99.2%	44.4%	67.4%	30.0%		83.1%
2010		87.7%	68.4%	92.0%	82.9%	86.7%	63.5%	70.4%	94.0%	66.8%	50.1%
2011	37.4%	0.0%	57.3%	5.0%	92.7%		60.6%	94.8%	91.3%	86.0%	63.1%
2012	99.2%	64.5%	68.1%	0.0%	80.5%	49.5%	63.2%	63.4%	68.8%	91.8%	80.3%
2013	81.3%	72.6%	42.6%	66.0%	42.2%	67.4%	45.9%	95.8%		79.3%	62.1%
2014	95.7%	62.1%	61.6%	56.6%	65.6%	42.6%	46.6%	64.8%	98.3%	84.1%	89.7%
2015	74.5%	59.0%	66.2%	44.2%	72.1%	72.5%	44.7%	88.9%	99.5%		75.6%
2016	15.5%	66.8%	52.8%	99.6%	62.1%	66.3%	39.5%	48.9%	35.6%	28.9%	58.9%
2017	99.8%	62.1%	58.0%	50.8%	76.8%	93.5%	96.6%	65.0%	69.0%	6.2%	59.5%
2018		67.1%	61.6%	66.5%	73.3%	89.5%	88.3%	47.9%	97.6%	44.5%	56.6%
2019		72.1%	78.5%		68.2%	74.9%	90.4%	61.9%	79.3%	52.9%	54.3%
2020		90.9%	76.9%		64.0%	79.9%	76.0%	86.9%	98.2%	98.5%	87.5%
2021	62.5%	78.0%	94.9%	100.0%	65.5%	99.2%	83.8%	87.3%	90.2%	83.9%	91.8%
2022		86.6%	87.9%		81.8%	91.3%	88.7%	67.3%		87.2%	60.9%
2023	4.0%	83.7%	58.4%	100.0%	71.9%	97.2%	99.3%	43.8%	98.3%	99.5%	91.3%
2024	57.4%	93.8%	93.3%		83.4%		40.9%	45.5%	96.8%		89.0%
2025		98.9%	98.5%		82.9%			97.6%			

4.4.2 Recovery Rates by Sector Groupings

Table 59 presents recovery rates by sector groupings. The assignment of individual GICS

and NACE sectors to their respective sector groupings is detailed in Annex 7.3.

Table 59: Recovery Rates by GEMs Sector Grouping

GEMs Sector Grouping	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10-P90 Range
Banking	239	3,341	73.5%	92.6% (58.0%–99.1%)	8.3%–100.0%
Infrastructure	333	8,347	73.2%	86.0% (62.5%–99.6%)	6.8%–100.0%
Non-Bank Financials	114	1,087	70.0%	87.9% (40.1%–98.8%)	3.4%–100.0%
Renewables	99	2,539	71.8%	84.3% (59.4%–98.7%)	7.7%–100.0%
Services	135	2,384	64.7%	79.8% (28.7%–99.5%)	1.2%–100.0%
Overall (including omitted categories)	1,659	26,653	69.8%	86.1% (44.3%–99.2%)	5.9%–100.0%

Figure 33: Recovery Rates by GEMs Sector Grouping

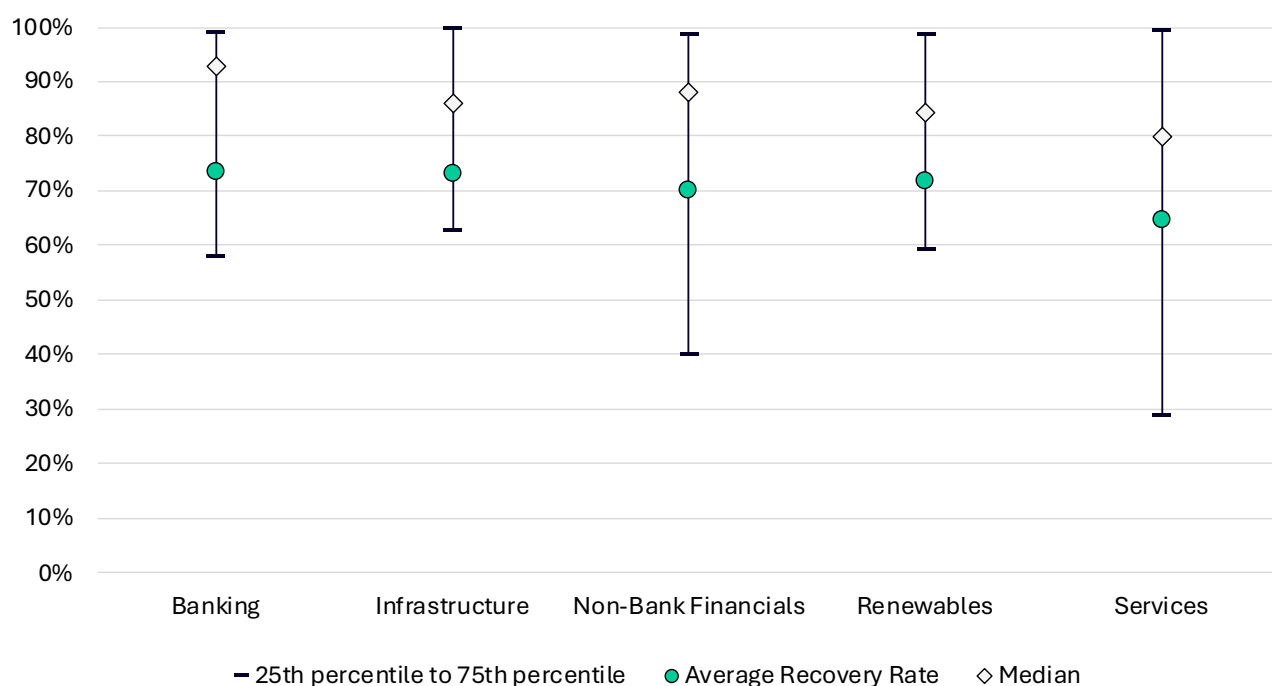


Table 60: Recovery Rates by GEMs Sector Grouping

Year	Banking	Infrastructure	Non-Bank Financials	Renewables	Services
1994					
1995					36.0%
1996	10.7%	100.0%			
1997		99.7%	40.7%		76.1%
1998	75.4%	99.6%	63.4%		44.7%
1999	84.6%	90.7%	95.4%		86.6%
2000	37.9%	64.7%			73.1%
2001	40.4%	77.0%	100.0%		80.4%
2002	88.2%	78.5%			99.5%
2003	98.8%	85.2%	22.3%	100.0%	93.6%
2004	79.2%	92.4%			82.3%
2005	42.4%	82.3%	66.8%		100.0%
2006	85.9%	64.4%	100.0%	0.0%	100.0%
2007	46.0%	80.2%			18.7%
2008	79.5%	79.2%	99.4%	99.2%	83.1%
2009	58.9%	80.1%	63.1%	79.7%	67.4%
2010	76.1%	42.4%	88.0%	100.0%	75.7%
2011	92.7%	57.6%	92.7%		43.7%
2012	77.7%	85.3%	85.3%	80.3%	87.5%
2013	70.3%	71.6%	0.0%	66.8%	56.3%
2014	71.6%	82.1%	0.0%	89.5%	58.9%
2015	81.1%	69.5%	59.1%	71.9%	54.0%
2016	61.8%	53.9%	63.0%	57.0%	53.0%
2017	76.6%	69.0%	77.1%	68.6%	63.3%
2018	69.8%	67.8%	84.0%	56.5%	89.3%
2019	56.0%	62.0%	74.4%	64.8%	99.4%
2020	72.6%	82.6%	43.6%	85.7%	71.1%
2021	73.6%	85.6%	54.5%	91.8%	68.9%
2022	87.0%	70.2%	76.7%	46.1%	47.9%
2023	72.8%	85.2%	70.4%	92.7%	57.0%
2024	83.0%	75.2%	86.4%	98.8%	57.3%
2025	82.9%				

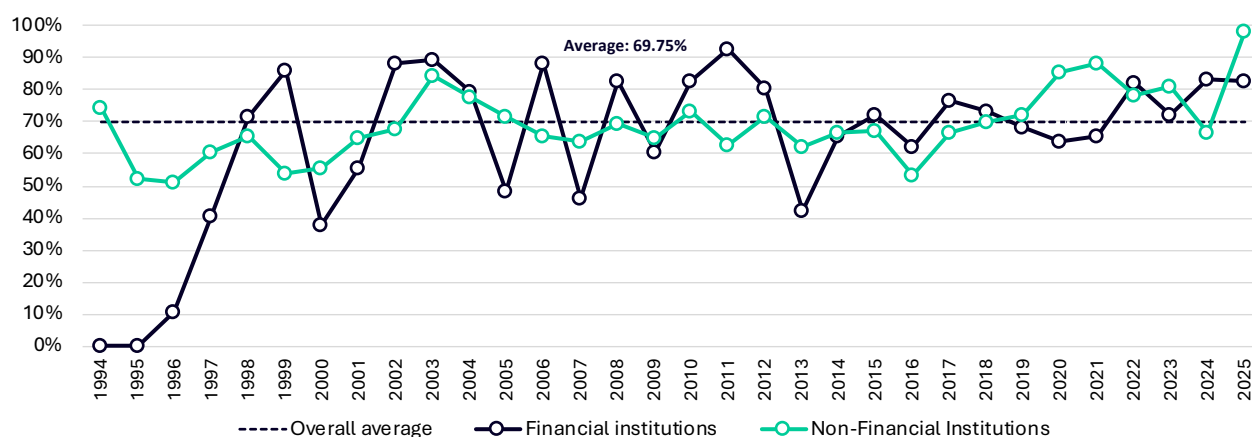
Table 61: Recovery Rates by Financial Industries Sector

Financial Industries Sector	Number of Defaults	Signed Amount (€m)	Average RR		Median RR (IQR)	P10–P90 Range
Financial	353	4,428	72.4%	91.9% (51.9%–99.1%)		6.8%–100.0%
Non-Financial	1,306	22,225	69.0%	84.1% (43.7%–99.3%)		5.7%–100.0%
Overall (including omitted categories)	1,659	26,653	69.8%	86.1% (44.3%–99.2%)		5.9%–100.0%

Table 62: Recovery Rates by Financial Industries Sector

Year	Financial Institutions	Non-Financial Institutions
1994		74.6%
1995		52.0%
1996	10.7%	51.2%
1997	40.7%	60.7%
1998	71.7%	65.6%
1999	86.0%	53.7%
2000	37.9%	55.5%
2001	55.3%	65.2%
2002	88.2%	67.9%
2003	89.2%	84.4%
2004	79.2%	77.8%
2005	48.5%	71.3%
2006	88.3%	65.7%
2007	46.0%	64.0%
2008	82.4%	69.5%
2009	60.3%	65.0%
2010	82.9%	73.1%
2011	92.7%	62.7%
2012	80.5%	71.4%
2013	42.2%	62.1%
2014	65.6%	66.4%
2015	72.1%	67.2%
2016	62.1%	53.4%
2017	76.8%	66.8%
2018	73.3%	69.9%
2019	68.2%	72.3%
2020	64.0%	85.5%
2021	65.5%	88.4%
2022	81.8%	78.4%
2023	71.9%	81.1%
2024	83.4%	66.8%
2025	82.9%	98.4%

Figure 34: Recovery Rates by Financial Industries Sector



4.5 Recovery Rates by World Bank Region and Sector

Disaggregating recovery rates by World Bank region and sector shows which sectors are represented in each region. Communication services are represented only in Sub-Saharan Africa, while Real Estate

is represented only in Europe & Central Asia. Consumer discretionary, financials and materials have recovery observations across all six regions.

4.5.1 Recovery Rates by World Bank Region and GICS Sector

Table 63: Recovery Rates by World Bank Region and GICS Sector

Sector	Item	East Asia & Pacific	Europe & Central Asia	Latin America & Caribbean	Middle East, North Africa, Afghanistan & Pakistan	South Asia	Sub-Saharan Africa
Communication Services	Average Recovery rate	82.5%					
	Median	99.2%					
	IQR	71.5%–99.8%					
	P10-P90	57.0%–100.0%					
Consumer Discretionary	Average Recovery rate	64.9%	61.2%	68.7%	75.8%	59.5%	72.9%
	Median	79.4%	75.3%	88.5%	90.4%	61.5%	92.1%
	IQR	39.4%–97.1%	32.9%–89.7%	28.4%–99.8%	56.8%–100.0%	27.2%–99.6%	52.0%–99.7%
	P10-P90	12.2%–99.7%	8.9%–99.5%	15.5%–100.0%	47.7%–100.0%	6.7%–100.0%	15.3%–100.0%
Consumer Staples	Average Recovery rate	86.1%	68.1%	59.1%	64.2%		
	Median	99.1%	83.4%	67.1%	81.5%		
	IQR	95.0%–100.0%	33.1%–97.0%	18.8%–93.6%	32.1%–99.3%		
	P10-P90	40.6%–100.0%	8.6%–100.0%	2.1%–100.0%	1.6%–100.0%		
Energy	Average Recovery rate	46.9%					
	Median	45.4%					
	IQR	0.1%–91.1%					
	P10-P90	0.0%–91.9%					
Financials	Average Recovery rate	70.9%	75.4%	59.1%	72.8%	89.5%	78.6%
	Median	83.8%	91.8%	71.1%	90.4%	96.5%	98.2%
	IQR	40.5%–99.6%	70.9%–97.6%	23.4%–94.6%	40.5%–99.8%	94.0%–99.4%	70.7%–99.9%
	P10-P90	34.1%–99.9%	10.6%–99.7%	3.7%–98.8%	25.4%–100.0%	77.8%–100.0%	0.0%–100.0%

Sector	Item	East Asia & Pacific	Europe & Central Asia	Latin America & Caribbean	Middle East, North Africa, Afghanistan & Pakistan	South Asia	Sub-Saharan Africa
Health Care	Average Recovery rate	78.8%		90.3%		49.5%	
	Median	79.8%		98.6%		54.6%	
	IQR	74.9%–94.8%		84.6%–100.0%		19.1%–77.4%	
	P10-P90	70.7%–98.6%		78.3%–100.0%		4.9%–98.9%	
Industrials	Average Recovery rate	75.6%	65.3%	64.8%	59.6%	73.2%	
	Median	86.8%	83.1%	73.2%	60.6%	99.6%	
	IQR	57.9%–93.1%	20.2%–98.0%	37.0%–100.0%	25.2%–97.3%	43.9%–100.0%	
	P10-P90	46.2%–98.2%	4.2%–100.0%	9.3%–100.0%	12.6%–100.0%	1.8%–100.0%	
Materials	Average Recovery rate	64.2%	72.9%	85.0%	77.8%	77.5%	65.8%
	Median	68.0%	86.4%	100.0%	100.0%	97.5%	85.5%
	IQR	38.5%–99.1%	59.1%–98.3%	90.8%–100.0%	62.4%–100.0%	61.1%–100.0%	26.5%–98.8%
	P10-P90	11.6%–100.0%	20.2%–100.0%	37.0%–100.0%	8.7%–100.0%	48.8%–100.0%	2.3%–100.0%
Others	Average Recovery rate	65.7%		77.4%		71.0%	
	Median	89.4%		83.7%		74.4%	
	IQR	20.3%–97.7%		55.8%–98.8%		46.3%–96.5%	
	P10-P90	0.0%–99.9%		47.6%–99.9%		36.5%–98.8%	
Real Estate	Average Recovery rate	76.2%					
	Median	82.5%					
	IQR	68.1%–95.7%					
	P10-P90	40.5%–98.6%					

Sector	Item	East Asia & Pacific	Europe & Central Asia	Latin America & Caribbean	Middle East, North Africa, Afghanistan & Pakistan	South Asia	Sub-Saharan Africa
Utilities	Average Recovery rate	70.9%	78.1%	87.2%	42.1%	81.6%	
	Median	84.0%	88.1%	90.6%	33.3%	96.5%	
	IQR	68.8%–90.8%	71.0%–99.7%	85.1%–92.7%	3.1%–81.0%	79.5%–100.0%	
	P10–P90	9.2%–99.5%	31.5%–100.0%	80.0%–100.0%	1.6%–87.4%	46.4%–100.0%	

4.5.2 Recovery Rates by World Bank Region and Sector Groupings

Table 64: Recovery Rates by World Bank Region and GEMs Sector Grouping

Region	Item	Banking	Infrastructure	Non-Bank Financials	Renewables	Services
East Asia & Pacific	Average Recovery rate	77.9%	61.1%			
	Median	92.6%	63.7%			
	IQR	61.3%–99.7%	44.2%–91.4%			
	P10-P90	37.6%–99.9%	5.2%–98.1%			
Europe & Central Asia	Average Recovery rate	74.2%	72.9%	81.0%	70.0%	72.4%
	Median	90.4%	84.2%	93.4%	84.0%	92.0%
	IQR	69.7%–97.6%	70.3%–96.1%	77.9%–97.2%	70.6%–87.2%	48.4%–98.8%
	P10-P90	9.1%–99.5%	12.9%–99.9%	40.0%–99.9%	8.4%–97.5%	9.9%–100.0%

Region	Item	Banking	Infrastructure	Non-Bank Financials	Renewables	Services
Latin America & Caribbean	Average Recovery rate	57.0%	75.8%	60.5%	67.7%	58.0%
	Median	58.5%	92.0%	75.5%	81.3%	73.7%
	IQR	20.4%–94.3%	65.2%–100.0%	26.7%–94.3%	44.0%–100.0%	17.0%–95.9%
	P10–P90	6.1%–99.3%	20.3%–100.0%	4.4%–98.7%	3.1%–100.0%	0.0%–100.0%
Middle East, North Africa, Afghanistan & Pakistan	Average Recovery rate	62.0%	76.5%	86.3%		71.0%
	Median	61.4%	90.6%	99.2%		91.2%
	IQR	32.9%–91.5%	74.2%–96.3%	91.5%–100.0%		42.2%–100.0%
	P10–P90	23.7%–99.9%	16.4%–100.0%	54.4%–100.0%		12.1%–100.0%
South Asia	Average Recovery rate	89.0%	49.4%	90.5%		
	Median	98.4%	67.3%	94.7%		
	IQR	95.3%–99.0%	6.3%–82.3%	92.5%–100.0%		
	P10–P90	77.8%–99.9%	1.7%–90.3%	85.4%–100.0%		
Sub-Saharan Africa	Average Recovery rate	80.5%	79.6%	70.4%	87.5%	71.8%
	Median	99.1%	97.2%	82.7%	100.0%	87.7%
	IQR	79.4%–100.0%	75.1%–100.0%	62.2%–99.8%	80.6%–100.0%	56.7%–99.7%
	P10–P90	5.4%–100.0%	20.7%–100.0%	4.3%–100.0%	60.2%–100.0%	11.3%–100.0%

Table 65: Recovery Rates by World Bank Region and Financial Industries Sector

Region	Item	Financial Institutions	Non-Financial Institutions
East Asia & Pacific	Average Recovery rate	70.9%	69.6%
	Median	83.8%	86.9%
	IQR	40.5%–99.6%	45.1%–99.1%
	P10-P90	34.1%–99.9%	17.2%–100.0%
Europe & Central Asia	Average Recovery rate	75.4%	67.9%
	Median	91.8%	83.3%
	IQR	70.9%–97.6%	38.1%–96.5%
	P10-P90	10.6%–99.7%	7.6%–100.0%
Latin America & Caribbean	Average Recovery rate	59.1%	70.9%
	Median	71.1%	85.5%
	IQR	23.4%–94.6%	46.5%–99.9%
	P10-P90	3.7%–98.8%	13.3%–100.0%
Middle East, North Africa, Afghanistan & Pakistan	Average Recovery rate	72.8%	75.5%
	Median	90.4%	92.5%
	IQR	40.5%–99.8%	56.1%–100.0%
	P10-P90	25.4%–100.0%	16.7%–100.0%
South Asia	Average Recovery rate	89.5%	59.1%
	Median	96.5%	74.6%
	IQR	94.0%–99.4%	15.5%–96.8%
	P10-P90	77.8%–100.0%	1.8%–100.0%
Sub-Saharan Africa	Average Recovery rate	78.6%	70.7%
	Median	98.2%	88.4%
	IQR	70.7%–99.9%	48.2%–99.7%
	P10-P90	0.0%–100.0%	5.0%–100.0%

4.6 Recovery Rates by Country

Average recovery rates vary by country. Country-level results should be read alongside the number of observations, which varies widely across countries.

The highest and lowest average recovery rates by country are set out in Table 66.

