Multilateral Development Banks and Development Finance Institutions

DEFAULT STATISTICS

SOVEREIGN AND SOVEREIGN-GUARANTEED LENDING 1998-2020

VOLUME I

GEMs
Global Emerging Markets Risk Database

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Default statistics: Sovereign and Sovereign-guaranteed Lending 1998-2020 - Volume 1

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Multilateral development banks and development finance institutions — Default statistics — Private and sub-sovereign lending, 1994–2020

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Foreword

Global Emerging Markets Risk Database Consortium (GEMs) was established in 2009 as a joint initiative between the European Investment Bank Group and the World Bank Group to pool credit risk data. Today, the GEMs risk database is a unique example of a tangible common good that can help catalyse investment in emerging markets. Built by the GEMs consortium, the database is a joint endeavour supporting technical cooperation between international institutions. As of year-end 2020, the GEMs consortium comprised 24 multilateral development banks (MDBs) and development finance institutions (DFIs), covering in particular emerging markets and developing economies.

This report is the first GEMs publication on sovereign and sovereign-guaranteed lending, and provides default statistics derived from pooled data going back to 1998. This type