Table 66: Recovery Rates by Country

ISO country code - ISO country name	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10–P90 Range
AL-Albania	16	243	80.5%	85.2% (72.4%–96.1%)	61.6%–99.9%
AR-Argentina	53	917	74.6%	86.7% (58.5%–98.0%)	17.5%–100.0%
AZ-Azerbaijan	38	332	59.2%	73.1% (24.8%–91.4%)	7.7%–98.9%
BA-Bosnia and Herzegovina	15	39	64.7%	79.9% (35.7%–93.4%)	15.9%–98.0%
BF-Burkina Faso	21	111	88.4%	98.9% (90.9%–100.0%)	50.5%–100.0%
BG-Bulgaria	22	400	80.0%	88.4% (76.1%–98.7%)	38.1%–100.0%
BJ-Benin	12	73	65.4%	71.3% (50.6%–98.2%)	4.0%–99.9%
BR-Brazil	30	737	63.2%	81.9% (18.4%–100.0%)	13.9%–100.0%
BY-Belarus	13	166	74.1%	83.0% (58.0%–100.0%)	19.7%–100.0%
CI-Cote D'Ivoire	32	346	87.5%	98.1% (87.5%–99.6%)	58.8%–100.0%
CL-Chile	11	604	43.9%	37.0% (23.6%–66.0%)	5.2%–88.6%
CN-China	28	471	66.7%	85.7% (41.9%–99.2%)	16.2%–100.0%
CR-Costa Rica	10	121	61.1%	76.2% (32.1%–86.0%)	0.0%–100.0%
DO-Dominican Republic	11	105	79.6%	99.1% (62.5%–99.9%)	48.4%–100.0%
EG-Egypt	24	1,004	69.4%	75.1% (51.5%–99.6%)	17.7%–100.0%
GE-Georgia	22	179	81.5%	86.8% (78.4%–95.8%)	46.1%–99.9%
GH-Ghana	21	223	63.6%	84.1% (27.3%–98.7%)	0.0%–100.0%
HR-Croatia	10	170	43.3%	36.6% (2.7%–76.7%)	0.0%–98.2%
HT-Haiti	13	64	73.1%	78.7% (44.6%–99.1%)	42.3%–100.0%

ISO country code - ISO country name	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10–P90 Range
ID-Indonesia	25	320	67.5%	79.8% (39.2%–99.2%)	13.0%–99.8%
IN-India	56	1,155	56.3%	67.2% (9.9%–95.4%)	0.8%–100.0%
JO-Jordan	15	366	74.9%	92.8% (61.5%–100.0%)	26.4%–100.0%
KE-Kenya	17	182	64.2%	90.2% (28.7%–100.0%)	0.0%–100.0%
KZ-Kazakhstan	12	220	72.1%	95.6% (53.0%–98.3%)	23.4%–99.9%
LB-Lebanon	26	399	63.3%	61.4% (32.1%–100.0%)	23.7%–100.0%
LK-Sri Lanka	19	507	96.6%	96.5% (95.0%–99.4%)	93.2%–100.0%
MD-Moldova	10	62	70.9%	85.2% (53.0%–97.5%)	22.6%–99.8%
ME-Montenegro	10	63	91.7%	99.1% (90.7%–100.0%)	67.9%–100.0%
ML-Mali	26	102	76.5%	98.7% (63.1%–99.8%)	14.6%–100.0%
MM-Myanmar	16	341	84.0%	93.0% (84.2%–98.4%)	43.0%–99.7%
MN-Mongolia	11	308	76.5%	86.8% (60.7%–95.5%)	52.4%–99.7%
MX-Mexico	36	828	72.8%	92.8% (52.8%–99.1%)	7.4%–100.0%
MZ-Mozambique	16	178	79.3%	95.9% (75.2%–99.5%)	26.8%–100.0%
NG-Nigeria	29	396	74.3%	95.5% (55.2%–99.7%)	14.9%–100.0%
NI-Nicaragua	22	151	70.2%	76.5% (67.0%–99.7%)	8.3%–100.0%
PE-Peru	18	198	60.8%	81.0% (15.6%–99.4%)	1.5%–100.0%
PH-Philippines	22	365	63.7%	77.7% (30.3%–95.9%)	5.0%–99.7%
PK-Pakistan	38	728	90.3%	99.3% (88.5%–100.0%)	74.3%–100.0%
PL-Poland	13	296	55.5%	75.5% (20.4%–80.8%)	8.5%–87.8%
RO-Romania	13	171	92.2%	93.8% (88.9%–100.0%)	79.9%–100.0%
RS-Serbia	15	386	45.5%	22.2% (18.0%–87.1%)	10.5%–96.2%
RU-Russian Federation	65	1,301	71.2%	89.7% (56.3%–97.6%)	6.2%–99.7%
RW-Rwanda	17	69	88.2%	82.7% (79.8%–99.1%)	78.2%–99.9%

ISO country code - ISO country name	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10–P90 Range
SN-Senegal	32	362	68.2%	78.8% (49.7%–98.5%)	15.8%–100.0%
TH-Thailand	11	277	76.9%	89.9% (56.4%–99.9%)	41.9%–100.0%
TJ-Tajikistan	20	93	52.5%	63.8% (5.4%–97.3%)	0.6%–99.8%
TM-Turkmenistan	36	102	89.0%	91.6% (83.7%–97.2%)	80.2%–98.8%
TR-Turkey	47	2,055	72.3%	84.1% (49.8%–97.2%)	24.8%–100.0%
TZ-Tanzania	18	69	70.3%	74.3% (60.0%–98.4%)	20.1%–100.0%
UA-Ukraine	93	1,868	68.9%	86.4% (40.9%–96.3%)	0.5%–99.5%
UG-Uganda	19	267	91.1%	100.0% (88.3%–100.0%)	63.9%–100.0%
UZ-Uzbekistan	18	122	65.5%	89.4% (25.1%–100.0%)	6.1%–100.0%
VN-Vietnam	14	140	65.6%	73.8% (51.1%–91.4%)	29.3%–96.9%
ZA-South Africa	19	448	61.1%	79.4% (15.7%–94.2%)	4.1%–100.0%
ZM-Zambia	18	152	61.1%	60.5% (37.1%–96.9%)	14.2%–99.7%
ZW-Zimbabwe	12	32	43.4%	39.4% (2.9%–76.6%)	0.0%–99.9%
Overall (including omitted categories)	1,659	26,653	69.8%	86.1% (44.3%–99.2%)	5.9%–100.0%

Table 67: Recovery Rates by Country

ISO country code -ISO country name	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
AL-Albania					25.3%											
AR-Argentina		97.1%		47.9%	100.0%	21.1%	29.2%	99.5%	80.1%	85.8%		96.0%			75.9%	
AZ-Azerbaijan															74.4%	46.7%
BA-Bosnia and Herzegovina							37.1%	42.4%						99.7%		
BF-Burkina Faso								100.0%			50.5%	71.0%	72.6%		99.1%	100.0%
BG-Bulgaria					3.9%	92.4%	76.7%			86.8%					85.1%	
BJ-Benin					100.0%		86.1%	61.2%		84.8%				18.7%		
BR-Brazil			19.4%				15.1%		58.9%	98.0%	100.0%	100.0%		100.0%		50.0%
BY-Belarus																
CI-Cote D'Ivoire	98.3%			87.8%	99.8%		67.8%	75.7%	56.3%	94.1%	99.0%		57.8%	98.0%	99.7%	
CL-Chile																
CN-China		0.0%	38.5%						54.2%	100.0%		45.5%	83.7%	100.0%		61.2%
CR-Costa Rica							100.0%			66.5%					82.8%	
DO-Dominican Republic								74.2%		100.0%	82.8%		100.0%			
EG-Egypt	8.2%		61.9%			95.3%		100.0%	69.1%	99.6%		47.6%			98.4%	100.0%
GE-Georgia								69.8%							87.1%	79.0%
GH-Ghana	91.1%	2.0%														
HR-Croatia							10.8%		17.7%	100.0%						77.7%
HT-Haiti																
ID-Indonesia					53.1%	79.8%	96.7%	21.7%	63.7%		99.5%					
IN-India				34.9%	74.4%			69.8%	91.3%	99.1%	49.7%				78.6%	33.3%
JO-Jordan			80.7%						25.4%		94.2%	99.3%				
KE-Kenya					100.0%		100.0%	85.0%				100.0%			0.0%	
KZ-Kazakhstan																60.1%
LB-Lebanon					34.9%			74.7%	100.0%		100.0%					
LK-Sri Lanka																
MD-Moldova						24.5%	91.3%									
ME-Montenegro													99.1%			

ISO country code-ISO country name	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
AL-Albania	94.4%	92.3%	95.9%	53.0%	84.0%	71.5%	91.3%	79.4%								
AR-Argentina				90.9%					28.8%	66.3%	96.7%				98.5%	
AZ-Azerbaijan	3.8%	97.7%	80.6%	20.6%		90.8%	51.6%	63.1%	73.8%		78.1%					
BA-Bosnia and Herzegovina	93.8%		94.2%		36.7%											
BF-Burkina Faso		98.4%	93.5%	90.9%					51.5%						99.5%	98.9%
BG-Bulgaria		57.7%	91.3%	80.6%	87.9%		34.9%	100.0%			100.0%					
BJ-Benin	2.3%		49.2%			65.6%								96.6%		
BR-Brazil			79.6%	77.6%	45.6%	100.0%	43.8%	23.3%			100.0%			4.0%		
BY-Belarus		100.0%	97.7%		82.7%	99.8%						58.0%	38.1%	75.7%		
CI-Cote D'Ivoire		50.0%			99.3%			89.1%	85.3%		99.0%			94.3%	98.2%	97.4%
CL-Chile							42.2%		20.0%	88.6%	37.0%					
CN-China	100.0%	90.9%		85.7%	69.5%	61.0%			91.5%		60.2%					
CR-Costa Rica						53.0%		100.0%							72.9%	
DO-Dominican Republic			5.4%			74.4%		99.4%								
EG-Egypt	33.0%				62.4%	40.1%	59.3%	84.1%		78.3%	100.0%	100.0%	100.0%			
GE-Georgia	74.3%	94.4%							63.9%		96.7%	84.9%				
GH-Ghana				100.0%	53.2%	50.9%	75.5%	37.1%	31.0%	100.0%	98.7%	92.5%			45.5%	96.2%
HR-Croatia		73.7%	55.5%								98.0%					
HT-Haiti				99.1%			81.7%	100.0%		50.3%	100.0%			84.4%		
ID-Indonesia			52.2%				37.2%	99.6%		99.7%	100.0%	100.0%			99.6%	
IN-India	78.6%	56.7%		21.3%	61.0%	81.4%	29.0%		52.5%	23.8%	85.4%	40.6%	95.1%	97.0%		
JO-Jordan				41.1%						87.3%	100.0%	100.0%	100.0%	92.8%		
KE-Kenya		28.7%	100.0%		83.7%		8.5%	99.7%				90.1%				
KZ-Kazakhstan	96.5%	35.2%	87.6%		98.6%											
LB-Lebanon					96.4%					64.5%	48.9%					
LK-Sri Lanka							96.5%					97.1%	96.6%			
MD-Moldova	81.3%	100.0%			99.8%	66.2%	47.0%									
ME-Montenegro	68.2%						64.6%		97.6%			99.2%				

ISO country code -ISO country name	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
ML-Mali					1.9%	44.2%				72.0%	99.9%	29.7%		53.5%		
MM-Myanmar																
MN-Mongolia																35.0%
MX-Mexico								76.2%	73.8%	99.3%	52.0%			100.0%		97.7%
MZ-Mozambique						3.7%			13.6%							98.9%
NG-Nigeria	100.0%				21.7%									68.4%	4.4%	87.5%
NI-Nicaragua										100.0%						56.0%
PE-Peru							11.1%	9.5%	99.5%	100.0%						
PH-Philippines				22.2%			3.1%	68.0%	64.5%	99.2%	98.5%	66.8%	93.0%			
PK-Pakistan				100.0%	99.9%	100.0%			57.5%		56.2%		100.0%		99.4%	81.0%
PL-Poland	31.6%					98.6%		72.0%	23.0%					88.7%		
RO-Romania					89.6%	86.1%		90.2%	100.0%							
RS-Serbia																
RU-Russian Federation			45.2%	100.0%	57.1%	76.6%	44.6%							100.0%	98.1%	74.9%
RW-Rwanda																
SN-Senegal							60.8%		77.6%		64.9%		40.3%	99.9%	91.6%	89.9%
TH-Thailand		41.9%		70.4%	88.3%		57.9%			99.7%						
TJ-Tajikistan													49.3%	17.4%		0.7%
TM-Turkmenistan																
TR-Turkey	81.3%	100.0%		100.0%		83.5%		50.1%		97.6%		32.4%			50.5%	100.0%
TZ-Tanzania		83.8%		50.2%	21.6%		100.0%		64.1%	100.0%	100.0%					
UA-Ukraine			2.2%												44.9%	80.2%
UG-Uganda						100.0%	99.7%								100.0%	
UZ-Uzbekistan						8.7%								59.7%	64.5%	15.1%
VN-Vietnam					98.3%		85.6%	96.7%		51.2%				38.2%	79.1%	
ZA-South Africa									72.7%			90.2%	80.9%	98.3%	18.2%	
ZM-Zambia		21.7%				42.2%		53.3%		100.0%			39.3%		9.2%	96.9%
ZW-Zimbabwe	99.1%	36.0%				100.0%						50.0%				3.9%

ISO country code-ISO country name	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ML-Mali	100.0%				64.1%	100.0%	98.2%	100.0%	68.9%				100.0%		98.8%	
MM-Myanmar										99.4%	99.2%	78.3%	92.6%			
MN-Mongolia				91.9%	96.6%	82.2%	65.1%		65.7%							
MX-Mexico	94.3%			83.1%	39.3%	98.2%	66.7%			45.4%	53.8%	99.6%	91.5%	98.0%	5.7%	
MZ-Mozambique					79.4%	98.6%	100.0%	99.9%	100.0%		100.0%					
NG-Nigeria		83.6%	99.9%		91.8%	44.0%	90.3%	43.3%	98.3%	99.0%	98.7%		100.0%	100.0%		
NI-Nicaragua	28.1%			71.4%	98.9%				93.4%	98.9%	85.2%					
PE-Peru	99.5%						96.3%	81.8%				19.1%	83.1%	100.0%		
PH-Philippines	79.3%							9.7%		53.4%		91.6%				
PK-Pakistan			95.1%				81.6%			87.2%				89.5%		
PL-Poland	80.0%							81.4%			20.4%					
RO-Romania	76.6%	100.0%	98.0%				87.4%									
RS-Serbia	58.3%		42.9%	18.7%	42.5%	83.6%		12.3%							93.2%	
RU-Russian Federation	92.2%	72.8%	87.0%		51.5%	73.5%	87.2%	58.0%				75.9%			99.0%	
RW-Rwanda						80.2%	77.2%			91.8%						
SN-Senegal		56.3%				80.0%		21.3%	61.7%	79.0%	87.3%	97.1%		74.4%	90.3%	
TH-Thailand									93.2%	89.9%						
TJ-Tajikistan	55.7%	6.6%	4.6%		5.6%	62.4%	86.8%	98.7%						97.2%		
TM-Turkmenistan			92.7%		19.7%	100.0%				90.9%	88.4%	94.2%	87.0%			
TR-Turkey	100.0%		90.8%		96.6%	19.9%	57.7%	94.2%	62.5%	82.7%	77.3%			90.8%	100.0%	
TZ-Tanzania					95.2%		49.7%			79.4%	85.5%	70.7%				
UA-Ukraine	56.6%	81.1%		37.0%	58.3%	76.1%	66.3%		12.9%	85.3%	88.0%		67.7%		94.4%	
UG-Uganda	98.7%		77.9%					92.8%		79.4%		100.0%				
UZ-Uzbekistan	80.8%			100.0%												
VN-Vietnam	0.2%	67.5%		93.7%	25.5%											
ZA-South Africa	82.7%	6.2%	85.5%			76.3%	13.1%	39.7%				73.0%				
ZM-Zambia							71.4%				90.6%	99.3%		99.5%		
ZW-Zimbabwe					55.9%	69.0%	13.9%	42.8%								

4.7 Recovery Rates by Country and Sector

4.7.1 Recovery Rates by Country and GICS Sector

Table 68: Recovery Rates by Country and GICS Sector

ISO country code- ISO country name / Sector	Consumer Discretionary	Consumer Staples	Financials	Industrials	Materials	Utilities	Others
AR-Argentina		61.5%				89.9%	
AZ-Azerbaijan			65.6%				
CN-China					64.0%		
IN-India						42.1%	
LB-Lebanon			58.1%				
LK-Sri Lanka			96.6%				
ML-Mali			92.7%				
MX-Mexico			67.9%				
MZ-Mozambique					85.2%		
PK-Pakistan			91.3%				
RU-Russian Federation			71.8%	74.6%			60.5%
RW-Rwanda		91.3%					
TM-Turkmenistan		90.5%					
TR-Turkey	62.9%	69.2%					
UA-Ukraine		67.3%	85.8%	62.0%	55.9%	68.5%	

4.7.2 Recovery Rates by Country and Sector Groupings

Table 69: Recovery Rates by Country and GEMs Sector Grouping

ISO country code-ISO country name / GEMs Sector Grouping	Banking	Infrastructure	Non-Bank Financials	Renewables
AR-Argentina		89.6%		
AZ-Azerbaijan	66.0%			
CL-Chile		45.1%		
IN-India		46.0%		
LB-Lebanon	48.9%			
LK-Sri Lanka	96.7%			
MX-Mexico		76.5%	70.5%	
TR-Turkey		76.0%		
UA-Ukraine	85.1%	69.6%		65.5%
PK-Pakistan		90.1%		
SN-Senegal		75.9%		

Table 70: Recovery Rates by Country and Financial Industries Sector

ISO country code-ISO country name / Financial Industries Sector	Financial Institutions	Non-Financial Institutions
AL-Albania		79.8%
AR-Argentina		72.6%
AZ-Azerbaijan	65.6%	45.5%
BA-Bosnia and Herzegovina		59.9%
BF-Burkina Faso		87.5%
BG-Bulgaria		79.3%
BJ-Benin		58.8%
BR-Brazil		63.2%
BY-Belarus		69.8%
CI-Cote D'Ivoire		85.5%
CL-Chile		45.1%
CN-China		65.5%
DO-Dominican Republic		77.7%
EG-Egypt		69.4%
GE-Georgia		80.5%
GH-Ghana		65.2%
HT-Haiti		71.0%
ID-Indonesia		62.0%
IN-India		54.8%
JO-Jordan		74.9%
KE-Kenya		76.2%
LB-Lebanon	58.1%	
LK-Sri Lanka	96.6%	
ML-Mali	92.7%	64.6%
MM-Myanmar		91.0%
MN-Mongolia		80.7%
MX-Mexico	67.9%	75.3%
MZ-Mozambique		77.9%
NG-Nigeria		75.4%
NI-Nicaragua		86.1%
PE-Peru		68.0%
PH-Philippines		66.1%
PK-Pakistan	91.3%	90.0%
PL-Poland		55.5%
RO-Romania		91.3%
RS-Serbia		45.5%
RU-Russian Federation	71.8%	70.8%

ISO country code-ISO country name / Financial Industries Sector	Financial Institutions	Non-Financial Institutions
RW-Rwanda		87.6%
SN-Senegal		66.1%
TH-Thailand		80.6%
TJ-Tajikistan		32.2%
TM-Turkmenistan		89.0%
TR-Turkey		71.7%
TZ-Tanzania		63.4%
UA-Ukraine	85.8%	64.2%
UG-Uganda		90.7%
UZ-Uzbekistan		68.0%
VN-Vietnam		67.7%
ZA-South Africa		61.0%
ZM-Zambia		64.7%

Table 71a - Recovery Rates by Country and Financial Industries Sector - Financial Institutions

ISO Country Code	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
AZ															74.4%	46.7%
LB									100.0%							
LK																
ML										99.0%		27.2%				
MX																96.9%
PK					100.0%				57.5%		94.6%		100.0%		99.4%	100.0%
RU					55.6%	81.3%										69.1%
UA															89.8%	97.9%

ISO Country Code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
AZ		97.7%				90.8%	45.2%	75.1%	92.2%							
LB					96.4%					64.5%	31.8%					
LK							96.5%					97.1%	96.6%			
ML						100.0%	98.2%	100.0%							99.5%	
MX	91.4%				39.3%					45.4%	39.8%		91.5%			
PK										87.2%				87.4%		
RU	90.4%	90.7%	93.0%		62.4%	81.4%	87.2%	37.1%							99.0%	
UA	87.0%			55.5%	89.0%	96.4%	89.8%								95.0%	0.0%

Table 71b - Recovery Rates by Country and Financial Industries Sector - Non-Financial Institutions

ISO Country Code	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
AL					25.3%											
AR		97.1%		47.9%	100.0%	21.1%	29.2%	99.5%	75.8%	84.6%		96.0%			89.1%	
AZ																
BA							37.1%	42.4%								
BF								100.0%			50.5%	71.0%	72.6%		99.1%	100.0%
BG					3.9%	89.4%	76.7%			86.8%					85.1%	
BJ							86.1%	61.2%		84.8%				18.7%		
BR				19.4%			15.1%		58.9%	98.0%	100.0%	100.0%		100.0%		50.0%
BY																
CI	98.3%			87.8%	99.8%		67.8%	75.7%	56.3%	94.1%	99.0%		57.8%	98.0%	99.7%	
CL																
CN		0.0%	38.5%						54.2%	100.0%		45.5%	83.7%	100.0%		61.2%
DO								74.2%		100.0%	74.6%		100.0%			
EG	8.2%		61.9%			95.3%		100.0%	69.1%	99.6%		47.6%			98.4%	100.0%
GE								93.8%							49.4%	79.0%
GH	91.1%	2.0%														
HT																
ID					41.1%	79.8%	96.7%	21.7%	63.7%		99.5%					
IN				34.9%	74.4%			100.0%	91.3%	99.1%					78.6%	33.3%
JO			80.7%						25.4%		94.2%	99.3%				
KE					100.0%		100.0%	85.0%				100.0%			0.0%	
ML					1.9%	44.2%				31.6%	99.9%	32.1%		53.5%		
MM																
MN																
MX								76.2%	73.8%	99.3%	52.0%			100.0%		100.0%
MZ						3.7%			13.6%							98.9%
NG	100.0%				21.7%									68.4%	4.4%	87.5%

ISO Country Code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
AL	94.4%		95.9%	53.0%	84.0%	71.5%	91.3%	79.4%								
AR				90.9%					28.8%	66.3%	95.8%				98.5%	
AZ	3.8%		80.6%	20.6%			85.9%	43.1%	37.2%		78.1%					
BA	94.9%		94.2%		42.1%											
BF		99.5%	93.5%	90.9%					51.5%						100.0%	98.9%
BG		57.7%	91.3%	80.6%	87.9%		34.9%	100.0%			100.0%					
BJ	2.3%		49.2%			65.6%										
BR			79.6%	77.6%	45.6%	100.0%	43.8%	23.3%			100.0%			4.0%		
BY		100.0%			82.7%	99.8%						58.0%	38.1%	75.7%		
CI		50.0%			99.3%			89.1%	73.8%		98.1%			94.3%	98.3%	97.0%
CL							43.7%		20.0%	88.6%	37.0%					
CN	100.0%	90.9%		85.7%	69.5%	48.1%	0.0%		91.5%		60.2%					
DO			5.4%			74.4%		99.4%								
EG	33.0%	0.0%			62.4%	40.1%	59.3%	84.1%		78.3%	100.0%	100.0%	100.0%			
GE	74.3%	94.4%							63.9%		96.7%	84.9%				
GH					53.2%	50.9%	99.6%	37.1%	61.9%		98.7%	92.5%			45.5%	96.2%
HT				99.1%			81.7%	100.0%		50.3%				99.1%		
ID			52.2%				37.2%	99.6%			100.0%	100.0%				
IN	78.6%	56.7%		21.3%	61.0%	81.4%	29.0%		52.5%	20.6%	78.1%	40.6%	95.1%	100.0%		
JO				41.1%				0.0%		87.3%	100.0%	100.0%	100.0%	92.8%		
KE		28.7%	100.0%		83.7%		34.0%	99.5%				90.1%				
ML	100.0%				64.1%				68.9%				100.0%		96.4%	
MM										99.4%	99.2%	85.4%	92.6%			
MN				91.9%	96.6%	82.2%	65.1%		65.7%							
MX	100.0%			83.1%		98.2%	66.7%	0.0%			96.0%	99.6%		98.0%	5.7%	
MZ					79.4%	98.6%		99.9%	100.0%		100.0%					
NG		83.6%	99.9%		91.8%	44.0%	98.5%	51.2%	97.0%	99.0%	98.7%		100.0%			

ISO Country Code	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
NI										100.0%						
PE							11.1%	0.7%	99.5%	100.0%						
PH				22.2%				68.0%	64.5%	99.0%	98.5%		93.0%			
PK				100.0%	99.8%	100.0%					37.0%					71.5%
PL	31.6%		0.0%			98.6%		72.0%	23.0%					88.7%		
RO					89.6%			90.2%	100.0%							
RS																0.0%
RU			45.2%	100.0%	58.2%	53.4%	44.6%							100.0%	98.1%	76.1%
RW																
SN		0.0%					60.8%		77.6%		64.9%		40.3%	99.9%	91.6%	89.9%
TH		41.9%		100.0%	88.3%		57.9%			99.7%						
TJ					0.0%								0.0%	17.4%		0.7%
TM																
TR	81.3%	100.0%		100.0%		83.5%		50.1%		97.6%		32.4%			50.5%	100.0%
TZ		83.8%		50.2%	21.6%				64.1%	100.0%	100.0%					
UA			2.2%			0.0%									0.0%	50.5%
UG						100.0%	99.7%								100.0%	
UZ						8.7%								59.7%	64.5%	15.1%
VN					98.3%		85.6%	96.7%		51.2%					79.1%	
ZA									72.7%			90.2%		98.3%	18.2%	
ZM		21.7%				42.2%		53.3%		100.0%			39.3%		9.2%	96.9%

ISO Country Code	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
NI	41.7%			71.4%	98.9%				99.4%	98.9%	85.2%					
PE	99.5%						96.3%	81.8%					83.1%	100.0%		
PH								9.7%				91.6%				
PK			95.1%				81.6%							89.8%		
PL	80.0%							81.4%			20.4%					
RO	76.6%	100.0%	95.9%				87.4%									
RS	58.3%		42.9%	18.7%	42.5%	83.6%		12.3%							93.2%	
RU	92.6%	55.0%	74.9%		8.1%	69.6%		99.8%				75.9%				
RW						80.2%	77.2%			91.2%						
SN		56.3%		0.0%		80.0%		21.3%	61.7%	79.0%	83.0%	97.1%		98.3%	83.0%	
TH									93.2%	89.9%						
TJ	55.7%	6.6%	4.6%		5.6%	62.4%		99.8%							97.2%	
TM			92.7%		19.7%	100.0%				90.9%	88.4%	94.2%	87.0%			
TR	100.0%		90.8%		96.6%	19.9%	57.7%	94.2%	62.5%	82.7%	74.9%			90.8%	100.0%	
TZ					95.2%		0.0%			58.8%	85.5%					
UA	50.5%	81.1%		0.1%	53.1%	67.7%	58.4%		12.9%	85.3%	88.0%		67.7%		93.3%	
UG	98.7%		80.2%					82.4%		79.4%		100.0%				
UZ	79.4%			100.0%												
VN	0.2%	67.5%		93.7%	25.5%											
ZA		6.2%	85.5%			76.3%	13.1%	39.7%				73.0%				
ZM							71.4%				90.6%	99.3%		99.5%		

4.8 Recovery Rates by Income Group

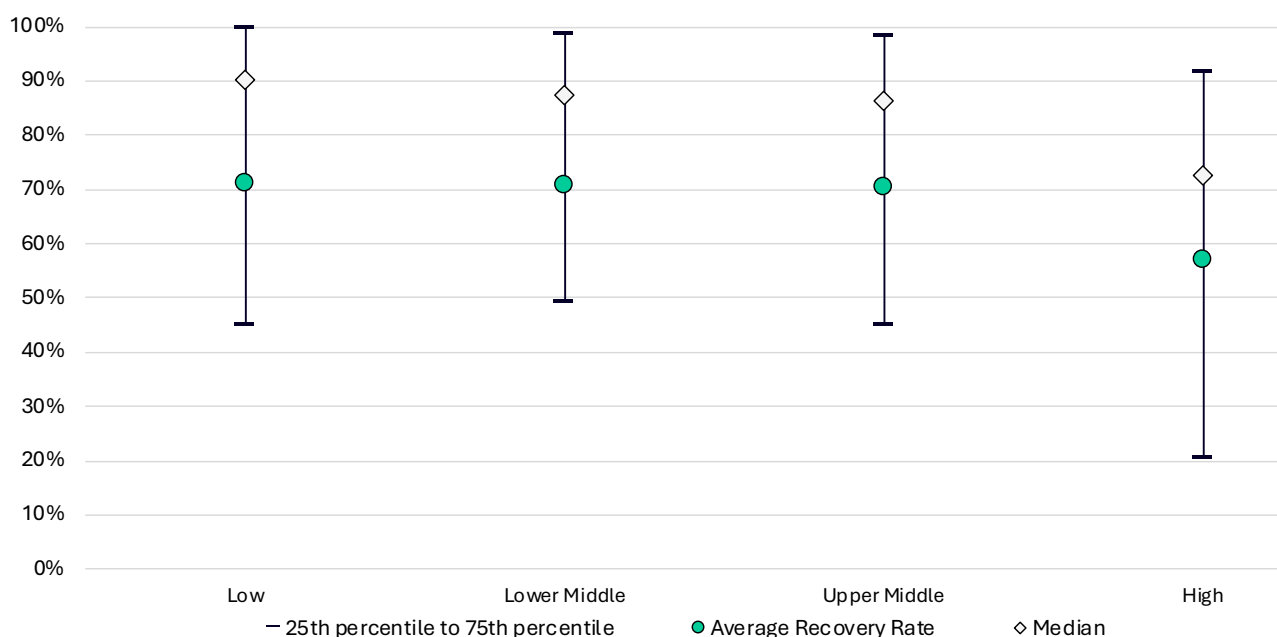
Each counterparts country is assigned to an income group using the World Bank classification applicable in the year of default. Recovery rates are broadly consistent across low, lower

middle and upper middle-income groups at around 70% – 71% on average, compared with 57.4% for high-income countries.

Table 72: Recovery Rates by Income Group

Income Group	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10–P90 Range
High	46	1,598	57.4%	72.6% (20.8%–91.8%)	0.0%–99.7%
Upper Middle	548	10,104	70.4%	86.5% (45.3%–98.7%)	10.5%–100.0%
Lower Middle	620	10,056	71.0%	87.5% (49.8%–99.1%)	4.4%–100.0%
Low	359	3,580	71.3%	90.5% (45.5%–99.9%)	9.0%–100.0%
Overall (including omitted categories)	1,659	26,653	69.8%	86.1% (44.3%–99.2%)	5.9%–100.0%

Figure 35: Recovery Rates by Income Group



4.9 Recovery Rates by Income Group and Region

The highest average recovery rate is observed in the low-income group in the Middle East, North Africa, Afghanistan & Pakistan at 82.3%. Lower middle-income recoveries are also strong across regions, ranging from 68.2% in South Asia to

76.7% in the Middle East and North Africa. Recovery outcomes across the low, lower middle and upper middle-income groups fall within a similar range.

Table 73: Recovery Rates by Income Group and World Bank Region

Region / Income Group	High	Upper Middle	Lower Middle	Low
East Asia & Pacific		74.3%	71.8%	60.6%
Europe & Central Asia	60.1%	71.8%	70.5%	43.6%
Latin America & Caribbean	56.9%	69.4%	69.7%	71.1%
Middle East, North Africa, Afghanistan & Pakistan		69.2%	76.7%	82.3%
South Asia			68.2%	72.1%
Sub-Saharan Africa		61.5%	70.6%	73.8%

4.10 Recovery Rates by Default Characteristics

For the first time, recovery rates are provided for three separate characteristics of defaults:

1. The types of default as defined in 6.1.1
 - Unlikely to pay
 - Payment delay over 90 days
2. The types of resolution of the default
 - Return to performing status
 - Close out of loan

3. The actions taken by the institution during the default period

- Restructuring
- Specific Provisioning
- Write Down
- Write Off

For the types of default and the actions taken by the institutions, the statistics reflect the most severe of them for cases where multiple types or actions apply.

4.10.1 Recovery Rates by Default Type

Table 74: Recovery Rates by Default Type

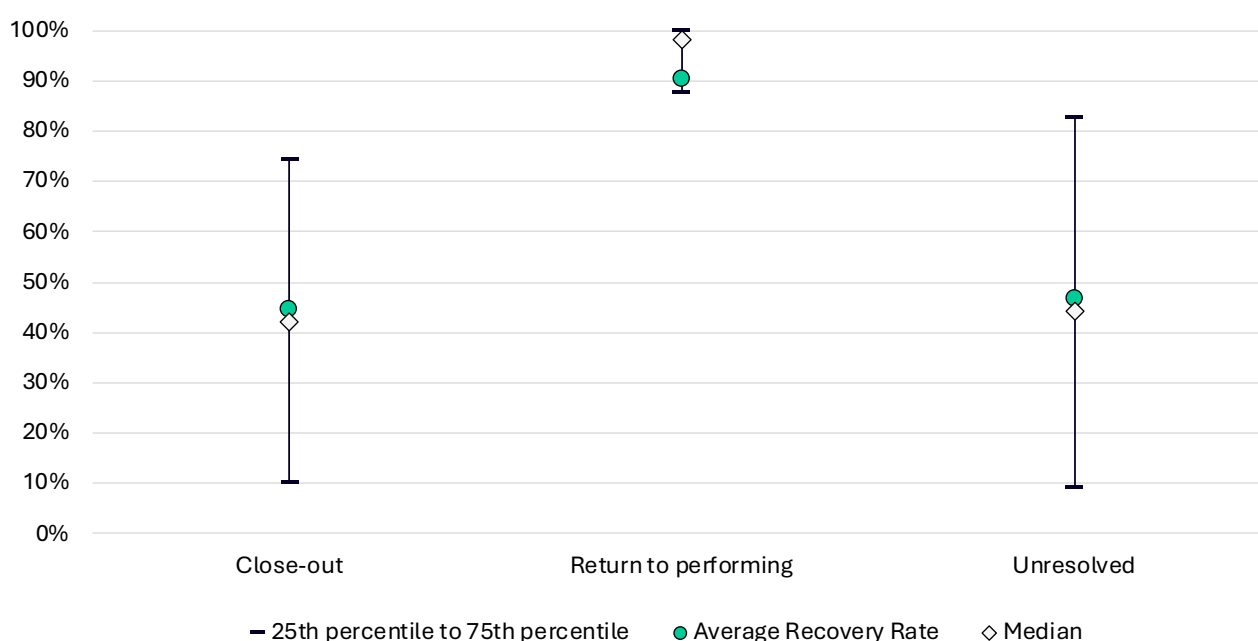
Default Type Last	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10–P90 Range
Days Late Payment	1,193	18,548	66.8%	83.0% (37.0%–99.1%)	5.1%–100.0%
Unlikely to Pay	457	8,030	77.4%	90.8% (73.0%–99.4%)	16.7%–100.0%
Overall (including omitted categories)	1,659	26,653	69.8%	86.1% (44.3%–99.2%)	5.9%–100.0%

4.10.2 Recovery Rates by Resolution Type

Table 75: Recovery Rates by Resolution Type

Resolution type	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10–P90 Range
Close-out	653	9,015	44.4%	42.2% (10.4%–74.6%)	0.0%–93.6%
Return to performing	910	15,352	90.4%	98.0% (87.6%–100.0%)	74.3%–100.0%
Unresolved	96	2,285	46.6%	44.2% (9.2%–82.6%)	0.0%–99.9%
Overall (including omitted categories)	1,659	26,653	69.8%	86.1% (44.3%–99.2%)	5.9%–100.0%

Figure 36: Recovery Rates by Resolution Type

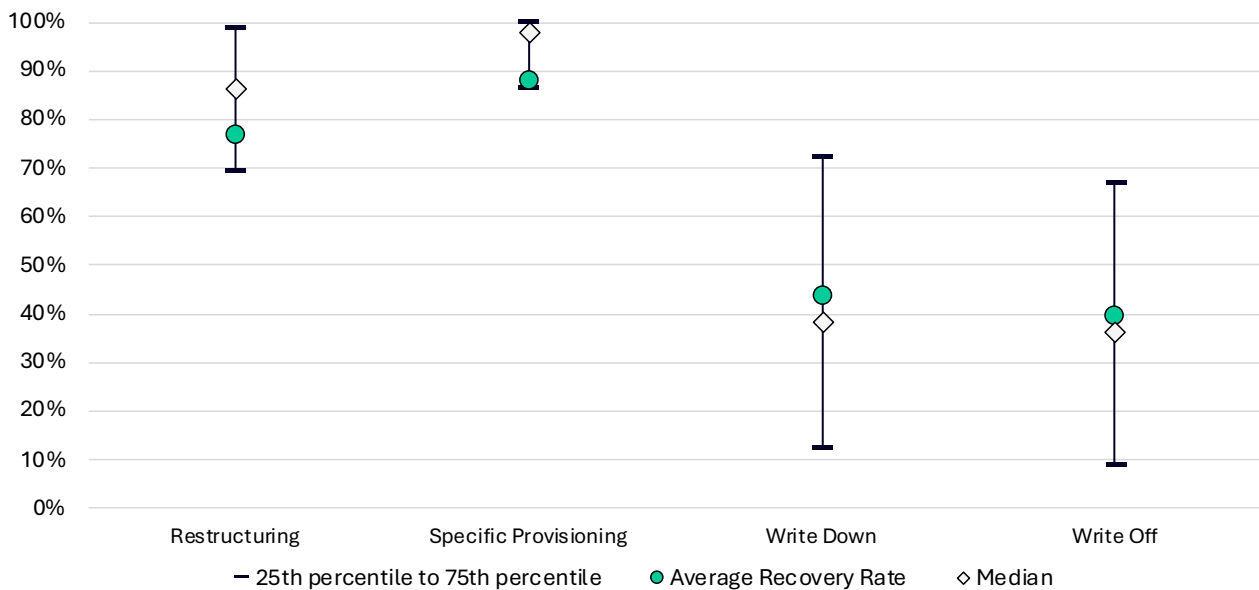


4.10.3 Recovery Rates by Actions Taken

Table 76: Recovery Rates by Actions Taken

Default Action	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10–P90 Range
Specific Provisioning	914	14,485	87.8%	97.9% (86.4%–100.0%)	67.5%–100.0%
Restructuring	151	3,232	76.8%	86.4% (69.4%–99.0%)	29.3%–100.0%
Write Down	76	1,671	43.5%	38.1% (12.2%–72.3%)	0.0%–94.5%
Write Off	513	7,079	39.5%	36.0% (9.1%–66.8%)	0.0%–86.6%
Overall (including omitted categories)	1,659	26,653	69.8%	86.1% (44.3%–99.2%)	5.9%–100.0%

Figure 37: Recovery Rates by Actions Taken



4.11 Recovery Rates by Currency Type

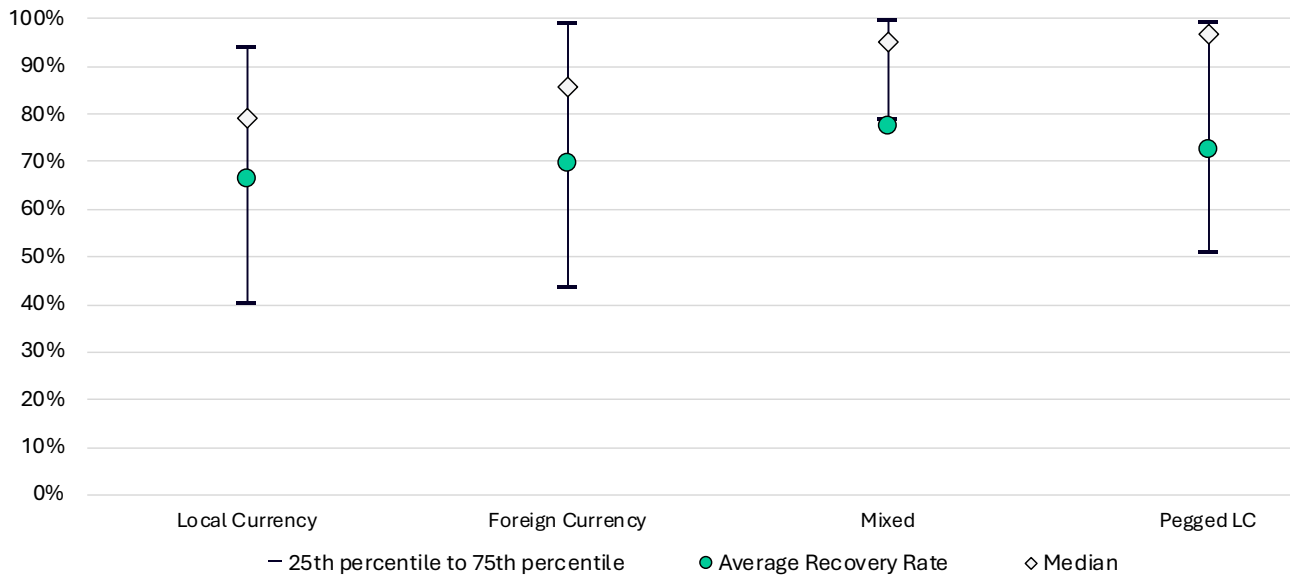
Foreign currency lending accounts for the large majority of defaults, at 1,441 of 1,659, and records an average recovery rate of 69.6%. Pegged local currency lending shows a higher average recovery, at 72.6%, while unpegged

local currency lending records the lowest rate in the comparison at 66.4%. The mixed currency category shows the highest average recovery at 77.4%, observed on a small sample of 28 defaults.

Table 77: Recovery Rates by Currency Type

Currency Type	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10-P90 Range
Local Currency	82	943	66.4%	79.4% (40.5%–94.2%)	5.4%–99.2%
Foreign Currency	1,441	24,143	69.6%	85.8% (43.8%–99.2%)	6.2%–100.0%
Mixed	28	720	77.4%	95.3% (79.0%–100.0%)	11.6%–100.0%
Pegged LC	108	847	72.6%	97.0% (51.3%–99.5%)	0.4%–100.0%
Overall (including omitted categories)	1,659	26,653	69.8%	86.1% (44.3%–99.2%)	5.9%–100.0%

Figure 38: Recovery Rates by Currency Type



4.11.1 Recovery Rates by Currency Type and Region

Table 78: Recovery Rates by Currency Type and World Bank Region

Region / Currency Type	Local Currency	Foreign Currency	Mixed	Pegged LC
East Asia & Pacific	51.9%	72.0%		
Europe & Central Asia	69.0%	69.6%		
Latin America & Caribbean	67.9%	69.4%	62.1%	69.3%
Middle East, North Africa, Afghanistan & Pakistan		74.4%		
South Asia	69.8%	67.4%		
Sub-Saharan Africa	69.1%	71.4%		72.9%

4.12 Recovery Rates for Lending with Credit Enhancements

Table 79: Recovery Rates for Lending with Credit Enhancements

Insurance and Guarantees	Number of Signed Defaults	Amount (€m)	Average RR	Median RR (IQR)	P10–P90 Range
Without insurance or guarantees	1,053	16,388	70.1%	88.5% (41.5%–99.7%)	7.9%–100.0%
With insurance and/or guarantees	129	2,787	78.0%	89.0% (74.9%–97.7%)	28.2%–100.0%
Overall (including omitted categories)	1,659	26,653	69.8%	86.1% (44.3%–99.2%)	5.9%–100.0%

4.12.1 Recovery Rates for Lending with Credit Enhancements by Region

Table 80: Recovery Rates for Lending with Credit Enhancements by World Bank Region

Region / Insurance and Guarantees	Without insurance or guarantees	With insurance and/or guarantees
East Asia & Pacific	68.3%	
Europe & Central Asia	66.9%	77.0%
Latin America & Caribbean	69.1%	
Middle East, North Africa, Afghanistan & Pakistan	75.2%	
South Asia	66.5%	
Sub-Saharan Africa	78.4%	

4.12.2 Recovery Rates for Lending with Credit Enhancements by GICS Sector

Table 81: Recovery Rates for Lending with Credit Enhancements by GICS Sector

GICS Sector / Insurance and Guarantees	Without insurance or guarantees	With insurance and/or guarantees
Communication Services	69.0%	
Consumer Discretionary	68.6%	85.1%
Consumer Staples	66.8%	82.5%
Energy	59.8%	
Financials	73.2%	87.2%
Health Care	76.4%	
Industrials	63.7%	73.8%
Materials	74.7%	70.1%
Others	62.0%	
Real Estate	73.9%	
Utilities	71.2%	78.9%

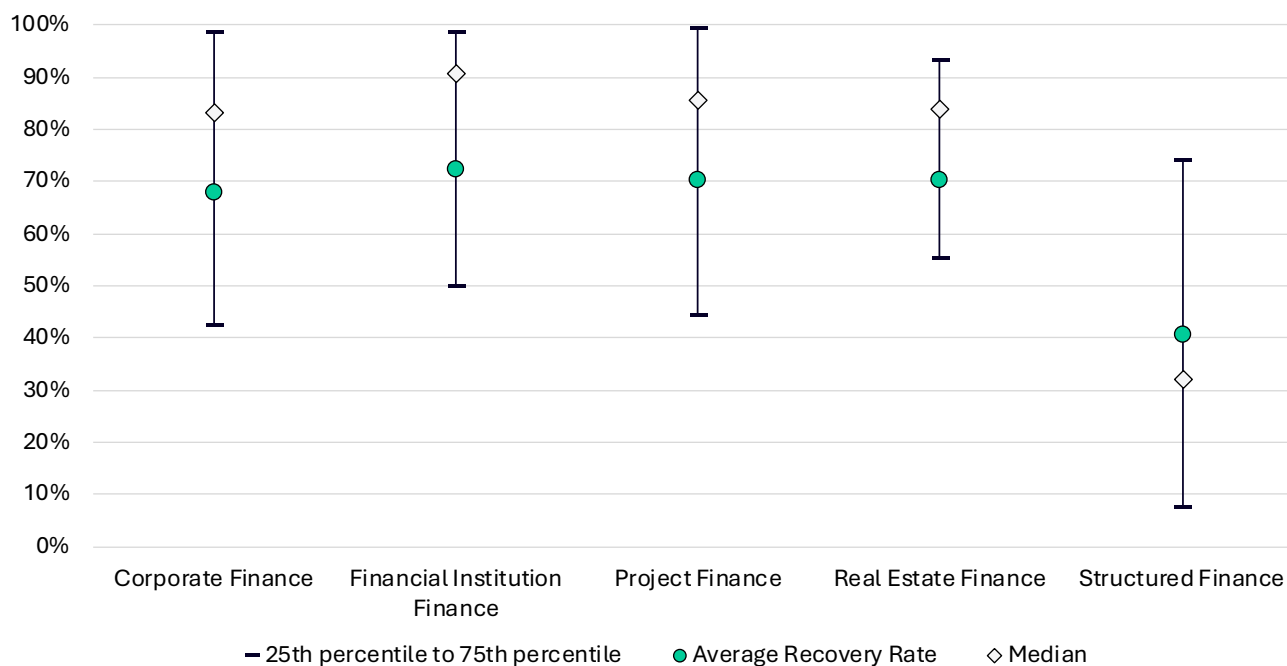
4.13 Recovery Rates by Project Type

The analysis of recovery rates by project type shows that financial institution finance records the highest average recovery rate at 72.2%.

Table 82: Recovery Rates by Project Type

Project Type	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10-P90 Range
Corporate Finance	620	8,150	67.8%	83.2% (42.5%–98.5%)	2.1%–100.0%
Financial Institution Finance	332	3,979	72.2%	90.4% (50.0%–98.8%)	6.3%–100.0%
Project Finance	221	7,393	70.2%	85.5% (44.6%–99.4%)	6.5%–100.0%
Real Estate Finance	21	426	70.1%	83.9% (55.5%–93.1%)	20.4%–97.8%
Structured Finance	25	417	40.5%	31.9% (7.5%–74.1%)	0.0%–95.4%
Overall (including omitted categories)	1,659	26,653	69.8%	86.1% (44.3%–99.2%)	5.9%–100.0%

Figure 39: Recovery Rates by Project Type



4.14 Recovery Rates by Seniority

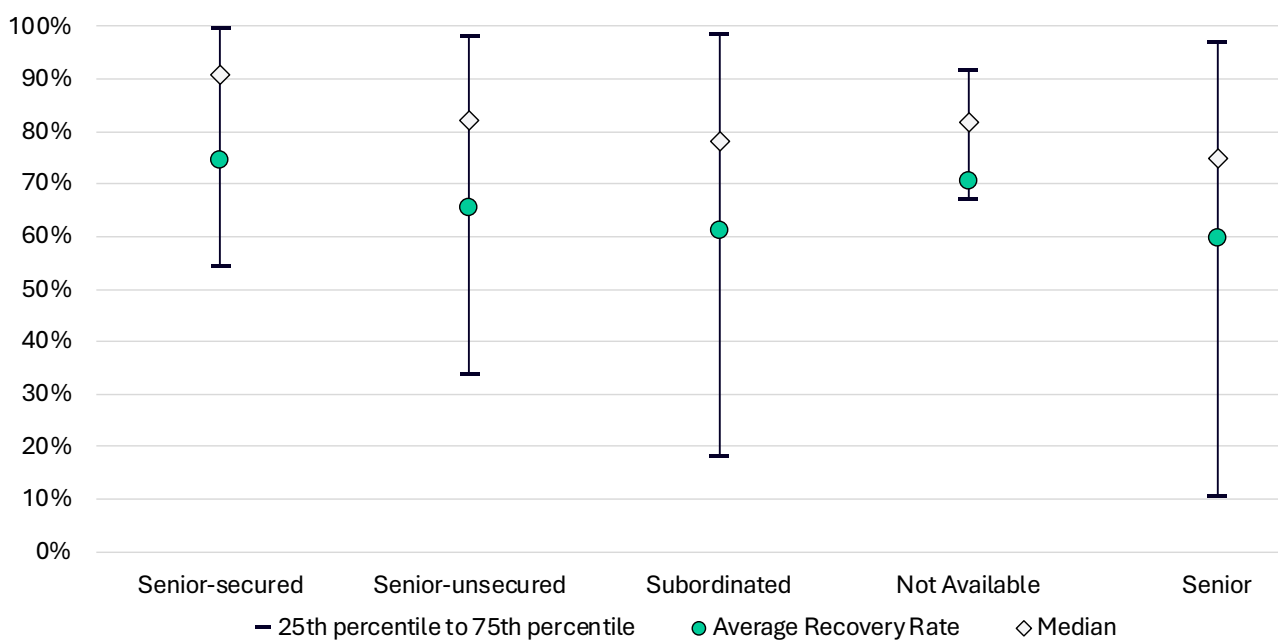
The analysis of recovery rates by seniority shows that senior secured instruments record the highest average recovery rate at 74.5%. The senior segment records the low-

est average recovery rate, at 59.5%, noting this is also the smallest sample size in comparison to the other reported categories.

Table 83: Recovery Rates by Seniority

Seniority	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10-P90 Range
Senior-secured	906	15,369	74.5%	90.6% (54.4%–99.6%)	16.1%–100.0%
Senior-unsecured	472	8,379	65.4%	82.1% (33.8%–98.0%)	2.3%–100.0%
Subordinated	169	1,656	60.9%	78.0% (18.2%–98.3%)	0.0%–100.0%
Not Available	42	298	70.5%	81.6% (67.0%–91.6%)	8.1%–97.0%
Senior	70	951	59.5%	74.8% (10.7%–97.0%)	0.0%–100.0%
Overall (including omitted categories)	1,659	26,653	69.8%	86.1% (44.3%–99.2%)	5.9%–100.0%

Figure 40: Recovery Rates by Seniority



4.15 Recovery Rates by Contract Size

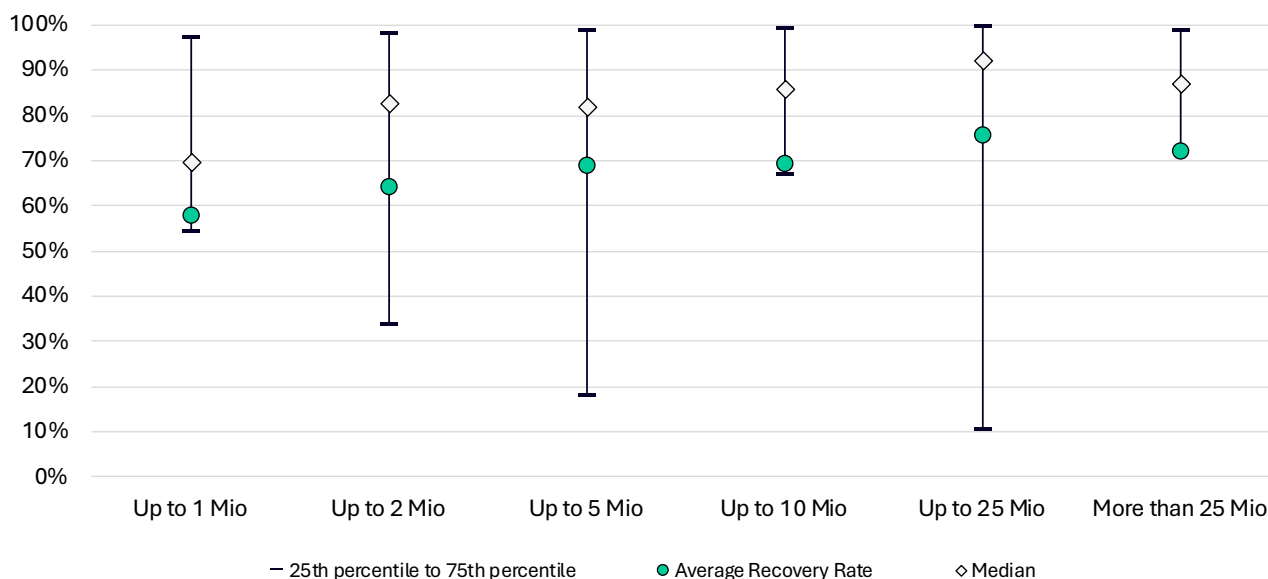
Contract size refers to the value of each obligation at the signature date. Recovery rates generally increase with contract size, from 57.8% for contracts up to EUR 1 million to a peak of 75.4%

for contracts up to 25 million on average. Contracts above EUR 25 million record a recovery rate of 72.1% with the overall average at 69.8%.

Table 84: Recovery Rates by Contract Size

Contract Size Grouped	Number of Defaults	Signed Amount (€m)	Average RR	Median RR (IQR)	P10-P90 Range
Up to 1 Mio	146	69	57.8%	69.4% (14.4%–97.2%)	0.0%–100.0%
Up to 2 Mio	125	197	64.2%	82.7% (27.2%–98.1%)	3.7%–100.0%
Up to 5 Mio	350	1,242	68.6%	81.9% (50.2%–98.8%)	9.0%–100.0%
Up to 10 Mio	344	2,569	69.3%	85.6% (43.8%–99.4%)	5.1%–100.0%
Up to 25 Mio	413	6,738	75.4%	92.2% (62.4%–99.7%)	13.4%–100.0%
More than 25 Mio	281	15,837	72.1%	86.8% (50.5%–99.0%)	13.1%–100.0%
Overall (including omitted categories)	1,659	26,653	69.8%	86.1% (44.3%–99.2%)	5.9%–100.0%

Figure 41: Recovery Rates by Contract Size



5. Rating Migration Rate Statistics

The rating migrations presented in this publication are based on counterparts ratings using the GEMs scale, as described in Section 3.2. Migrations are captured as annual snapshots taken on 1 January of each year over the 32-year obser-

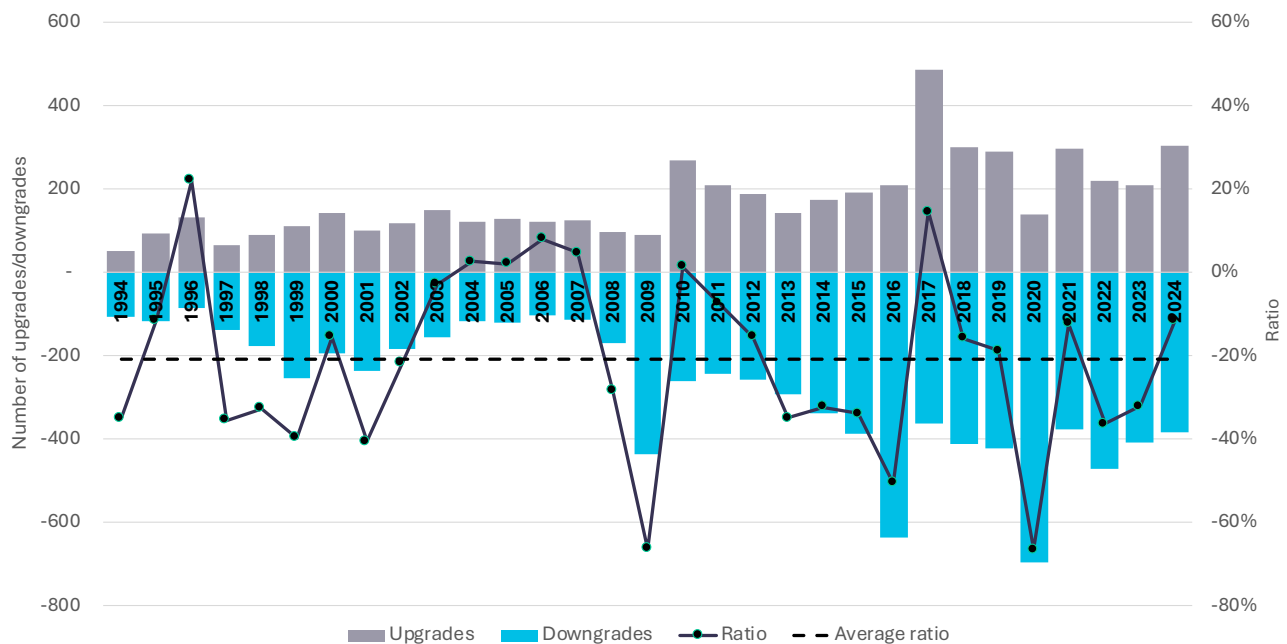
vation period. For example, for one-year migration rates, the rating of each counterparts for year i is compared with the ratings for year $i + 1$. Rating changes within the year are not considered.

5.1 Annual Upgrade vs. Downgrade Ratio

Figure 42 presents the annual credit rating upgrades and downgrades of private counterparties in the GEMs dataset. Over the observation period, downgrades have generally outpaced upgrades, particularly during periods of macroeconomic stress. Transitions into and out of the unrated (NR) category are excluded, as they

do not reflect changes in underlying creditworthiness. The rating change ratio is calculated as the difference between the number of upgrades and downgrades divided by the total number of rating changes in each year, with its fluctuations illustrating the cyclical volatility of portfolio credit quality.

Figure 42: GEMs Rating Upgrades and Downgrades



5.2 GEMs Rating Migration Rates

5.2.1 One-Year Migration Matrix

Table 85: One-Year GEMs Rating Migration Rates

From/to	Gi1	Gi2	Gi3	Gi4	Gi5	Gi6	Gi7	Gi8	Gi9	Gi10	Gs1	Gs2	Gs3	Gs4	Gs5	Gs6	Gs7	Gs8	Gs9	Gs10	D	# Obs.
Gi1	94.4%						5.6%															18
Gi2																						0
Gi3				50.0%																		2
Gi4				78.3%	6.5%						2.2%		2.2%	2.2%								46
Gi5					71.7%	1.6%	0.8%	2.8%	1.6%	2.0%	4.5%		1.2%		1.2%		1.6%					247
Gi6					1.6%	75.8%	3.2%		4.8%	1.6%	1.6%	3.2%						1.6%				62
Gi7					1.5%	2.3%	75.0%	11.4%	3.8%			0.8%					0.8%	1.5%				132
Gi8					1.3%	0.1%	1.1%	72.6%	5.0%	0.7%	6.6%	0.3%	1.1%	0.1%	0.1%	0.1%	0.3%		0.3%	0.1%		904
Gi9					0.2%	0.1%	0.1%	2.0%	79.1%	3.0%	3.6%	1.1%	0.1%	0.1%	1.2%	0.1%	0.0%	0.1%	0.6%	0.0%	0.1%	2,201
Gi10					0.0%			0.3%	1.6%	75.3%	4.4%	3.0%	0.6%	3.2%	1.4%	0.1%	0.5%	0.5%	0.1%		0.3%	4,729
Gs1			0.0%	0.0%	0.1%		0.0%	0.8%	0.8%	2.5%	73.0%	4.3%	4.8%	0.4%	0.6%	0.1%	1.0%	0.3%	0.2%	0.1%	0.7%	7,897
Gs2	0.0%				0.0%		0.0%	0.0%	0.1%	1.8%	3.2%	66.6%	7.8%	0.3%	3.7%	1.8%	1.2%	0.6%	0.2%	0.1%	1.0%	7,932
Gs3								0.0%	0.0%	0.3%	4.2%	8.0%	57.0%	2.7%	5.6%	3.6%	3.2%	1.6%	1.1%	0.1%	1.9%	7,657
Gs4									0.0%	8.8%	1.2%	0.5%	4.5%	55.8%	4.9%	0.2%	6.5%	3.1%	0.0%		2.2%	2,161
Gs5					0.1%			0.0%	0.3%	1.1%	0.5%	6.8%	8.4%	2.8%	45.6%	8.9%	6.3%	2.5%	1.3%	0.3%	2.7%	4,383
Gs6									0.0%	0.1%	0.2%	2.8%	5.5%	0.1%	10.2%	49.1%	9.9%	3.9%	2.9%	0.5%	3.9%	3,476
Gs7					0.0%			0.0%		0.3%	1.1%	0.5%	2.7%	2.9%	4.3%	5.2%	50.4%	10.3%	1.7%	0.7%	6.1%	4,595
Gs8										0.2%	0.1%	0.1%	0.6%	0.6%	1.9%	2.7%	8.7%	57.7%	3.7%	1.5%	8.3%	3,399
Gs9							0.1%	0.4%	0.3%	0.5%	0.6%		1.2%		1.8%	3.0%	2.4%	6.2%	55.5%	3.9%	13.3%	1,526
Gs10										0.2%					1.2%	0.7%	2.7%	3.7%	7.4%	44.4%	24.8%	408
D									0.1%		0.1%	0.4%	0.2%	0.1%	0.4%	0.5%	0.7%	2.3%	0.6%	0.4%	78.5%	5,375

5.2.2 One-Year Migration Matrix

Table 86: Two-Year GEMs Rating Migration Rates

From/to	Gi1	Gi2	Gi3	Gi4	Gi5	Gi6	Gi7	Gi8	Gi9	Gi10	Gs1	Gs2	Gs3	Gs4	Gs5	Gs6	Gs7	Gs8	Gs9	Gs10	D	# Obs.
Gi1	100.0%																					12
Gi2																						0
Gi3																						1
Gi4				57.8%	11.1%						4.4%		2.2%	2.2%	2.2%		2.2%					45
Gi5					53.3%	0.8%	1.3%	5.8%	1.7%	2.1%	7.5%		2.5%		0.4%		1.7%	0.4%	0.8%			240
Gi6					1.8%	64.9%	1.8%		5.3%	1.8%	1.8%	3.5%	1.8%					3.5%				57
Gi7					2.6%	3.5%	64.3%	13.9%	2.6%	2.6%	0.9%	0.9%	0.9%				1.7%	2.6%				115
Gi8					2.0%	0.5%	1.1%	54.3%	4.7%	1.3%	10.9%	0.6%	1.2%	0.2%	0.4%	0.2%	0.6%	0.1%	0.4%	0.4%	0.5%	855
Gi9					0.1%	0.2%	0.2%	1.9%	66.2%	3.9%	4.5%	2.0%	0.2%	0.3%	1.5%	0.3%	0.1%	0.1%	0.9%		0.5%	1,994
Gi10								0.4%	1.9%	60.9%	5.3%	4.3%	1.0%	3.3%	2.0%	0.4%	0.8%	0.9%	0.3%		0.7%	4,325
Gs1			0.0%	0.0%	0.2%		0.0%	1.4%	1.0%	3.3%	55%	4.7%	7.2%	0.7%	0.7%	0.3%	1.7%	0.5%	0.3%	0.0%	1.4%	7,474
Gs2	0.0%				0.0%		0.0%	0.0%	0.1%	2.4%	3.8%	48.7%	8.4%	0.4%	4.8%	2.4%	1.8%	1.1%	0.4%	0.1%	2.0%	7,519
Gs3					0.0%			0.0%	0.0%	0.5%	6.2%	8.8%	37.4%	3.3%	5.5%	4.2%	5.0%	2.3%	1.7%	0.2%	4.1%	7,290
Gs4									0.1%	10.1%	1.9%	0.6%	5.1%	37.3%	4.8%	0.7%	6.5%	5.4%			4.3%	1,975
Gs5					0.1%			0.1%	0.3%	1.3%	0.6%	7.9%	8.1%	3.1%	28.7%	8.2%	6.5%	3.6%	1.3%	0.3%	5.3%	4,192
Gs6									0.1%	0.1%	0.2%	4.4%	6.5%	0.1%	8.6%	30.6%	9.9%	4.7%	4.5%	0.8%	7.7%	3,327
Gs7					0.0%			0.0%		0.5%	1.4%	0.8%	3.5%	3.5%	4.6%	4.8%	31.9%	9.9%	1.8%	0.9%	9.9%	4,367
Gs8										0.4%	0.2%	0.7%	1.3%	1.4%	2.6%	2.9%	6.4%	40.2%	3.4%	1.4%	12.4%	3,090
Gs9								0.1%	0.4%	0.6%	0.7%	0.8%	2.1%		2.9%	4.5%	2.6%	5.4%	36.1%	4.1%	18.3%	1,430
Gs10										0.3%			0.5%		1.8%	1.0%	2.4%	4.5%	7.9%	25.5%	25.7%	381
D			0.0%	0.0%						0.1%	0.1%	0.5%	0.4%	0.2%	0.6%	0.6%	0.9%	3.4%	0.8%	0.6%	61.7%	5,008

5.2.3 Ten-Year Migration Matrix

Table 87: Ten-Year GEMs Rating Migration Rates

From/to	Gi1	Gi2	Gi3	Gi4	Gi5	Gi6	Gi7	Gi8	Gi9	Gi10	Gs1	Gs2	Gs3	Gs4	Gs5	Gs6	Gs7	Gs8	Gs9	Gs10	D	# Obs.
Gi1																						0
Gi2																						0
Gi3																						1
Gi4											14.7%						2.9%					34
Gi5					2.2%		0.5%		1.1%	3.8%	7.1%	0.5%	0.5%					0.5%				182
Gi6						11.8%	5.9%	11.8%														17
Gi7						20.0%	30.0%		3.3%	3.3%			6.7%									30
Gi8					0.5%	0.8%	0.6%	3.6%	2.0%	1.6%	6.7%		1.4%		0.3%		0.6%					639
Gi9						0.4%		2.8%	15.6%	3.9%	1.3%	1.9%	2.2%		0.6%			0.4%	0.2%	2.2%		539
Gi10								0.1%	0.4%	11.3%	2.7%	4.2%	3.1%		0.4%	1.7%	0.1%	0.2%	0.6%	0.1%	2.0%	1,427
Gs1					0.2%		0.0%	1.1%	0.7%	2.2%	10.8%	0.9%	4.1%	0.7%	0.1%	0.4%	0.8%	0.7%	0.2%	0.0%	1.7%	4,238
Gs2									0.2%	0.9%	0.6%	5.0%	1.9%		1.4%	0.6%	0.2%	0.3%	0.2%	0.1%	1.8%	4,307
Gs3										0.5%	2.7%	1.7%	4.9%	1.2%	0.9%	0.7%	1.1%	1.2%	0.3%	0.1%	5.2%	4,103
Gs4										0.5%	1.0%	0.5%	2.5%	8.9%	3.0%						1.0%	202
Gs5								0.2%		0.1%	0.1%	1.7%	1.0%		2.4%	0.9%	0.3%	0.3%	0.2%	0.2%	2.4%	2,189
Gs6										0.2%	0.2%	2.5%	1.8%		1.2%	3.6%	0.4%	0.9%	1.0%	0.1%	5.4%	2,098
Gs7										0.1%	1.9%	0.1%	2.7%	1.6%	0.3%	0.5%	2.7%	1.6%	0.2%		5.1%	2,445
Gs8								0.1%		0.1%	0.6%	0.7%	1.0%		0.1%	0.8%	1.0%	6.2%	1.0%	0.1%	3.6%	1,346
Gs9					0.3%					0.1%	0.3%	0.6%	1.3%		0.9%	1.4%	0.5%	1.4%	4.5%	0.5%	9.0%	793
Gs10															1.4%	0.5%		0.9%	0.5%	2.8%	5.1%	214
D								0.1%		0.5%	0.3%	0.1%	0.0%	0.2%	0.2%	0.3%	0.2%	0.8%	0.2%	0.0%	8.5%	2,470

6. Methodology

6.1 Default Rates

6.1.1 Default Types

Following the Basel II definition of default in quantifying the risk parameters, the following approach is used to determine when an obligor has defaulted.

A default on a loan shall occur when either of the following has taken place:

- a. The institution considers that the obligor is unlikely to pay its credit obligations to the institution, the parent undertaking or any of its subsidiaries in full, without recourse by the institution to actions such as realising security.
- b. The obligor is past due more than 90 days on any material credit obligation to the institution, the parent undertaking or any of its subsidiaries.

For the purpose of point (a) above, elements to be taken as indications of unlikelihood to pay shall include:

- The institution places the credit obligation on non-accrual status.
- The institution recognises a specific credit

adjustment resulting from a significant perceived decline in credit quality after the exposure was taken on.

- The institution sells the credit obligation at a material credit-related economic loss.
- The institution consents to a pre-emptive restructuring without reducing the overall financial obligation of the borrower in order to avoid a severe default.
- The institution consents to a distressed restructuring of the credit obligation that reduces the financial obligation through material forgiveness, or postponement, of principal, interest or, where relevant, fees.
- The institution has filed for the obligor's bankruptcy or a similar order regarding a credit obligation to the institution, the parent undertaking or any of its subsidiaries.
- The obligor has sought or has been placed in bankruptcy or similar protection to avoid or delay repayment of a credit obligation to the institution, the parent undertaking or any of its subsidiaries.

6.1.2 Output Parameters

To ensure the significance of the resulting default rate statistics, each disclosed table or figure must meet the following requirements:

- The minimum number of counterparts for each bucket in the reporting dimension is ten.
- The minimum number of active years for each bucket in the reporting dimension is five.

No values are disclosed if the predefined threshold is not met. The average recovery rates shown represent simple averages of the observations in the respective dimensions and categories.

The confidence intervals displayed alongside the mean values provide insight into the distribution of the underlying data dimension category.

6.1.3 Annual Default Rates Calculations

During each year of the reporting horizon, the number of active counterparts is determined at the beginning of the year. Active counterparts are those that have at least one signed and not matured contract on 1 January of the year.

To calculate an annual default rate, the number of defaults for these counterparts is then divided by their total number at the beginning of the year.

Annual default rates are calculated as:

Equation 1: 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 January of each year as weights:
number of performing counterparts as of 1

Equation 2: 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

Weighted standard deviations of annual default rates are calculated using the number of performing counterparts as of 1 January of each year as weights:

Equation 3: 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

The confidence intervals indicate the degree of statistical uncertainty associated with each regional estimate. Assuming default rates are normally distributed, the confidence intervals around the averages are determined as:

Equation 4: 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

6.1.4 Default Rates by Cohorts Calculations

Default rates following the cohort approach are calculated at the counterpart level. A *cohort*_(j,r) consists of all counterparts with the same *credit rating*_r that were active on 1 January of a given *year*_j.

A new cohort is formed for each year and credit rating, and the default and survival status of each counterpart is tracked across years. During every year, a fraction of counterparts in each cohort may default and marginal default rates per year (and credit rating) and the cumulative default rates since inception of the cohort (and credit rating) can be calculated.

For this publication, a dynamic cohort approach was used in which the number of counterparts decreases over time. Each year, the cohort starts out with only the active counterparts as of 1 January of that year. Counterparts that defaulted or matured in prior years are excluded from the count. This number is further reduced by half of the number of counterparts that mature during the year, assuming maturities are equally distributed over the year and deriving an approximate average number of active counterparts during the year.

The number of counterparts $c_{j,r}^i$ in *year*_i for *cohort*_{j,r} is calculated as:

Equation 5: Number of counterparts in a cohort

for $i = 1$: $c_i^{j,r} = \text{Number of Counterparts on 1 January for cohort year and credit rating}$

$$\text{for } i > 1: c_i^{j,r} = c_{i-1}^{j,r} - d_{i-1}^{j,r} - m_{i-1}^{j,r} - \frac{m_i^{j,r}}{2}$$

$d_{i-1}^{j,r}$ = Number of counterparts in *cohort*_{j,r} that default in *year*_i

$m_{i-1}^{j,r}$ = Number of counterparts in *cohort*_{j,r} that mature during *year*_i

Equation 6: Marginal default rate for a cohort

$$\text{MDR}_i^{j,r} = \frac{d_i^{j,r}}{c_i^{j,r}}$$

$d_i^{j,r}$ = Number of counterparts in *cohort*_{j,r} that default during *year*_i

$c_i^{j,r}$ = Number of counterparts in *cohort*_{j,r} during *year*_i

Combining all cohorts for a credit rating, the average marginal default rate $a\text{MDR}_i^r$ for all

cohorts with *credit rating*_r in *year*_i is calculated as:

Equation 7: Marginal default rate for a credit rating and year

$$a\text{MDR}_i^r = \frac{\sum_{j=1}^K d_i^{j,r}}{\sum_{j=1}^K c_i^{j,r}}$$

K = Total number of cohorts for *credit rating*_r

The cumulative default rates CDR_i^r can be calculated from the average marginal default rate $aMDR_i^r$ for credit rating r in year i as:

Equation 8: Cumulative default rate for a credit rating and year

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

6.1.5 Contract Lifetime Default Rates Calculations

The calculation is performed at the contract level and is based on all contracts with signature and maturity dates during the reporting horizon, i.e., from 1 January 1994 to 31 December 2025.

For lifetime default rates calculations:

$y_i = \text{Year } i$ = Calculated for each contract individually, the number of years between its signature

date and the i -th anniversary of such date until maturity of contract.

$c_i = \text{Contract } i$ = Any contract, which has not matured or defaulted on or before its signature date plus y_{i-1} years.

Marginal lifetime default rates are calculated as:

Equation 9: Marginal lifetime default rates for year i

$$MDR_i = \frac{dc_i}{cc_i}$$

dc_i = Marginal Default Count for year i = Count of defaults of all c_i during y_i

cc_i = Marginal Contract Count for year i = Count of all c_i

Cumulative lifetime default rates are calculated as:

Equation 10: Cumulative lifetime default rates for year i

$$CDR_i = \frac{cdc_i}{cc_1} = \frac{\sum_{n=1}^i dc_n}{cc_1}$$

cdc_i = Cumulative Default Count for year i = Count of defaults for all contracts from y_1 to and including y_i

cc_1 = Count of all contracts at the beginning of year 1

6.2 Recovery Rates

6.2.1 Calculations

The database captures exposure at three levels: counterpart, contract and tranche. This structure shows that a single counterpart may have several contracts, each comprising several tranches with varying currencies and/or interest rates. For private and public counterparts, recovery rates are calculated per contract by aggregating all discounted cash flows from each tranche. These calculations account for the timing of payments and the applicable lending rate over the life of the contract. As a result, one recovery rate is calculated per contract, covering the period from the earliest default to the final maturity

date, and includes all subsequent default events and associated cash flows.

The recovery rate statistics in this publication include unresolved contracts in default for at least eight years. This threshold ensures consistency in the statistics.

In such cases, unrecovered amounts at the reporting date are considered lost, and no estimates of future cash flows are included. Recovery rates are calculated as follows:

Equation 11: Recovery rates (RR) calculation

$$RR = \frac{A+B}{C+D}$$

A = Amounts paid after the discount date and up to the resolution of default, discounted to the chosen discount date
B = Amount outstanding after the chosen reporting horizon for cash flows discounted to the chosen discount date
C = Initial amount outstanding as of the discount date
D = Postdefault disbursed amounts, discounted to the chosen discount date.

6.2.2 Output Parameters

To ensure the significance of the recovery rate statistics, each table or figure must include data from at least ten defaulted contracts within each relevant category (for example, a specific sector or region). If this threshold is not met, no values are disclosed. The average recovery rates presented are simple averages of the observations available within each category.

Percentile values are provided alongside mean and median values to illustrate the distribution of recovery rates. This method was chosen over the confidence interval approach – used in the default rate statistics – due to the non-normal distribution of recovery data.

7. Annexes

7.1 List of Abbreviations

The following abbreviations and acronyms are used throughout this report:

CI	Confidence interval
CLOSE	Closed (recovery resolution type)
COVID-19	Coronavirus disease in 2020
DFI(s)	Development finance institution(s)
DLP	Days late payment (default identified as more than 90 days past due)
DR	Default rate
EU	European Union
EUR	Euro
FI / Non-FI	Financial institution(s) / Non-financial institution(s)
GEMs	Global Emerging Markets Risk Database (Consortium)
GICS	Global Industry Classification Standard
IQR	Interquartile range
ISO	International Organization for Standardization (used for country codes)
MDB(s)	Multilateral development bank(s)
NA	Not available
NACE	Nomenclature of Economic Activities
NAICS	North American Industry Classification System
P10 / P90	10th percentile / 90th percentile
PERFO	Performing (recovery resolution type)
PRSTR	Pre-restructuring (default action)
RESTR	Restructuring (default action)
RR	Recovery rate
S&P	Standard & Poor's
UNLPY	Unlikely to pay (default type)
URSVD	Unresolved (recovery resolution type)
US	United States

7.2 Mapping of Countries to Regions and Continents

ISO country code and ISO country name	Region	Continent
AD-Andorra	Europe & Central Asia	Europe
AE-United Arab Emirates	Middle East, North Africa, Afghanistan & Pakistan	Asia
AF-Afghanistan	Middle East, North Africa, Afghanistan & Pakistan	Asia
AG-Antigua and Barbuda	Latin America & Caribbean	North America
AI-Anguilla	Latin America & Caribbean	North America
AL-Albania	Europe & Central Asia	Europe
AM-Armenia	Europe & Central Asia	Europe
AN-Netherlands Antilles	Latin America & Caribbean	North America
AO-Angola	Sub-Saharan Africa	Africa
AQ-Antarctica	Other	Antarctica
AR-Argentina	Latin America & Caribbean	South America
AS-American Samoa	East Asia & Pacific	Oceania
AT-Austria	Europe & Central Asia	Europe
AU-Australia	East Asia & Pacific	Oceania
AW-Aruba	Latin America & Caribbean	North America
AX-Åland Islands	Europe & Central Asia	Europe
AZ-Azerbaijan	Europe & Central Asia	Europe
BA-Bosnia and Herzegovina	Europe & Central Asia	Europe
BB-Barbados	Latin America & Caribbean	North America
BD-Bangladesh	South Asia	Asia
BE-Belgium	Europe & Central Asia	Europe
BF-Burkina Faso	Sub-Saharan Africa	Africa
BG-Bulgaria	Europe & Central Asia	Europe
BH-Bahrain	Middle East, North Africa, Afghanistan & Pakistan	Asia
BI-Burundi	Sub-Saharan Africa	Africa
BJ-Benin	Sub-Saharan Africa	Africa
BL-Saint Barthélemy	Latin America & Caribbean	North America
BM-Bermuda	North America	North America
BN-Brunei	East Asia & Pacific	Asia
BO-Bolivia	Latin America & Caribbean	South America
BQ-Bonaire, Sint Eustatius and Saba	Latin America & Caribbean	North America
BR-Brazil	Latin America & Caribbean	South America
BS-Bahamas	Latin America & Caribbean	North America
BT-Bhutan	South Asia	Asia

ISO country code and ISO country name	Region	Continent
BV-Bouvet Island	Latin America & Caribbean	North America
BW-Botswana	Sub-Saharan Africa	Africa
BY-Belarus	Europe & Central Asia	Europe
BZ-Belize	Latin America & Caribbean	North America
CA-Canada	North America	North America
CC-Cocos (Keeling Islands)	East Asia & Pacific	Oceania
CD-Congo, Democratic Republic of	Sub-Saharan Africa	Africa
CF-Central African Republic	Sub-Saharan Africa	Africa
CG-Congo	Sub-Saharan Africa	Africa
CH-Switzerland	Europe & Central Asia	Europe
CI-Cote D'Ivoire	Sub-Saharan Africa	Africa
CK-Cook Islands	East Asia & Pacific	Oceania
CL-Chile	Latin America & Caribbean	South America
CM-Cameroon	Sub-Saharan Africa	Africa
CN-China	East Asia & Pacific	Asia
CO-Colombia	Latin America & Caribbean	South America
CR-Costa Rica	Latin America & Caribbean	North America
CS-Serbia and Montenegro	Europe & Central Asia	Europe
CU-Cuba	Latin America & Caribbean	North America
CV-Cape Verde	Sub-Saharan Africa	Africa
CW-Curaçao	Latin America & Caribbean	North America
CX-Christmas Island	East Asia & Pacific	Oceania
CY-Cyprus	Europe & Central Asia	Europe
CZ-Czech Republic	Europe & Central Asia	Europe
DE-Germany	Europe & Central Asia	Europe
DJ-Djibouti	Middle East, North Africa, Afghanistan & Pakistan	Asia
DK-Denmark	Europe & Central Asia	Europe
DM-Dominica	Latin America & Caribbean	North America
DO-Dominican Republic	Latin America & Caribbean	North America
DZ-Algeria	Middle East, North Africa, Afghanistan & Pakistan	Africa
EC-Ecuador	Latin America & Caribbean	South America
EE-Estonia	Europe & Central Asia	Europe
EG-Egypt	Middle East, North Africa, Afghanistan & Pakistan	Africa
EH-Western Sahara	Middle East, North Africa, Afghanistan & Pakistan	Africa
ER-Eritrea	Sub-Saharan Africa	Africa

ISO country code and ISO country name	Region	Continent
ES-Spain	Europe & Central Asia	Europe
ET-Ethiopia	Sub-Saharan Africa	Africa
FI-Finland	Europe & Central Asia	Europe
FJ-Fiji	East Asia & Pacific	Oceania
FK-Falkland Islands	Latin America & Caribbean	South America
FM-Micronesia, Federated States of	East Asia & Pacific	Oceania
FO-Faroe Islands	Europe & Central Asia	Europe
FR-France	Europe & Central Asia	Europe
GA-Gabon	Sub-Saharan Africa	Africa
GB-United Kingdom	Europe & Central Asia	Europe
GD-Grenada	Latin America & Caribbean	North America
GE-Georgia	Europe & Central Asia	Europe
GF-French Guiana	Latin America & Caribbean	South America
GG-Guernsey	Europe & Central Asia	Europe
GH-Ghana	Sub-Saharan Africa	Africa
GI-Gibraltar	Europe & Central Asia	Europe
GL-Greenland	Europe & Central Asia	Europe
GM-Gambia	Sub-Saharan Africa	Africa
GN-Guinea	Sub-Saharan Africa	Africa
GP-Guadeloupe	Latin America & Caribbean	North America
GQ-Equatorial Guinea	Sub-Saharan Africa	Africa
GR-Greece	Europe & Central Asia	Europe
GS-South Georgia and the South Sandwich Islands	Latin America & Caribbean	South America
GT-Guatemala	Latin America & Caribbean	North America
GU-Guam	East Asia & Pacific	Oceania
GW-Guinea-Bissau	Sub-Saharan Africa	Africa
GY-Guyana	Latin America & Caribbean	South America
HK-Hong Kong	East Asia & Pacific	Asia
HM-Heard Island and McDonald Islands	East Asia & Pacific	Oceania
HN-Honduras	Latin America & Caribbean	North America
HR-Croatia	Europe & Central Asia	Europe
HT-Haiti	Latin America & Caribbean	North America
HU-Hungary	Europe & Central Asia	Europe
ID-Indonesia	East Asia & Pacific	Asia
IE-Ireland	Europe & Central Asia	Europe
IL-Israel	Middle East, North Africa, Afghanistan & Pakistan	Asia

ISO country code and ISO country name	Region	Continent
IM-Isle of Man	Europe & Central Asia	Europe
IN-India	South Asia	Asia
IO-British Indian Ocean Territory	South Asia	Oceania
IQ-Iraq	Middle East, North Africa, Afghanistan & Pakistan	Asia
IR-Iran, Islamic Republic of	Middle East, North Africa, Afghanistan & Pakistan	Asia
IS-Iceland	Europe & Central Asia	Europe
IT-Italy	Europe & Central Asia	Europe
JE-Jersey	Europe & Central Asia	Europe
JM-Jamaica	Latin America & Caribbean	North America
JO-Jordan	Middle East, North Africa, Afghanistan & Pakistan	Asia
JP-Japan	East Asia & Pacific	Asia
KE-Kenya	Sub-Saharan Africa	Africa
KG-Kyrgyzstan	Europe & Central Asia	Asia
KH-Cambodia	East Asia & Pacific	Asia
KI-Kiribati	East Asia & Pacific	Oceania
KM-Comoros	Sub-Saharan Africa	Africa
KN-Saint Kitts and Nevis	Latin America & Caribbean	North America
KP-Korea, Democratic People's Republic of	East Asia & Pacific	Asia
KR-Korea, Republic of	East Asia & Pacific	Asia
KW-Kuwait	Middle East, North Africa, Afghanistan & Pakistan	Asia
KY-Cayman Islands	Latin America & Caribbean	North America
KZ-Kazakhstan	Europe & Central Asia	Europe
LA-Laos	East Asia & Pacific	Asia
LB-Lebanon	Middle East, North Africa, Afghanistan & Pakistan	Asia
LC-Saint Lucia	Latin America & Caribbean	North America
LI-Liechtenstein	Europe & Central Asia	Europe
LK-Sri Lanka	South Asia	Asia
LR-Liberia	Sub-Saharan Africa	Africa
LS-Lesotho	Sub-Saharan Africa	Africa
LT-Lithuania	Europe & Central Asia	Europe
LU-Luxembourg	Europe & Central Asia	Europe
LV-Latvia	Europe & Central Asia	Europe
LY-Libyan Arab Jamahiriya	Middle East, North Africa, Afghanistan & Pakistan	Africa

ISO country code and ISO country name	Region	Continent
MA-Morocco	Middle East, North Africa, Afghanistan & Pakistan	Africa
MC-Monaco	Europe & Central Asia	Europe
MD-Moldova	Europe & Central Asia	Europe
ME-Montenegro	Europe & Central Asia	Europe
MF-Saint Martin (French)	Latin America & Caribbean	North America
MG-Madagascar	Sub-Saharan Africa	Africa
MH-Marshall Islands	East Asia & Pacific	Oceania
MK-Macedonia, Former Yugoslav Republic of	Europe & Central Asia	Europe
ML-Mali	Sub-Saharan Africa	Africa
MM-Myanmar	East Asia & Pacific	Asia
MN-Mongolia	East Asia & Pacific	Asia
MO-Macao	East Asia & Pacific	Asia
MP-Northern Mariana Island	East Asia & Pacific	Oceania
MQ-Martinique	Latin America & Caribbean	North America
MR-Mauritania	Sub-Saharan Africa	Africa
MS-Montserrat	Latin America & Caribbean	North America
MT-Malta	Middle East, North Africa, Afghanistan & Pakistan	Europe
MU-Mauritius	Sub-Saharan Africa	Africa
MV-Maldives	South Asia	Asia
MW-Malawi	Sub-Saharan Africa	Africa
MX-Mexico	Latin America & Caribbean	North America
MY-Malaysia	East Asia & Pacific	Asia
MZ-Mozambique	Sub-Saharan Africa	Africa
NA-Namibia	Sub-Saharan Africa	Africa
NC-Nouvelle Caledonie	East Asia & Pacific	Oceania
NE-Niger	Sub-Saharan Africa	Africa
NF-Norfolk Island	East Asia & Pacific	Oceania
NG-Nigeria	Sub-Saharan Africa	Africa
NI-Nicaragua	Latin America & Caribbean	North America
NL-Netherlands	Europe & Central Asia	Europe
NO-Norway	Europe & Central Asia	Europe
NP-Nepal	South Asia	Asia
NR-Nauru	East Asia & Pacific	Oceania
NU-Niue	East Asia & Pacific	Oceania
NZ-New Zealand	East Asia & Pacific	Oceania
OM-Oman	Middle East, North Africa, Afghanistan & Pakistan	Asia

ISO country code and ISO country name	Region	Continent
OT-Other, e.g., supranational organizations, cannot be allocated to one country	Other	Other
PA-Panama	Latin America & Caribbean	North America
PE-Peru	Latin America & Caribbean	South America
PF-French Polynesia	East Asia & Pacific	Oceania
PG-Papua New Guinea	East Asia & Pacific	Oceania
PH-Philippines	East Asia & Pacific	Asia
PK-Pakistan	Middle East, North Africa, Afghanistan & Pakistan	Asia
PL-Poland	Europe & Central Asia	Europe
PM-Saint Pierre and Miquelon	Latin America & Caribbean	North America
PN-Pitcairn	East Asia & Pacific	Oceania
PR-Puerto Rico	Latin America & Caribbean	North America
PS-Palestinian Territory (West Bank and Gaza)	Middle East, North Africa, Afghanistan & Pakistan	Asia
PT-Portugal	Europe & Central Asia	Europe
PW-Palau	East Asia & Pacific	Oceania
PY-Paraguay	Latin America & Caribbean	South America
QA-Qatar	Middle East, North Africa, Afghanistan & Pakistan	Asia
RE-Réunion	Sub-Saharan Africa	Africa
REG-Regional: more than one country	Other	Regional
RO-Romania	Europe & Central Asia	Europe
RS-Serbia	Europe & Central Asia	Europe
RU-Russian Federation	Europe & Central Asia	Europe
RW-Rwanda	Sub-Saharan Africa	Africa
SA-Saudi Arabia	Middle East, North Africa, Afghanistan & Pakistan	Asia
SB-Solomon Islands	East Asia & Pacific	Oceania
SC-Seychelles	Sub-Saharan Africa	Africa
SD-Sudan, Republic of	Sub-Saharan Africa	Africa
SE-Sweden	Europe & Central Asia	Europe
SG-Singapore	East Asia & Pacific	Asia
SH-Saint Helena, Ascension and Tristan da Cunha	Sub-Saharan Africa	Africa
SI-Slovenia	Europe & Central Asia	Europe
SJ-Svalbard and Jan Mayen	Europe & Central Asia	Europe
SK-Slovakia	Europe & Central Asia	Europe
SL-Sierra Leone	Sub-Saharan Africa	Africa

ISO country code and ISO country name	Region	Continent
SM-San Marino	Europe & Central Asia	Europe
SN-Senegal	Sub-Saharan Africa	Africa
SO-Somalia	Sub-Saharan Africa	Africa
SR-Suriname	Latin America & Caribbean	South America
SS-South Sudan, Republic of	Sub-Saharan Africa	Africa
ST-Sao Tome and Principe	Sub-Saharan Africa	Africa
SV-El Salvador	Latin America & Caribbean	North America
SX-Sint Maarten (Dutch)	Latin America & Caribbean	North America
SY-Syrian Arab Republic	Middle East, North Africa, Afghanistan & Pakistan	Asia
SZ-Swaziland	Sub-Saharan Africa	Africa
TC-Turks and Caicos Islands	Latin America & Caribbean	North America
TD-Chad	Sub-Saharan Africa	Africa
TF-French Southern Territories	Sub-Saharan Africa	Africa
TG-Togo	Sub-Saharan Africa	Africa
TH-Thailand	East Asia & Pacific	Asia
TJ-Tajikistan	Europe & Central Asia	Asia
TK-Tokelau	East Asia & Pacific	Oceania
TL-East Timor	East Asia & Pacific	Asia
TM-Turkmenistan	Europe & Central Asia	Asia
TN-Tunisia	Middle East, North Africa, Afghanistan & Pakistan	Africa
TO-Tonga	East Asia & Pacific	Oceania
TR-Turkey	Europe & Central Asia	Europe
TT-Trinidad and Tobago	Latin America & Caribbean	North America
TV-Tuvalu	East Asia & Pacific	Oceania
TW-Taiwan	East Asia & Pacific	Asia
TZ-Tanzania	Sub-Saharan Africa	Africa
UA-Ukraine	Europe & Central Asia	Europe
UG-Uganda	Sub-Saharan Africa	Africa
UM-United States Minor Outlying Islands	East Asia & Pacific	Oceania
US-United States	North America	North America
UY-Uruguay	Latin America & Caribbean	South America
UZ-Uzbekistan	Europe & Central Asia	Asia
VA-Holy See (Vatican City State)	Europe & Central Asia	Europe
VC-Saint Vincent and The Grenadines	Latin America & Caribbean	North America
VE-Venezuela	Latin America & Caribbean	South America

ISO country code and ISO country name	Region	Continent
VG-Virgin Islands, British	Latin America & Caribbean	North America
VI-Virgin Islands, U.S.	Latin America & Caribbean	North America
VN-Vietnam	East Asia & Pacific	Asia
VU-Vanuatu	East Asia & Pacific	Oceania
WF-Wallis and Futuna	East Asia & Pacific	Oceania
WS-Samoa	East Asia & Pacific	Oceania
XK-Kosovo	Europe & Central Asia	Europe
XT-Turkish Republic of North- ern Cyprus	Europe & Central Asia	Europe
YE-Yemen, Republic of	Middle East, North Africa, Afghanistan & Pakistan	Asia
YT-Mayotte	Sub-Saharan Africa	Africa
ZA-South Africa	Sub-Saharan Africa	Africa
ZM-Zambia	Sub-Saharan Africa	Africa
ZW-Zimbabwe	Sub-Saharan Africa	Africa

7.3 Mapping of GICS, NACE and NAICS Sectors to Sector Groupings

Sector categorisation	Sector code	Description
GICS 2018	10101010	Oil & Gas Drilling
GICS 2018	10101020	Oil & Gas Equipment & Services
GICS 2018	10102010	Integrated Oil & Gas
GICS 2018	10102020	Oil & Gas Exploration & Production
GICS 2018	10102030	Oil & Gas Refining & Marketing
GICS 2018	10102040	Oil & Gas Storage & Transportation
GICS 2018	10102050	Coal & Consumable Fuels
GICS 2018	15101010	Commodity Chemicals
GICS 2018	15101020	Diversified Chemicals
GICS 2018	15101030	Fertilisers & Agricultural Chemicals
GICS 2018	15101040	Industrial Gases
GICS 2018	15101050	Specialty Chemicals
GICS 2018	15102010	Construction Materials
GICS 2018	15103010	Metal & Glass Containers
GICS 2018	15103020	Paper Packaging
GICS 2018	15104010	Aluminum
GICS 2018	15104020	Diversified Metals & Mining
GICS 2018	15104025	Copper
GICS 2018	15104030	Gold
GICS 2018	15104040	Precious Metals & Minerals
GICS 2018	15104045	Silver
GICS 2018	15104050	Steel
GICS 2018	15105010	Forest Products
GICS 2018	15105020	Paper Products
GICS 2018	20101010	Aerospace & Defense
GICS 2018	20102010	Building Products
GICS 2018	20103010	Construction & Engineering
GICS 2018	20104010	Electrical Components & Equipment
GICS 2018	20104020	Heavy Electrical Equipment
GICS 2018	20105010	Industrial Conglomerates
GICS 2018	20106010	Construction Machinery & Heavy Trucks
GICS 2018	20106015	Agricultural & Farm Machinery
GICS 2018	20106020	Industrial Machinery
GICS 2018	20107010	Trading Companies & Distributors
GICS 2018	20201010	Commercial Printing
GICS 2018	20201050	Environmental & Facilities Services
GICS 2018	20201060	Office Services & Supplies

Sector categorisation	Sector code	Description
GICS 2018	20201070	Diversified Support Services
GICS 2018	20201080	Security & Alarm Services
GICS 2018	20202010	Human Resource & Employment Services
GICS 2018	20202020	Research & Consulting Services
GICS 2018	20301010	Air Freight & Logistics
GICS 2018	20302010	Airlines
GICS 2018	20303010	Marine
GICS 2018	20304010	Railroads
GICS 2018	20304020	Trucking
GICS 2018	20305010	Airport Services
GICS 2018	20305020	Highways & Railtracks
GICS 2018	20305030	Marine Ports & Services
GICS 2018	25101010	Auto Parts & Equipment
GICS 2018	25101020	Tires & Rubber
GICS 2018	25102010	Automobile Manufacturers
GICS 2018	25102020	Motorcycle Manufacturers
GICS 2018	25201010	Consumer Electronics
GICS 2018	25201020	Home Furnishings
GICS 2018	25201030	Homebuilding
GICS 2018	25201040	Household Appliances
GICS 2018	25201050	Housewares & Specialties
GICS 2018	25202010	Leisure Products
GICS 2018	25203010	Apparel, Accessories & Luxury Goods
GICS 2018	25203020	Footwear
GICS 2018	25203030	Textiles
GICS 2018	25301010	Casinos & Gaming
GICS 2018	25301020	Hotels, Resorts & Cruise Lines
GICS 2018	25301030	Leisure Facilities
GICS 2018	25301040	Restaurants
GICS 2018	25302010	Education Services
GICS 2018	25302020	Specialised Consumer Services
GICS 2018	25501010	Distributors
GICS 2018	25502020	Internet & Direct Marketing Retail
GICS 2018	25503010	Department Stores
GICS 2018	25503020	General Merchandise Stores
GICS 2018	25504010	Apparel Retail
GICS 2018	25504020	Computer & Electronics Retail
GICS 2018	25504030	Home Improvement Retail
GICS 2018	25504040	Specialty Stores
GICS 2018	25504050	Automotive Retail
GICS 2018	25504060	Homefurnishing Retail

Sector categorisation	Sector code	Description
GICS 2018	30101010	Drug Retail
GICS 2018	30101020	Food Distributors
GICS 2018	30101030	Food Retail
GICS 2018	30101040	Hypermarkets & Super Centers
GICS 2018	30201010	Brewers
GICS 2018	30201020	Distillers & Vintners
GICS 2018	30201030	Soft Drinks
GICS 2018	30202010	Agricultural Products
GICS 2018	30202030	Packaged Foods & Meats
GICS 2018	30203010	Tobacco
GICS 2018	30301010	Household Products
GICS 2018	30302010	Personal Products
GICS 2018	35101010	Health Care Equipment
GICS 2018	35101020	Health Care Supplies
GICS 2018	35102010	Health Care Distributors
GICS 2018	35102015	Health Care Services
GICS 2018	35102020	Health Care Facilities
GICS 2018	35102030	Managed Health Care
GICS 2018	35103010	Health Care Technology
GICS 2018	35201010	Biotechnology
GICS 2018	35202010	Pharmaceuticals
GICS 2018	35203010	Life Sciences Tools & Services
GICS 2018	40101010	Diversified Banks
GICS 2018	40101015	Regional Banks
GICS 2018	40102010	Thriffs & Mortgage Finance
GICS 2018	40201020	Other Diversified Financial Services
GICS 2018	40201030	Multi-Sector Holdings
GICS 2018	40201040	Specialised Finance
GICS 2018	40202010	Consumer Finance
GICS 2018	40203010	Asset Management & Custody Banks
GICS 2018	40203020	Investment Banking & Brokerage
GICS 2018	40203030	Diversified Capital Markets
GICS 2018	40203040	Financial Exchanges & Data
GICS 2018	40204010	Mortgage REITs
GICS 2018	40301010	Insurance Brokers
GICS 2018	40301020	Life & Health Insurance
GICS 2018	40301030	Multi-line Insurance
GICS 2018	40301040	Property & Casualty Insurance
GICS 2018	40301050	Reinsurance
GICS 2018	45102010	IT Consulting & Other Services
GICS 2018	45102020	Data Processing & Outsourced Services

Sector categorisation	Sector code	Description
GICS 2018	45102030	Internet Services & Infrastructure
GICS 2018	45103010	Application Software
GICS 2018	45103020	Systems Software
GICS 2018	45201020	Communications Equipment
GICS 2018	45202030	Technology Hardware, Storage & Peripherals
GICS 2018	45203010	Electronic Equipment & Instruments
GICS 2018	45203015	Electronic Components
GICS 2018	45203020	Electronic Manufacturing Services
GICS 2018	45203030	Technology Distributors
GICS 2018	45301010	Semiconductor Equipment
GICS 2018	45301020	Semiconductors
GICS 2018	50101010	Alternative Carriers
GICS 2018	50101020	Integrated Telecommunication Services
GICS 2018	50102010	Wireless Telecommunication Services
GICS 2018	50201010	Advertising
GICS 2018	50201020	Broadcasting
GICS 2018	50201030	Cable & Satellite
GICS 2018	50201040	Publishing
GICS 2018	50202010	Movies & Entertainment
GICS 2018	50202020	Interactive Home Entertainment
GICS 2018	50203010	Interactive Media & Services
GICS 2018	55101010	Electric Utilities
GICS 2018	55102010	Gas Utilities
GICS 2018	55103010	Multi-Utilities
GICS 2018	55104010	Water Utilities
GICS 2018	55105010	Independent Power Producers & Energy Traders
GICS 2018	55105020	Renewable Electricity
GICS 2018	60101010	Diversified REITs
GICS 2018	60101020	Industrial REITs
GICS 2018	60101030	Hotel & Resort REITs
GICS 2018	60101040	Office REITs
GICS 2018	60101050	Health Care REITs
GICS 2018	60101060	Residential REITs
GICS 2018	60101070	Retail REITs
GICS 2018	60101080	Specialised REITs
GICS 2018	60102010	Diversified Real Estate Activities
GICS 2018	60102020	Real Estate Operating Companies
GICS 2018	60102030	Real Estate Development
GICS 2018	60102040	Real Estate Services
GICS 2018	ADM	Administration
GICS 2018	OTH	Others

Sector categorisation	Sector code	Description
GICS 2018	SOV	Sovereign
NACE 2	1.11	Growing of cereals (except rice), leguminous crops and oil seeds
NACE 2	1.12	Growing of rice
NACE 2	1.13	Growing of vegetables and melons, roots and tubers
NACE 2	1.14	Growing of sugar cane
NACE 2	1.15	Growing of tobacco
NACE 2	1.16	Growing of fibre crops
NACE 2	1.19	Growing of other non-perennial crops
NACE 2	1.21	Growing of grapes
NACE 2	1.22	Growing of tropical and subtropical fruits
NACE 2	1.23	Growing of citrus fruits
NACE 2	1.24	Growing of pome fruits and stone fruits
NACE 2	1.25	Growing of other tree and bush fruits and nuts
NACE 2	1.26	Growing of oleaginous fruits
NACE 2	1.27	Growing of beverage crops
NACE 2	1.28	Growing of spices, aromatic, drug and pharmaceutical crops
NACE 2	1.29	Growing of other perennial crops
NACE 2	1.3	Plant propagation
NACE 2	1.41	Raising of dairy cattle
NACE 2	1.42	Raising of other cattle and buffaloes
NACE 2	1.43	Raising of horses and other equines
NACE 2	1.44	Raising of camels and camelids
NACE 2	1.45	Raising of sheep and goats
NACE 2	1.46	Raising of swine/pigs
NACE 2	1.47	Raising of poultry
NACE 2	1.49	Raising of other animals
NACE 2	1.5	Mixed farming
NACE 2	1.61	Support activities for crop production
NACE 2	1.62	Support activities for animal production
NACE 2	1.63	Post-harvest crop activities
NACE 2	1.64	Seed processing for propagation
NACE 2	1.7	Hunting, trapping and related service activities
NACE 2	2.1	Silviculture and other forestry activities
NACE 2	2.2	Logging
NACE 2	2.3	Gathering of wild growing non-wood products
NACE 2	2.4	Support services to forestry
NACE 2	3.11	Marine fishing
NACE 2	3.12	Freshwater fishing
NACE 2	3.21	Marine aquaculture
NACE 2	3.22	Freshwater aquaculture
NACE 2	5.1	Mining of hard coal

Sector categorisation	Sector code	Description
NACE 2	5.2	Mining of lignite
NACE 2	6.1	Extraction of crude petroleum
NACE 2	6.2	Extraction of natural gas
NACE 2	7.1	Mining of iron ores
NACE 2	7.21	Mining of uranium and thorium ores
NACE 2	7.29	Mining of other non-ferrous metal ores
NACE 2	8.11	Quarrying of ornamental and building stone, limestone, gypsum, chalk and slate
NACE 2	8.12	Operation of gravel and sand pits; mining of clays and kaolin
NACE 2	8.91	Mining of chemical and fertiliser minerals
NACE 2	8.92	Extraction of peat
NACE 2	8.93	Extraction of salt
NACE 2	8.99	Other mining and quarrying n.e.c.
NACE 2	9.1	Support activities for petroleum and natural gas extraction
NACE 2	9.9	Support activities for other mining and quarrying
NACE 2	10.11	Processing and preserving of meat
NACE 2	10.12	Processing and preserving of poultry meat
NACE 2	10.13	Production of meat and poultry meat products
NACE 2	10.2	Processing and preserving of fish, crustaceans and molluscs
NACE 2	10.31	Processing and preserving of potatoes
NACE 2	10.32	Manufacture of fruit and vegetable juice
NACE 2	10.39	Other processing and preserving of fruit and vegetables
NACE 2	10.41	Manufacture of oils and fats
NACE 2	10.42	Manufacture of margarine and similar edible fats
NACE 2	10.51	Operation of dairies and cheese making
NACE 2	10.52	Manufacture of ice cream
NACE 2	10.61	Manufacture of grain mill products
NACE 2	10.62	Manufacture of starches and starch products
NACE 2	10.71	Manufacture of bread; manufacture of fresh pastry goods and cakes
NACE 2	10.72	Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes
NACE 2	10.73	Manufacture of macaroni, noodles, couscous and similar farinaceous products
NACE 2	10.81	Manufacture of sugar
NACE 2	10.82	Manufacture of cocoa, chocolate and sugar confectionery
NACE 2	10.83	Processing of tea and coffee
NACE 2	10.84	Manufacture of condiments and seasonings
NACE 2	10.85	Manufacture of prepared meals and dishes
NACE 2	10.86	Manufacture of homogenised food preparations and dietetic food
NACE 2	10.89	Manufacture of other food products n.e.c.
NACE 2	10.91	Manufacture of prepared feeds for farm animals
NACE 2	10.92	Manufacture of prepared pet foods

Sector categorisation	Sector code	Description
NACE 2	11.01	Distilling, rectifying and blending of spirits
NACE 2	11.02	Manufacture of wine from grape
NACE 2	11.03	Manufacture of cider and other fruit wines
NACE 2	11.04	Manufacture of other non-distilled fermented beverages
NACE 2	11.05	Manufacture of beer
NACE 2	11.06	Manufacture of malt
NACE 2	11.07	Manufacture of soft drinks; production of mineral waters and other bottled waters
NACE 2	12	Manufacture of tobacco products
NACE 2	12	Manufacture of tobacco products
NACE 2	13.1	Preparation and spinning of textile fibres
NACE 2	13.2	Weaving of textiles
NACE 2	13.3	Finishing of textiles
NACE 2	13.91	Manufacture of knitted and crocheted fabrics
NACE 2	13.92	Manufacture of made-up textile articles, except apparel
NACE 2	13.93	Manufacture of carpets and rugs
NACE 2	13.94	Manufacture of cordage, rope, twine and netting
NACE 2	13.95	Manufacture of non-wovens and articles made from non-wovens, except apparel
NACE 2	13.96	Manufacture of other technical and industrial textiles
NACE 2	13.99	Manufacture of other textiles n.e.c.
NACE 2	14.11	Manufacture of leather clothes
NACE 2	14.12	Manufacture of workwear
NACE 2	14.13	Manufacture of other outerwear
NACE 2	14.14	Manufacture of underwear
NACE 2	14.19	Manufacture of other wearing apparel and accessories
NACE 2	14.2	Manufacture of articles of fur
NACE 2	14.31	Manufacture of knitted and crocheted hosiery
NACE 2	14.39	Manufacture of other knitted and crocheted apparel
NACE 2	15.11	Tanning and dressing of leather; dressing and dyeing of fur
NACE 2	15.12	Manufacture of luggage, handbags and the like, saddlery and harness
NACE 2	15.2	Manufacture of footwear
NACE 2	16.1	Sawmilling and planing of wood
NACE 2	16.21	Manufacture of veneer sheets and wood-based panels
NACE 2	16.22	Manufacture of assembled parquet floors
NACE 2	16.23	Manufacture of other builders' carpentry and joinery
NACE 2	16.24	Manufacture of wooden containers
NACE 2	16.29	Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials
NACE 2	17.11	Manufacture of pulp
NACE 2	17.12	Manufacture of paper and paperboard

Sector categorisation	Sector code	Description
NACE 2	17.21	Manufacture of corrugated paper and paperboard and of containers of paper and paperboard
NACE 2	17.22	Manufacture of household and sanitary goods and of toilet requisites
NACE 2	17.23	Manufacture of paper stationery
NACE 2	17.24	Manufacture of wallpaper
NACE 2	17.29	Manufacture of other articles of paper and paperboard
NACE 2	18.11	Printing of newspapers
NACE 2	18.12	Other printing
NACE 2	18.13	Pre-press and pre-media services
NACE 2	18.14	Binding and related services
NACE 2	18.2	Reproduction of recorded media
NACE 2	19.1	Manufacture of coke oven products
NACE 2	19.2	Manufacture of refined petroleum products
NACE 2	20.11	Manufacture of industrial gases
NACE 2	20.12	Manufacture of dyes and pigments
NACE 2	20.13	Manufacture of other inorganic basic chemicals
NACE 2	20.14	Manufacture of other organic basic chemicals
NACE 2	20.15	Manufacture of fertilisers and nitrogen compounds
NACE 2	20.16	Manufacture of plastics in primary forms
NACE 2	20.17	Manufacture of synthetic rubber in primary forms
NACE 2	20.2	Manufacture of pesticides and other agrochemical products
NACE 2	20.3	Manufacture of paints, varnishes and similar coatings, printing ink and mastics
NACE 2	20.41	Manufacture of soap and detergents, cleaning and polishing preparations
NACE 2	20.42	Manufacture of perfumes and toilet preparations
NACE 2	20.51	Manufacture of explosives
NACE 2	20.52	Manufacture of glues
NACE 2	20.53	Manufacture of essential oils
NACE 2	20.59	Manufacture of other chemical products n.e.c.
NACE 2	20.6	Manufacture of man-made fibres
NACE 2	21.1	Manufacture of basic pharmaceutical products
NACE 2	21.2	Manufacture of pharmaceutical preparations
NACE 2	22.11	Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres
NACE 2	22.19	Manufacture of other rubber products
NACE 2	22.21	Manufacture of plastic plates, sheets, tubes and profiles
NACE 2	22.22	Manufacture of plastic packing goods
NACE 2	22.23	Manufacture of builders' ware of plastic
NACE 2	22.29	Manufacture of other plastic products
NACE 2	23.11	Manufacture of flat glass
NACE 2	23.12	Shaping and processing of flat glass
NACE 2	23.13	Manufacture of hollow glass
NACE 2	23.14	Manufacture of glass fibres

Sector categorisation	Sector code	Description
NACE 2	23.19	Manufacture and processing of other glass, including technical glassware
NACE 2	23.2	Manufacture of refractory products
NACE 2	23.31	Manufacture of ceramic tiles and flags
NACE 2	23.32	Manufacture of bricks, tiles and construction products, in baked clay
NACE 2	23.41	Manufacture of ceramic household and ornamental articles
NACE 2	23.42	Manufacture of ceramic sanitary fixtures
NACE 2	23.43	Manufacture of ceramic insulators and insulating fittings
NACE 2	23.44	Manufacture of other technical ceramic products
NACE 2	23.49	Manufacture of other ceramic products
NACE 2	23.51	Manufacture of cement
NACE 2	23.52	Manufacture of lime and plaster
NACE 2	23.61	Manufacture of concrete products for construction purposes
NACE 2	23.62	Manufacture of plaster products for construction purposes
NACE 2	23.63	Manufacture of ready-mixed concrete
NACE 2	23.64	Manufacture of mortars
NACE 2	23.65	Manufacture of fibre cement
NACE 2	23.69	Manufacture of other articles of concrete, plaster and cement
NACE 2	23.7	Cutting, shaping and finishing of stone
NACE 2	23.91	Production of abrasive products
NACE 2	23.99	Manufacture of other non-metallic mineral products n.e.c.
NACE 2	24.1	Manufacture of basic iron and steel and of ferro-alloys
NACE 2	24.2	Manufacture of tubes, pipes, hollow profiles and related fittings, of steel
NACE 2	24.31	Cold drawing of bars
NACE 2	24.32	Cold rolling of narrow strip
NACE 2	24.33	Cold forming or folding
NACE 2	24.34	Cold drawing of wire
NACE 2	24.41	Precious metals production
NACE 2	24.42	Aluminium production
NACE 2	24.43	Lead, zinc and tin production
NACE 2	24.44	Copper production
NACE 2	24.45	Other non-ferrous metal production
NACE 2	24.46	Processing of nuclear fuel
NACE 2	24.51	Casting of iron
NACE 2	24.52	Casting of steel
NACE 2	24.53	Casting of light metals
NACE 2	24.54	Casting of other non-ferrous metals
NACE 2	25.11	Manufacture of metal structures and parts of structures
NACE 2	25.12	Manufacture of doors and windows of metal
NACE 2	25.21	Manufacture of central heating radiators and boilers
NACE 2	25.29	Manufacture of other tanks, reservoirs and containers of metal
NACE 2	25.3	Manufacture of steam generators, except central heating hot water boilers
NACE 2	25.4	Manufacture of weapons and ammunition

Sector categorisation	Sector code	Description
NACE 2	25.5	Forging, pressing, stamping and roll-forming of metal; powder metallurgy
NACE 2	25.61	Treatment and coating of metals
NACE 2	25.62	Machining
NACE 2	25.71	Manufacture of cutlery
NACE 2	25.72	Manufacture of locks and hinges
NACE 2	25.73	Manufacture of tools
NACE 2	25.91	Manufacture of steel drums and similar containers
NACE 2	25.92	Manufacture of light metal packaging
NACE 2	25.93	Manufacture of wire products, chain and springs
NACE 2	25.94	Manufacture of fasteners and screw machine products
NACE 2	25.99	Manufacture of other fabricated metal products n.e.c.
NACE 2	26.11	Manufacture of electronic components
NACE 2	26.12	Manufacture of loaded electronic boards
NACE 2	26.2	Manufacture of computers and peripheral equipment
NACE 2	26.3	Manufacture of communication equipment
NACE 2	26.4	Manufacture of consumer electronics
NACE 2	26.51	Manufacture of instruments and appliances for measuring, testing and navigation
NACE 2	26.52	Manufacture of watches and clocks
NACE 2	26.6	Manufacture of irradiation, electromedical and electrotherapeutic equipment
NACE 2	26.7	Manufacture of optical instruments and photographic equipment
NACE 2	26.8	Manufacture of magnetic and optical media
NACE 2	27.11	Manufacture of electric motors, generators and transformers
NACE 2	27.12	Manufacture of electricity distribution and control apparatus
NACE 2	27.2	Manufacture of batteries and accumulators
NACE 2	27.31	Manufacture of fibre optic cables
NACE 2	27.32	Manufacture of other electronic and electric wires and cables
NACE 2	27.33	Manufacture of wiring devices
NACE 2	27.4	Manufacture of electric lighting equipment
NACE 2	27.51	Manufacture of electric domestic appliances
NACE 2	27.52	Manufacture of non-electric domestic appliances
NACE 2	27.9	Manufacture of other electrical equipment
NACE 2	28.11	Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
NACE 2	28.12	Manufacture of fluid power equipment
NACE 2	28.13	Manufacture of other pumps and compressors
NACE 2	28.14	Manufacture of other taps and valves
NACE 2	28.15	Manufacture of bearings, gears, gearing and driving elements
NACE 2	28.21	Manufacture of ovens, furnaces and furnace burners
NACE 2	28.22	Manufacture of lifting and handling equipment
NACE 2	28.23	Manufacture of office machinery and equipment (except computers and peripheral equipment)

Sector categorisation	Sector code	Description
NACE 2	28.24	Manufacture of power-driven hand tools
NACE 2	28.25	Manufacture of non-domestic cooling and ventilation equipment
NACE 2	28.29	Manufacture of other general-purpose machinery n.e.c.
NACE 2	28.3	Manufacture of agricultural and forestry machinery
NACE 2	28.41	Manufacture of metal forming machinery
NACE 2	28.49	Manufacture of other machine tools
NACE 2	28.91	Manufacture of machinery for metallurgy
NACE 2	28.92	Manufacture of machinery for mining, quarrying and construction
NACE 2	28.93	Manufacture of machinery for food, beverage and tobacco processing
NACE 2	28.94	Manufacture of machinery for textile, apparel and leather production
NACE 2	28.95	Manufacture of machinery for paper and paperboard production
NACE 2	28.96	Manufacture of plastics and rubber machinery
NACE 2	28.99	Manufacture of other special-purpose machinery n.e.c.
NACE 2	29.1	Manufacture of motor vehicles
NACE 2	29.2	Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers
NACE 2	29.31	Manufacture of electrical and electronic equipment for motor vehicles
NACE 2	29.32	Manufacture of other parts and accessories for motor vehicles
NACE 2	30.11	Building of ships and floating structures
NACE 2	30.12	Building of pleasure and sporting boats
NACE 2	30.2	Manufacture of railway locomotives and rolling stock
NACE 2	30.3	Manufacture of air and spacecraft and related machinery
NACE 2	30.4	Manufacture of military fighting vehicles
NACE 2	30.91	Manufacture of motorcycles
NACE 2	30.92	Manufacture of bicycles and invalid carriages
NACE 2	30.99	Manufacture of other transport equipment n.e.c.
NACE 2	31.01	Manufacture of office and shop furniture
NACE 2	31.02	Manufacture of kitchen furniture
NACE 2	31.03	Manufacture of mattresses
NACE 2	31.09	Manufacture of other furniture
NACE 2	32.11	Striking of coins
NACE 2	32.12	Manufacture of jewellery and related articles
NACE 2	32.13	Manufacture of imitation jewellery and related articles
NACE 2	32.2	Manufacture of musical instruments
NACE 2	32.3	Manufacture of sports goods
NACE 2	32.4	Manufacture of games and toys
NACE 2	32.5	Manufacture of medical and dental instruments and supplies
NACE 2	32.91	Manufacture of brooms and brushes
NACE 2	32.99	Other manufacturing n.e.c.
NACE 2	33.11	Repair of fabricated metal products
NACE 2	33.12	Repair of machinery
NACE 2	33.13	Repair of electronic and optical equipment

Sector categorisation	Sector code	Description
NACE 2	33.14	Repair of electrical equipment
NACE 2	33.15	Repair and maintenance of ships and boats
NACE 2	33.16	Repair and maintenance of aircraft and spacecraft
NACE 2	33.17	Repair and maintenance of other transport equipment
NACE 2	33.19	Repair of other equipment
NACE 2	33.2	Installation of industrial machinery and equipment
NACE 2	35.11	Production of electricity
NACE 2	35.12	Transmission of electricity
NACE 2	35.13	Distribution of electricity
NACE 2	35.14	Trade of electricity
NACE 2	35.21	Manufacture of gas
NACE 2	35.22	Distribution of gaseous fuels through mains
NACE 2	35.23	Trade of gas through mains
NACE 2	35.3	Steam and air conditioning supply
NACE 2	36	Water collection, treatment and supply
NACE 2	36	Water collection, treatment and supply
NACE 2	37	Sewerage
NACE 2	37	Sewerage
NACE 2	38.11	Collection of non-hazardous waste
NACE 2	38.12	Collection of hazardous waste
NACE 2	38.21	Treatment and disposal of non-hazardous waste
NACE 2	38.22	Treatment and disposal of hazardous waste
NACE 2	38.31	Dismantling of wrecks
NACE 2	38.32	Recovery of sorted materials
NACE 2	39	Remediation activities and other waste management services
NACE 2	39	Remediation activities and other waste management services
NACE 2	41.1	Development of building projects
NACE 2	41.2	Construction of residential and non-residential buildings
NACE 2	42.11	Construction of roads and motorways
NACE 2	42.12	Construction of railways and underground railways
NACE 2	42.13	Construction of bridges and tunnels
NACE 2	42.21	Construction of utility projects for fluids
NACE 2	42.22	Construction of utility projects for electricity and telecommunications
NACE 2	42.91	Construction of water projects
NACE 2	42.99	Construction of other civil engineering projects n.e.c.
NACE 2	43.11	Demolition
NACE 2	43.12	Site preparation
NACE 2	43.13	Test drilling and boring
NACE 2	43.21	Electrical installation
NACE 2	43.22	Plumbing, heat and air-conditioning installation
NACE 2	43.29	Other construction installation

Sector categorisation	Sector code	Description
NACE 2	43.31	Plastering
NACE 2	43.32	Joinery installation
NACE 2	43.33	Floor and wall covering
NACE 2	43.34	Painting and glazing
NACE 2	43.39	Other building completion and finishing
NACE 2	43.91	Roofing activities
NACE 2	43.99	Other specialised construction activities n.e.c.
NACE 2	45.11	Sale of cars and light motor vehicles
NACE 2	45.19	Sale of other motor vehicles
NACE 2	45.2	Maintenance and repair of motor vehicles
NACE 2	45.31	Wholesale trade of motor vehicle parts and accessories
NACE 2	45.32	Retail trade of motor vehicle parts and accessories
NACE 2	45.4	Sale, maintenance and repair of motorcycles and related parts and accessories
NACE 2	46.11	Agents involved in the sale of agricultural raw materials, live animals, textile raw materials and semi-finished goods
NACE 2	46.12	Agents involved in the sale of fuels, ores, metals and industrial chemicals
NACE 2	46.13	Agents involved in the sale of timber and building materials
NACE 2	46.14	Agents involved in the sale of machinery, industrial equipment, ships and aircraft
NACE 2	46.15	Agents involved in the sale of furniture, household goods, hardware and ironmongery
NACE 2	46.16	Agents involved in the sale of textiles, clothing, fur, footwear and leather goods
NACE 2	46.17	Agents involved in the sale of food, beverages and tobacco
NACE 2	46.18	Agents specialised in the sale of other particular products
NACE 2	46.19	Agents involved in the sale of a variety of goods
NACE 2	46.21	Wholesale of grain, unmanufactured tobacco, seeds and animal feeds
NACE 2	46.22	Wholesale of flowers and plants
NACE 2	46.23	Wholesale of live animals
NACE 2	46.24	Wholesale of hides, skins and leather
NACE 2	46.31	Wholesale of fruit and vegetables
NACE 2	46.32	Wholesale of meat and meat products
NACE 2	46.33	Wholesale of dairy products, eggs and edible oils and fats
NACE 2	46.34	Wholesale of beverages
NACE 2	46.35	Wholesale of tobacco products
NACE 2	46.36	Wholesale of sugar and chocolate and sugar confectionery
NACE 2	46.37	Wholesale of coffee, tea, cocoa and spices
NACE 2	46.38	Wholesale of other food, including fish, crustaceans and molluscs
NACE 2	46.39	Non-specialised wholesale of food, beverages and tobacco
NACE 2	46.41	Wholesale of textiles
NACE 2	46.42	Wholesale of clothing and footwear
NACE 2	46.43	Wholesale of electrical household appliances

Sector categorisation	Sector code	Description
NACE 2	46.44	Wholesale of china and glassware and cleaning materials
NACE 2	46.45	Wholesale of perfume and cosmetics
NACE 2	46.46	Wholesale of pharmaceutical goods
NACE 2	46.47	Wholesale of furniture, carpets and lighting equipment
NACE 2	46.48	Wholesale of watches and jewellery
NACE 2	46.49	Wholesale of other household goods
NACE 2	46.51	Wholesale of computers, computer peripheral equipment and software
NACE 2	46.52	Wholesale of electronic and telecommunications equipment and parts
NACE 2	46.61	Wholesale of agricultural machinery, equipment and supplies
NACE 2	46.62	Wholesale of machine tools
NACE 2	46.63	Wholesale of mining, construction and civil engineering machinery
NACE 2	46.64	Wholesale of machinery for the textile industry and of sewing and knitting machines
NACE 2	46.65	Wholesale of office furniture
NACE 2	46.66	Wholesale of other office machinery and equipment
NACE 2	46.69	Wholesale of other machinery and equipment
NACE 2	46.71	Wholesale of solid, liquid and gaseous fuels and related products
NACE 2	46.72	Wholesale of metals and metal ores
NACE 2	46.73	Wholesale of wood, construction materials and sanitary equipment
NACE 2	46.74	Wholesale of hardware, plumbing and heating equipment and supplies
NACE 2	46.75	Wholesale of chemical products
NACE 2	46.76	Wholesale of other intermediate products
NACE 2	46.77	Wholesale of waste and scrap
NACE 2	46.9	Non-specialised wholesale trade
NACE 2	47.11	Retail sale in non-specialised stores with food, beverages or tobacco predominating
NACE 2	47.19	Other retail sale in non-specialised stores
NACE 2	47.21	Retail sale of fruit and vegetables in specialised stores
NACE 2	47.22	Retail sale of meat and meat products in specialised stores
NACE 2	47.23	Retail sale of fish, crustaceans and molluscs in specialised stores
NACE 2	47.24	Retail sale of bread, cakes, flour confectionery and sugar confectionery in specialised stores
NACE 2	47.25	Retail sale of beverages in specialised stores
NACE 2	47.26	Retail sale of tobacco products in specialised stores
NACE 2	47.29	Other retail sale of food in specialised stores
NACE 2	47.3	Retail sale of automotive fuel in specialised stores
NACE 2	47.41	Retail sale of computers, peripheral units and software in specialised stores
NACE 2	47.42	Retail sale of telecommunications equipment in specialised stores
NACE 2	47.43	Retail sale of audio and video equipment in specialised stores
NACE 2	47.51	Retail sale of textiles in specialised stores
NACE 2	47.52	Retail sale of hardware, paints and glass in specialised stores
NACE 2	47.53	Retail sale of carpets, rugs, wall and floor coverings in specialised stores

Sector categorisation	Sector code	Description
NACE 2	47.54	Retail sale of electrical household appliances in specialised stores
NACE 2	47.59	Retail sale of furniture, lighting equipment and other household articles in specialised stores
NACE 2	47.61	Retail sale of books in specialised stores
NACE 2	47.62	Retail sale of newspapers and stationery in specialised stores
NACE 2	47.63	Retail sale of music and video recordings in specialised stores
NACE 2	47.64	Retail sale of sporting equipment in specialised stores
NACE 2	47.65	Retail sale of games and toys in specialised stores
NACE 2	47.71	Retail sale of clothing in specialised stores
NACE 2	47.72	Retail sale of footwear and leather goods in specialised stores
NACE 2	47.73	Dispensing chemist in specialised stores
NACE 2	47.74	Retail sale of medical and orthopaedic goods in specialised stores
NACE 2	47.75	Retail sale of cosmetic and toilet articles in specialised stores
NACE 2	47.76	Retail sale of flowers, plants, seeds, fertilisers, pet animals and pet food in specialised stores
NACE 2	47.77	Retail sale of watches and jewellery in specialised stores
NACE 2	47.78	Other retail sale of new goods in specialised stores
NACE 2	47.79	Retail sale of second-hand goods in stores
NACE 2	47.81	Retail sale via stalls and markets of food, beverages and tobacco products
NACE 2	47.82	Retail sale via stalls and markets of textiles, clothing and footwear
NACE 2	47.89	Retail sale via stalls and markets of other goods
NACE 2	47.91	Retail sale via mail order houses or via Internet
NACE 2	47.99	Other retail sale not in stores, stalls or markets
NACE 2	49.1	Passenger rail transport, interurban
NACE 2	49.2	Freight rail transport
NACE 2	49.31	Urban and suburban passenger land transport
NACE 2	49.32	Taxi operation
NACE 2	49.39	Other passenger land transport n.e.c.
NACE 2	49.41	Freight transport by road
NACE 2	49.42	Removal services
NACE 2	49.5	Transport via pipeline
NACE 2	50.1	Sea and coastal passenger water transport
NACE 2	50.2	Sea and coastal freight water transport
NACE 2	50.3	Inland passenger water transport
NACE 2	50.4	Inland freight water transport
NACE 2	51.1	Passenger air transport
NACE 2	51.21	Freight air transport
NACE 2	51.22	Space transport
NACE 2	52.1	Warehousing and storage
NACE 2	52.21	Service activities incidental to land transportation
NACE 2	52.22	Service activities incidental to water transportation
NACE 2	52.23	Service activities incidental to air transportation

Sector categorisation	Sector code	Description
NACE 2	52.24	Cargo handling
NACE 2	52.29	Other transportation support activities
NACE 2	53.1	Postal activities under universal service obligation
NACE 2	53.2	Other postal and courier activities
NACE 2	55.1	Hotels and similar accommodation
NACE 2	55.2	Holiday and other short-stay accommodation
NACE 2	55.3	Camping grounds, recreational vehicle parks and trailer parks
NACE 2	55.9	Other accommodation
NACE 2	56.1	Restaurants and mobile food service activities
NACE 2	56.21	Event catering activities
NACE 2	56.29	Other food service activities
NACE 2	56.3	Beverage serving activities
NACE 2	58.11	Book publishing
NACE 2	58.12	Publishing of directories and mailing lists
NACE 2	58.13	Publishing of newspapers
NACE 2	58.14	Publishing of journals and periodicals
NACE 2	58.19	Other publishing activities
NACE 2	58.21	Publishing of computer games
NACE 2	58.29	Other software publishing
NACE 2	59.11	Motion picture, video and television programme production activities
NACE 2	59.12	Motion picture, video and television programme post-production activities
NACE 2	59.13	Motion picture, video and television programme distribution activities
NACE 2	59.14	Motion picture projection activities
NACE 2	59.2	Sound recording and music publishing activities
NACE 2	60.1	Radio broadcasting
NACE 2	60.2	Television programming and broadcasting activities
NACE 2	61.1	Wired telecommunications activities
NACE 2	61.2	Wireless telecommunications activities
NACE 2	61.3	Satellite telecommunications activities
NACE 2	61.9	Other telecommunications activities
NACE 2	62.01	Computer programming activities
NACE 2	62.02	Computer consultancy activities
NACE 2	62.03	Computer facilities management activities
NACE 2	62.09	Other information technology and computer service activities
NACE 2	63.11	Data processing, hosting and related activities
NACE 2	63.12	Web portals
NACE 2	63.91	News agency activities
NACE 2	63.99	Other information service activities n.e.c.
NACE 2	64.11	Central banking
NACE 2	64.19	Other monetary intermediation
NACE 2	64.2	Activities of holding companies
NACE 2	64.3	Trusts, funds and similar financial entities

Sector categorisation	Sector code	Description
NACE 2	64.91	Financial leasing
NACE 2	64.92	Other credit granting
NACE 2	64.99	Other financial service activities, except insurance and pension funding n.e.c.
NACE 2	65.11	Life insurance
NACE 2	65.12	Non-life insurance
NACE 2	65.2	Reinsurance
NACE 2	65.3	Pension funding
NACE 2	66.11	Administration of financial markets
NACE 2	66.12	Security and commodity contracts brokerage
NACE 2	66.19	Other activities auxiliary to financial services, except insurance and pension funding
NACE 2	66.21	Risk and damage evaluation
NACE 2	66.22	Activities of insurance agents and brokers
NACE 2	66.29	Other activities auxiliary to insurance and pension funding
NACE 2	66.3	Fund management activities
NACE 2	68.1	Buying and selling of own real estate
NACE 2	68.2	Rental and operating of own or leased real estate
NACE 2	68.31	Real estate agencies
NACE 2	68.32	Management of real estate on a fee or contract basis
NACE 2	69.1	Legal activities
NACE 2	69.2	Accounting, bookkeeping and auditing activities; tax consultancy
NACE 2	70.1	Activities of head offices
NACE 2	70.21	Public relations and communication activities
NACE 2	70.22	Business and other management consultancy activities
NACE 2	71.11	Architectural activities
NACE 2	71.12	Engineering activities and related technical consultancy
NACE 2	71.2	Technical testing and analysis
NACE 2	72.11	Research and experimental development on biotechnology
NACE 2	72.19	Other research and experimental development on natural sciences and engineering
NACE 2	72.2	Research and experimental development on social sciences and humanities
NACE 2	73.11	Advertising agencies
NACE 2	73.12	Media representation
NACE 2	73.2	Market research and public opinion polling
NACE 2	74.1	Specialised design activities
NACE 2	74.2	Photographic activities
NACE 2	74.3	Translation and interpretation activities
NACE 2	74.9	Other professional, scientific and technical activities n.e.c.
NACE 2	75	Veterinary activities
NACE 2	75	Veterinary activities
NACE 2	77.11	Rental and leasing of cars and light motor vehicles
NACE 2	77.12	Rental and leasing of trucks

Sector categorisation	Sector code	Description
NACE 2	77.21	Rental and leasing of recreational and sports goods
NACE 2	77.22	Rental of video tapes and disks
NACE 2	77.29	Rental and leasing of other personal and household goods
NACE 2	77.31	Rental and leasing of agricultural machinery and equipment
NACE 2	77.32	Rental and leasing of construction and civil engineering machinery and equipment
NACE 2	77.33	Rental and leasing of office machinery and equipment (including computers)
NACE 2	77.34	Rental and leasing of water transport equipment
NACE 2	77.35	Rental and leasing of air transport equipment
NACE 2	77.39	Rental and leasing of other machinery, equipment and tangible goods n.e.c.
NACE 2	77.4	Leasing of intellectual property and similar products, except copyrighted works
NACE 2	78.1	Activities of employment placement agencies
NACE 2	78.2	Temporary employment agency activities
NACE 2	78.3	Other human resources provision
NACE 2	79.11	Travel agency activities
NACE 2	79.12	Tour operator activities
NACE 2	79.9	Other reservation service and related activities
NACE 2	80.1	Private security activities
NACE 2	80.2	Security systems service activities
NACE 2	80.3	Investigation activities
NACE 2	81.1	Combined facilities support activities
NACE 2	81.21	General cleaning of buildings
NACE 2	81.22	Other building and industrial cleaning activities
NACE 2	81.29	Other cleaning activities
NACE 2	81.3	Landscape service activities
NACE 2	82.11	Combined office administrative service activities
NACE 2	82.19	Photocopying, document preparation and other specialised office support activities
NACE 2	82.2	Activities of call centres
NACE 2	82.3	Organisation of conventions and trade shows
NACE 2	82.91	Activities of collection agencies and credit bureaus
NACE 2	82.92	Packaging activities
NACE 2	82.99	Other business support service activities n.e.c.
NACE 2	84.11	General public administration activities
NACE 2	84.12	Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security
NACE 2	84.13	Regulation of and contribution to more efficient operation of businesses
NACE 2	84.21	Foreign affairs
NACE 2	84.22	Defence activities
NACE 2	84.23	Justice and judicial activities
NACE 2	84.24	Public order and safety activities

Sector categorisation	Sector code	Description
NACE 2	84.25	Fire service activities
NACE 2	84.3	Compulsory social security activities
NACE 2	85.1	Pre-primary education
NACE 2	85.2	Primary education
NACE 2	85.31	General secondary education
NACE 2	85.32	Technical and vocational secondary education
NACE 2	85.41	Post-secondary non-tertiary education
NACE 2	85.42	Tertiary education
NACE 2	85.51	Sports and recreation education
NACE 2	85.52	Cultural education
NACE 2	85.53	Driving school activities
NACE 2	85.59	Other education n.e.c.
NACE 2	85.6	Educational support activities
NACE 2	86.1	Hospital activities
NACE 2	86.21	General medical practice activities
NACE 2	86.22	Specialist medical practice activities
NACE 2	86.23	Dental practice activities
NACE 2	86.9	Other human health activities
NACE 2	87.1	Residential nursing care activities
NACE 2	87.2	Residential care activities for mental retardation, mental health and substance abuse
NACE 2	87.3	Residential care activities for the elderly and disabled
NACE 2	87.9	Other residential care activities
NACE 2	88.1	Social work activities without accommodation for the elderly and disabled
NACE 2	88.91	Child day-care activities
NACE 2	88.99	Other social work activities without accommodation n.e.c.
NACE 2	90.01	Performing arts
NACE 2	90.02	Support activities to performing arts
NACE 2	90.03	Artistic creation
NACE 2	90.04	Operation of arts facilities
NACE 2	91.01	Library and archives activities
NACE 2	91.02	Museums activities
NACE 2	91.03	Operation of historical sites and buildings and similar visitor attractions
NACE 2	91.04	Botanical and zoological gardens and nature reserves activities
NACE 2	92	Gambling and betting activities
NACE 2	92	Gambling and betting activities
NACE 2	93.11	Operation of sports facilities
NACE 2	93.12	Activities of sports clubs
NACE 2	93.13	Fitness facilities
NACE 2	93.19	Other sports activities
NACE 2	93.21	Activities of amusement parks and theme parks
NACE 2	93.29	Other amusement and recreation activities

Sector categorisation	Sector code	Description
NACE 2	94.11	Activities of business and employers membership organisations
NACE 2	94.12	Activities of professional membership organisations
NACE 2	94.2	Activities of trade unions
NACE 2	94.91	Activities of religious organisations
NACE 2	94.92	Activities of political organisations
NACE 2	94.99	Activities of other membership organisations n.e.c.
NACE 2	95.11	Repair of computers and peripheral equipment
NACE 2	95.12	Repair of communication equipment
NACE 2	95.21	Repair of consumer electronics
NACE 2	95.22	Repair of household appliances and home and garden equipment
NACE 2	95.23	Repair of footwear and leather goods
NACE 2	95.24	Repair of furniture and home furnishings
NACE 2	95.25	Repair of watches, clocks and jewellery
NACE 2	95.29	Repair of other personal and household goods
NACE 2	96.01	Washing and (dry-)cleaning of textile and fur products
NACE 2	96.02	Hairdressing and other beauty treatment
NACE 2	96.03	Funeral and related activities
NACE 2	96.04	Physical well-being activities
NACE 2	96.09	Other personal service activities n.e.c.
NACE 2	97	Activities of households as employers of domestic personnel
NACE 2	97	Activities of households as employers of domestic personnel
NACE 2	98.1	Undifferentiated goods-producing activities of private households for own use
NACE 2	98.2	Undifferentiated service-producing activities of private households for own use
NACE 2	99	Activities of extraterritorial organisations and bodies
NACE 2	99	Activities of extraterritorial organisations and bodies
NAICS 2017	111110	Soybean Farming
NAICS 2017	111120	Oilseed (except Soybean) Farming
NAICS 2017	111130	Dry Pea and Bean Farming
NAICS 2017	111140	Wheat Farming
NAICS 2017	111150	Corn Farming
NAICS 2017	111160	Rice Farming
NAICS 2017	111199	Other Grain Farming
NAICS 2017	11121	Vegetable and Melon Farming
NAICS 2017	111320	Citrus (except Orange) Groves
NAICS 2017	111336	Fruit and Tree Nut Combination Farming
NAICS 2017	111339	Other Noncitrus Fruit Farming
NAICS 2017	111419	Other Food Crops Grown Under Cover
NAICS 2017	111422	Floriculture Production
NAICS 2017	111920	Cotton Farming
NAICS 2017	111930	Sugarcane Farming

Sector categorisation	Sector code	Description
NAICS 2017	111991	Sugar Beet Farming
NAICS 2017	111998	All Other Miscellaneous Crop Farming
NAICS 2017	112111	Beef Cattle Ranching and Farming
NAICS 2017	112320	Broilers and Other Meat Type Chicken Production
NAICS 2017	112330	Turkey Production
NAICS 2017	112390	Other Poultry Production
NAICS 2017	112511	Finfish Farming and Fish Hatcheries
NAICS 2017	112512	Shellfish Farming
NAICS 2017	112519	Other Aquaculture
NAICS 2017	112990	All Other Animal Production
NAICS 2017	113310	Logging
NAICS 2017	114111	Finfish Fishing
NAICS 2017	114112	Shellfish Fishing
NAICS 2017	114119	Other Marine Fishing
NAICS 2017	115310	Support Activities for Forestry
NAICS 2017	211120	Crude Petroleum Extraction
NAICS 2017	211130	Natural Gas Extraction
NAICS 2017	212111	Bituminous Coal and Lignite Surface Mining
NAICS 2017	212112	Bituminous Coal Underground Mining
NAICS 2017	212113	Anthracite Mining
NAICS 2017	212210	Iron Ore Mining
NAICS 2017	212221	Gold Ore Mining
NAICS 2017	212222	Silver Ore Mining
NAICS 2017	212230	Copper, Nickel, Lead, and Zinc Mining
NAICS 2017	212299	All Other Metal Ore Mining
NAICS 2017	212311	Dimension Stone Mining and Quarrying
NAICS 2017	212313	Crushed and Broken Granite Mining and Quarrying
NAICS 2017	212319	Other Crushed and Broken Stone Mining and Quarrying
NAICS 2017	212399	All Other Nonmetallic Mineral Mining
NAICS 2017	213111	Drilling Oil and Gas Wells
NAICS 2017	213112	Support Activities for Oil and Gas Operations
NAICS 2017	213113	Support Activities for Coal Mining
NAICS 2017	213114	Support Activities for Metal Mining
NAICS 2017	213115	Support Activities for Nonmetallic Minerals (except Fuels) Mining
NAICS 2017	221111	Hydroelectric Power Generation
NAICS 2017	221112	Fossil Fuel Electric Power Generation
NAICS 2017	221114	Solar Electric Power Generation
NAICS 2017	221115	Wind Electric Power Generation
NAICS 2017	221116	Geothermal Electric Power Generation
NAICS 2017	221117	Biomass Electric Power Generation
NAICS 2017	221121	Electric Bulk Power Transmission and Control

Sector categorisation	Sector code	Description
NAICS 2017	221122	Electric Power Distribution
NAICS 2017	221210	Natural Gas Distribution
NAICS 2017	221310	Water Supply and Irrigation Systems
NAICS 2017	221320	Sewage Treatment Facilities
NAICS 2017	221330	Steam and Air-Conditioning Supply
NAICS 2017	236115	New Single-Family Housing Construction (except For-Sale Builders)
NAICS 2017	236116	New Multifamily Housing Construction (except For-Sale Builders)
NAICS 2017	236117	New Housing For-Sale Builders
NAICS 2017	236118	Residential Remodelers
NAICS 2017	236210	Industrial Building Construction
NAICS 2017	236220	Commercial and Institutional Building Construction
NAICS 2017	237310	Civil work Construction
NAICS 2017	311211	Flour Milling
NAICS 2017	311212	Rice Milling
NAICS 2017	311213	Malt Manufacturing
NAICS 2017	31122	Starch and Vegetable Fats and Oils Manufacturing
NAICS 2017	311224	Soybean and Other Oilseed Processing
NAICS 2017	311225	Fats and Oils Refining and Blending
NAICS 2017	311313	Beet Sugar Manufacturing
NAICS 2017	311314	Cane Sugar Manufacturing
NAICS 2017	311340	Nonchocolate Confectionery Manufacturing
NAICS 2017	311351	Chocolate and Confectionery Manufacturing from Cacao Beans
NAICS 2017	311352	Confectionery Manufacturing from Purchased Chocolate
NAICS 2017	311411	Frozen Fruit, Juice, and Vegetable Manufacturing
NAICS 2017	311412	Frozen Specialty Food Manufacturing
NAICS 2017	311421	Fruit and Vegetable Canning
NAICS 2017	311422	Specialty Canning
NAICS 2017	311423	Dried and Dehydrated Food Manufacturing
NAICS 2017	311511	Fluid Milk Manufacturing
NAICS 2017	311512	Creamery Butter Manufacturing
NAICS 2017	311513	Cheese Manufacturing
NAICS 2017	311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing
NAICS 2017	311520	Ice Cream and Frozen Dessert Manufacturing
NAICS 2017	311611	Animal (except Poultry) Slaughtering
NAICS 2017	311612	Meat Processed from Carcasses
NAICS 2017	311613	Rendering and Meat Byproduct Processing
NAICS 2017	311615	Poultry Processing
NAICS 2017	311710	Seafood Product Preparation and Packaging
NAICS 2017	311999	All Other Miscellaneous Food Manufacturing
NAICS 2017	312111	Soft Drink Manufacturing
NAICS 2017	312120	Breweries

Sector categorisation	Sector code	Description
NAICS 2017	312130	Wineries
NAICS 2017	313110	Fiber, Yarn, and Thread Mills
NAICS 2017	313210	Broadwoven Fabric Mills
NAICS 2017	313220	Narrow Fabric Mills and Schiffli Machine Embroidery
NAICS 2017	313230	Nonwoven Fabric Mills
NAICS 2017	313240	Knit Fabric Mills
NAICS 2017	313310	Textile and Fabric Finishing Mills
NAICS 2017	315210	Cut and Sew Apparel Contractors
NAICS 2017	315280	Other Cut and Sew Apparel Manufacturing
NAICS 2017	316210	Footwear Manufacturing
NAICS 2017	316992	Women's Handbag and Purse Manufacturing
NAICS 2017	316998	All Other Leather Good and Allied Product Manufacturing
NAICS 2017	32111	Sawmills and Wood Preservation
NAICS 2017	321113	Sawmills
NAICS 2017	321114	Wood Preservation
NAICS 2017	321211	Hardwood Veneer and Plywood Manufacturing
NAICS 2017	321212	Softwood Veneer and Plywood Manufacturing
NAICS 2017	321213	Engineered Wood Member (except Truss) Manufacturing
NAICS 2017	322110	Pulp Mills
NAICS 2017	322121	Paper (except Newsprint) Mills
NAICS 2017	322122	Newsprint Mills
NAICS 2017	322130	Paperboard Mills
NAICS 2017	322220	Paper Bag and Coated and Treated Paper Manufacturing
NAICS 2017	322299	All Other Converted Paper Product Manufacturing
NAICS 2017	323111	Commercial Printing (except Screen and Books)
NAICS 2017	323117	Books Printing
NAICS 2017	324110	Petroleum Refineries
NAICS 2017	324191	Petroleum Lubricating Oil and Grease Manufacturing
NAICS 2017	324199	All Other Petroleum and Coal Products Manufacturing
NAICS 2017	325110	Petrochemical Manufacturing
NAICS 2017	325120	Industrial Gas Manufacturing
NAICS 2017	325180	Other Basic Inorganic Chemical Manufacturing
NAICS 2017	325199	All Other Basic Organic Chemical Manufacturing
NAICS 2017	325211	Plastics Material and Resin Manufacturing
NAICS 2017	325220	Artificial and Synthetic Fibers and Filaments Manufacturing
NAICS 2017	325311	Nitrogenous Fertiliser Manufacturing
NAICS 2017	325312	Phosphatic Fertiliser Manufacturing
NAICS 2017	325314	Fertiliser (Mixing Only) Manufacturing
NAICS 2017	325320	Pesticide and Other Agricultural Chemical Manufacturing
NAICS 2017	32541	Pharmaceutical and Medicine Manufacturing
NAICS 2017	325411	Medicinal and Botanical Manufacturing

Sector categorisation	Sector code	Description
NAICS 2017	325412	Pharmaceutical Preparation Manufacturing
NAICS 2017	325413	In-Vitro Diagnostic Substance Manufacturing
NAICS 2017	325414	Biological Product (except Diagnostic) Manufacturing
NAICS 2017	325510	Paint and Coating Manufacturing
NAICS 2017	325520	Adhesive Manufacturing
NAICS 2017	325611	Soap and Other Detergent Manufacturing
NAICS 2017	325612	Polish and Other Sanitation Good Manufacturing
NAICS 2017	325613	Surface Active Agent Manufacturing
NAICS 2017	325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing
NAICS 2017	326111	Plastics Bag and Pouch Manufacturing
NAICS 2017	326112	Plastics Packaging Film and Sheet (including Laminated) Manufacturing
NAICS 2017	326113	Unlaminated Plastics Film and Sheet (except Packaging) Manufacturing
NAICS 2017	326121	Unlaminated Plastics Profile Shape Manufacturing
NAICS 2017	326122	Plastics Pipe and Pipe Fitting Manufacturing
NAICS 2017	326130	Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing
NAICS 2017	326140	Polystyrene Foam Product Manufacturing
NAICS 2017	326150	Urethane and Other Foam Product (except Polystyrene) Manufacturing
NAICS 2017	326160	Plastics Bottle Manufacturing
NAICS 2017	326191	Plastics Plumbing Fixture Manufacturing
NAICS 2017	326199	All Other Plastics Product Manufacturing
NAICS 2017	326211	Tire Manufacturing (except Retreading)
NAICS 2017	326212	Tire Retreading
NAICS 2017	326220	Rubber and Plastics Hoses and Belting Manufacturing
NAICS 2017	326291	Rubber Product Manufacturing for Mechanical Use
NAICS 2017	326299	All Other Rubber Product Manufacturing
NAICS 2017	327110	Pottery, Ceramics, and Plumbing Fixture Manufacturing
NAICS 2017	327120	Clay Building Material and Refractories Manufacturing
NAICS 2017	327211	Flat Glass Manufacturing
NAICS 2017	327212	Other Pressed and Blown Glass and Glassware Manufacturing
NAICS 2017	327213	Glass Container Manufacturing
NAICS 2017	327215	Glass Product Manufacturing Made of Purchased Glass
NAICS 2017	327310	Cement Manufacturing
NAICS 2017	327331	Concrete Block and Brick Manufacturing
NAICS 2017	327332	Concrete Pipe Manufacturing
NAICS 2017	327420	Gypsum Product Manufacturing
NAICS 2017	327993	Mineral Wool Manufacturing
NAICS 2017	327999	All Other Miscellaneous Nonmetallic Mineral Product Manufacturing
NAICS 2017	331110	Iron and Steel Mills and Ferroalloy Manufacturing
NAICS 2017	331210	Iron and Steel Pipe and Tube Manufacturing from Purchased Steel
NAICS 2017	331221	Rolled Steel Shape Manufacturing
NAICS 2017	331222	Steel Wire Drawing

Sector categorisation	Sector code	Description
NAICS 2017	331313	Alumina Refining and Primary Aluminum Production
NAICS 2017	331314	Secondary Smelting and Alloying of Aluminum
NAICS 2017	331315	Aluminum Sheet, Plate, and Foil Manufacturing
NAICS 2017	331318	Other Aluminum Rolling, Drawing, and Extruding
NAICS 2017	331420	Copper Rolling, Drawing, Extruding, and Alloying
NAICS 2017	331511	Iron Foundries
NAICS 2017	331512	Steel Investment Foundries
NAICS 2017	331513	Steel Foundries (except Investment)
NAICS 2017	332111	Iron and Steel Forging
NAICS 2017	332215	Metal Kitchen Cookware, Utensil, Cutlery, and Flatware (except Precious) Manufacturing
NAICS 2017	332216	Saw Blade and Handtool Manufacturing
NAICS 2017	332311	Prefabricated Metal Building and Component Manufacturing
NAICS 2017	332431	Metal Can Manufacturing
NAICS 2017	332439	Other Metal Container Manufacturing
NAICS 2017	332812	Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers
NAICS 2017	332991	Ball and Roller Bearing Manufacturing
NAICS 2017	332999	All Other Miscellaneous Fabricated Metal Product Manufacturing
NAICS 2017	333111	Farm Machinery and Equipment Manufacturing
NAICS 2017	333112	Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing
NAICS 2017	333120	Construction Machinery Manufacturing
NAICS 2017	333131	Mining Machinery and Equipment Manufacturing
NAICS 2017	333241	Food Product Machinery Manufacturing
NAICS 2017	333242	Semiconductor Machinery Manufacturing
NAICS 2017	333243	Sawmill, Woodworking, and Paper Machinery Manufacturing
NAICS 2017	333244	Printing Machinery and Equipment Manufacturing
NAICS 2017	333249	Other Industrial Machinery Manufacturing
NAICS 2017	333413	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing
NAICS 2017	333414	Heating Equipment (except Warm Air Furnaces) Manufacturing
NAICS 2017	333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing
NAICS 2017	333517	Machine Tool Manufacturing
NAICS 2017	333519	Rolling Mill and Other Metalworking Machinery Manufacturing
NAICS 2017	333611	Turbine and Turbine Generator Set Units Manufacturing
NAICS 2017	334111	Electronic Computer Manufacturing
NAICS 2017	334210	Telephone Apparatus Manufacturing
NAICS 2017	334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing
NAICS 2017	334413	Semiconductor and Related Device Manufacturing
NAICS 2017	335110	Electric Lamp Bulb and Part Manufacturing
NAICS 2017	335121	Residential Electric Lighting Fixture Manufacturing

Sector categorisation	Sector code	Description
NAICS 2017	335122	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing
NAICS 2017	335129	Other Lighting Equipment Manufacturing
NAICS 2017	335210	Small Electrical Appliance Manufacturing
NAICS 2017	335220	Major Household Appliance Manufacturing
NAICS 2017	335312	Motor and Generator Manufacturing
NAICS 2017	335911	Storage Battery Manufacturing
NAICS 2017	335912	Primary Battery Manufacturing
NAICS 2017	335921	Fiber Optic Cable Manufacturing
NAICS 2017	335929	Other Communication and Energy Wire Manufacturing
NAICS 2017	335991	Carbon and Graphite Product Manufacturing
NAICS 2017	336211	Motor Vehicle Body Manufacturing
NAICS 2017	336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing
NAICS 2017	336411	Aircraft Manufacturing
NAICS 2017	336412	Aircraft Engine and Engine Parts Manufacturing
NAICS 2017	336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing
NAICS 2017	336414	Guided Missile and Space Vehicle Manufacturing
NAICS 2017	336415	Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing
NAICS 2017	336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing
NAICS 2017	336510	Railroad Rolling Stock Manufacturing
NAICS 2017	336611	Ship Building and Repairing
NAICS 2017	336991	Motorcycle, Bicycle, and Parts Manufacturing
NAICS 2017	337110	Wood Kitchen Cabinet and Countertop Manufacturing
NAICS 2017	337121	Upholstered Household Furniture Manufacturing
NAICS 2017	337122	Nonupholstered Wood Household Furniture Manufacturing
NAICS 2017	337124	Metal Household Furniture Manufacturing
NAICS 2017	337125	Household Furniture (except Wood and Metal) Manufacturing
NAICS 2017	337127	Institutional Furniture Manufacturing
NAICS 2017	337910	Mattress Manufacturing
NAICS 2017	337920	Blind and Shade Manufacturing
NAICS 2017	339112	Surgical and Medical Instrument Manufacturing
NAICS 2017	339113	Surgical Appliance and Supplies Manufacturing
NAICS 2017	339114	Rental Equipment and Supplies Manufacturing
NAICS 2017	339115	Ophthalmic Goods Manufacturing
NAICS 2017	339116	Dental Laboratories
NAICS 2017	339920	Sporting and Athletic Goods Manufacturing
NAICS 2017	339930	Doll, Toy, and Game Manufacturing
NAICS 2017	339992	Musical Instrument Manufacturing
NAICS 2017	42345	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers
NAICS 2017	42421	Drugs and Druggists' Sundries Merchant Wholesalers

Sector categorisation	Sector code	Description
NAICS 2017	424410	General Line Grocery Merchant Wholesalers
NAICS 2017	424420	Packaged Frozen Food Merchant Wholesalers
NAICS 2017	424430	Dairy Product (except Dried or Canned) Merchant Wholesalers
NAICS 2017	424440	Poultry and Poultry Product Merchant Wholesalers
NAICS 2017	424450	Confectionery Merchant Wholesalers
NAICS 2017	424460	Fish and Seafood Merchant Wholesalers
NAICS 2017	424470	Meat and Meat Product Merchant Wholesalers
NAICS 2017	424480	Fresh Fruit and Vegetable Merchant Wholesalers
NAICS 2017	424490	Other Grocery and Related Products Merchant Wholesalers
NAICS 2017	424510	Grain and Field Bean Merchant Wholesalers
NAICS 2017	424520	Livestock Merchant Wholesalers
NAICS 2017	424590	Other Farm Product Raw Material Merchant Wholesalers
NAICS 2017	445110	Supermarkets and Other Grocery (except Convenience) Stores
NAICS 2017	44611	Pharmacies and Drug Stores
NAICS 2017	481111	Scheduled Passenger Air Transportation
NAICS 2017	481112	Scheduled Freight Air Transportation
NAICS 2017	481211	Nonscheduled Chartered Passenger Air Transportation
NAICS 2017	481212	Nonscheduled Chartered Freight Air Transportation
NAICS 2017	481219	Other Nonscheduled Air Transportation
NAICS 2017	482111	Line-Haul Railroads
NAICS 2017	482112	Short Line Railroads
NAICS 2017	483111	Deep Sea Freight Transportation
NAICS 2017	483112	Deep Sea Passenger Transportation
NAICS 2017	483113	Coastal and Great Lakes Freight Transportation
NAICS 2017	483114	Coastal and Great Lakes Passenger Transportation
NAICS 2017	483211	Inland Water Freight Transportation
NAICS 2017	483212	Inland Water Passenger Transportation
NAICS 2017	484110	General Freight Trucking, Local
NAICS 2017	484122	General Freight Trucking, Long-Distance, Less Than Truckload
NAICS 2017	485111	Mixed Mode Transit Systems
NAICS 2017	485112	Commuter Rail Systems
NAICS 2017	485113	Bus and Other Motor Vehicle Transit Systems
NAICS 2017	485119	Other Urban Transit Systems
NAICS 2017	485210	Interurban and Rural Bus Transportation
NAICS 2017	485310	Taxi Service
NAICS 2017	485320	Limousine Service
NAICS 2017	485410	School and Employee Bus Transportation
NAICS 2017	485510	Charter Bus Industry
NAICS 2017	485991	Special Needs Transportation
NAICS 2017	485999	All Other Transit and Ground Passenger Transportation
NAICS 2017	486110	Pipeline Transportation of Crude Oil

Sector categorisation	Sector code	Description
NAICS 2017	486210	Pipeline Transportation of Natural Gas
NAICS 2017	486910	Pipeline Transportation of Refined Petroleum Products
NAICS 2017	486990	All Other Pipeline Transportation
NAICS 2017	488119	Other Airport Operations
NAICS 2017	488210	Support Activities for Rail Transportation
NAICS 2017	488310	Port and Harbor Operations
NAICS 2017	488490	Other Support Activities for Road Transportation
NAICS 2017	488999	All Other Support Activities for Transportation
NAICS 2017	493110	General Warehousing and Storage
NAICS 2017	493120	Refrigerated Warehousing and Storage
NAICS 2017	493130	Farm Product Warehousing and Storage
NAICS 2017	49319	Other Warehousing and Storage
NAICS 2017	511110	Newspaper Publishers
NAICS 2017	511120	Periodical Publishers
NAICS 2017	511130	Book Publishers
NAICS 2017	511140	Directory and Mailing List Publishers
NAICS 2017	511191	Greeting Card Publishers
NAICS 2017	511199	All Other Publishers
NAICS 2017	515111	Radio Networks
NAICS 2017	515112	Radio Stations
NAICS 2017	515120	Television Broadcasting
NAICS 2017	517311	Wired Telecommunications Carriers
NAICS 2017	517312	Wireless Telecommunications Carriers (except Satellite)
NAICS 2017	517911	Telecommunications Resellers
NAICS 2017	517919	All Other Telecommunications
NAICS 2017	519130	Internet Publishing and Broadcasting and Web Search Portals
NAICS 2017	522110	Commercial Banking
NAICS 2017	522291	Consumer Lending
NAICS 2017	522292	Real Estate Credit
NAICS 2017	522293	International Trade Financing
NAICS 2017	522298	All Other Nondepository Credit Intermediation
NAICS 2017	522310	Mortgage and Nonmortgage Loan Brokers
NAICS 2017	522320	Financial Transactions Processing, Reserve, and Clearinghouse Activities
NAICS 2017	522390	Other Activities Related to Credit Intermediation
NAICS 2017	523110	Investment Banking and Securities Dealing
NAICS 2017	523120	Securities Brokerage
NAICS 2017	523210	Securities and Commodity Exchanges
NAICS 2017	523920	Portfolio Management
NAICS 2017	523930	Investment Advice
NAICS 2017	523991	Trust, Fiduciary, and Custody Activities
NAICS 2017	52411	Direct Life, Health, and Medical Insurance Carriers
NAICS 2017	524113	Direct Life Insurance Carriers

Sector categorisation	Sector code	Description
NAICS 2017	524114	Direct Health and Medical Insurance Carriers
NAICS 2017	52412	Direct Insurance (except Life, Health, and Medical) Carriers
NAICS 2017	524126	Direct Property and Casualty Insurance Carriers
NAICS 2017	524127	Direct Title Insurance Carriers
NAICS 2017	524128	Other Direct Insurance (except Life, Health, and Medical) Carriers
NAICS 2017	52413	Reinsurance Carriers
NAICS 2017	525910	Open-End Investment Funds
NAICS 2017	525990	Other Financial Vehicles
NAICS 2017	531110	Housing authorities building, owning and operating residential buildings
NAICS 2017	531111	Residential Property Managers
NAICS 2017	531120	Non-Residential Rental or Leasing
NAICS 2017	531130	Lessors of Miniwarehouses and Self-Storage Units
NAICS 2017	531190	Lessors of Other Real Estate Property
NAICS 2017	531312	Nonresidential Property Managers
NAICS 2017	532111	Passenger Car Rental
NAICS 2017	532112	Passenger Car Leasing
NAICS 2017	53212	Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing
NAICS 2017	532120	Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing
NAICS 2017	53221	Consumer Electronics and Appliances Rental
NAICS 2017	532210	Consumer Electronics and Appliances Rental
NAICS 2017	53228	Other Consumer Goods Rental
NAICS 2017	532310	General Rental Centers
NAICS 2017	532411	Commercial Air, Rail, and Water Transportation Equipment Rental and Leasing
NAICS 2017	532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing
NAICS 2017	532420	Office Machinery and Equipment Rental and Leasing
NAICS 2017	532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing
NAICS 2017	541330	Engineering Services
NAICS 2017	541350	Building Inspection Services
NAICS 2017	541512	Computer Systems Design Services
NAICS 2017	541613	Marketing Consulting Services
NAICS 2017	541990	All Other Professional, Scientific, and Technical Services
NAICS 2017	561450	Credit Bureaus
NAICS 2017	561510	Travel Agencies
NAICS 2017	561520	Tour Operators
NAICS 2017	561599	All Other Travel Arrangement and Reservation Services
NAICS 2017	562111	Solid Waste Collection
NAICS 2017	562112	Hazardous Waste Collection
NAICS 2017	562119	Other Waste Collection
NAICS 2017	562211	Hazardous Waste Treatment and Disposal
NAICS 2017	562212	Solid Waste Landfill

Sector categorisation	Sector code	Description
NAICS 2017	562213	Solid Waste Combustors and Incinerators
NAICS 2017	562219	Other Non-hazardous Waste Treatment and Disposal
NAICS 2017	562910	Remediation Services
NAICS 2017	562920	Materials Recovery Facilities
NAICS 2017	562998	All Other Miscellaneous Waste Management Services
NAICS 2017	611110	Elementary and Secondary Schools
NAICS 2017	611310	Colleges, Universities, and Professional Schools
NAICS 2017	611610	Fine Arts Schools
NAICS 2017	611620	Sports and Recreation Instruction
NAICS 2017	611630	Language Schools
NAICS 2017	611691	Exam Preparation and Tutoring
NAICS 2017	611692	Automobile Driving Schools
NAICS 2017	611699	All Other Miscellaneous Schools and Instruction
NAICS 2017	62111	Offices of Physicians
NAICS 2017	62121	Offices of Dentists
NAICS 2017	62131	Offices of Chiropractors
NAICS 2017	62132	Offices of Optometrists
NAICS 2017	62133	Offices of Mental Health Practitioners (except Physicians)
NAICS 2017	62134	Offices of Physical, Occupational and Speech Therapists, and Audiologists
NAICS 2017	62139	Offices of All Other Health Practitioners
NAICS 2017	62141	Family Planning Centers
NAICS 2017	62142	Outpatient Mental Health and Substance Abuse Centers
NAICS 2017	621420	Outpatient Mental Health and Substance Abuse Centers
NAICS 2017	62149	Other Outpatient Care Centers
NAICS 2017	621491	HMO Medical Centers
NAICS 2017	621492	Kidney Dialysis Centers
NAICS 2017	621493	Freestanding Ambulatory Surgical and Emergency Centers
NAICS 2017	621498	All Other Outpatient Care Centers
NAICS 2017	621511	Medical Laboratories
NAICS 2017	62161	Home Health Care Services
NAICS 2017	62191	Ambulance Services
NAICS 2017	62199	All Other Ambulatory Health Care Services
NAICS 2017	622110	General Medical and Surgical Hospitals
NAICS 2017	622210	Psychiatric and Substance Abuse Hospitals
NAICS 2017	622310	Specialty (except Psychiatric and Substance Abuse) Hospitals
NAICS 2017	62311	Nursing Care Facilities (Skilled Nursing Facilities)
NAICS 2017	62321	Residential Intellectual and Developmental Disability Facilities
NAICS 2017	62322	Residential Mental Health, and Substance Abuse Facilities
NAICS 2017	62331	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly
NAICS 2017	62390	Other Residential Care Facilities
NAICS 2017	721110	Hotels (except Casino Hotels) and Motels

Sector categorisation	Sector code	Description
NAICS 2017	921110	Executive Offices
NAICS 2017	921120	Legislative Bodies
NAICS 2017	921130	Public Finance Activities
NAICS 2017	92114	Executive and Legislative Offices, Combined
NAICS 2017	921140	Executive and Legislative Offices, Combined
NAICS 2017	921150	American Indian and Alaska Native Tribal Governments
NAICS 2017	92119	Other General Government Support
NAICS 2017	921190	Other General Government Support
NAICS 2017	923110	Administration of Education Programs
NAICS 2017	924110	Administration of Air and Water Resource and Solid Waste Management Programs
NAICS 2017	926120	Regulation and Administration of Transportation Programs
NAICS 2017	926130	Regulation and Administration of Communications, Electric, Gas, and Other Utilities
NAICS 2017	926150	Regulation, Licensing, and Inspection of Miscellaneous Commercial Sectors

7.4 List of Excluded Countries

GEMs member institutions operate in both EMDEs and developed countries. Institutional judgement is applied when determining the geographical scope of data submitted to GEMs. As GEMs, to report risk statistics that reflect the lending activities of member institutions in EMDEs, the overall dataset underlying GEMs publications is filtered based on the submitted counterparts country, according to the following criteria:

- Exclusion of EU member countries that joined prior to 2000;
- Exclusion of countries rated AAA and AA+ as of reporting date;

- Exclusion of selected other countries considered developed;
- Exclusion of dependent overseas territories.

For EU member countries that joined after 2000 (i.e., Bulgaria, Croatia, Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia) and non-EU countries, three different sources of country classification—the Human Development Index, the World Bank Group country classification, and the IMF classification—are considered to exclude data starting from the most recent year in which all three sources classified the country as developed.

ISO country code and ISO country name	Exclusion
AD-Andorra	All years
AT-Austria	All years
AU-Australia	All years
BE-Belgium	All years
BM-Bermuda	All years
CA-Canada	All years
CH-Switzerland	All years
CZ-Czechia	Starting 2009
DE-Germany	All years
DK-Denmark	All years
EE-Estonia	Starting 2011
ES-Spain	All years
FI-Finland	All years
FR-France	All years
GB-United Kingdom	All years
GG-Guernsey	All years
GI-Gibraltar	All years
GR-Greece	All years
HK-Hong Kong	All years
HR-Croatia	Starting 2023
IE-Ireland	All years
IM-Isle of Man	All years
IS-Iceland	All years
IT-Italy	All years
JE-Jersey	All years
JP-Japan	All years
LI-Liechtenstein	All years

ISO country code and ISO country name	Exclusion
LT-Lithuania	Starting 2015
LU-Luxembourg	All years
LV-Latvia	Starting 2014
MC-Monaco	All years
MT-Malta	All years
NL-Netherlands	All years
NO-Norway	All years
NZ-New Zealand	All years
PT-Portugal	All years
SE-Sweden	All years
SG-Singapore	All years
SI-Slovenia	Starting 2007
SM-San Marino	All years
SK-Slovakia	Starting 2009
TW-Taiwan, Province of China	All years
UM-United States Minor Outlying Islands	All years
US-United States	All years
VA-Holy See (Vatican City State)	All years



PRIVATE LENDING 1994-2024



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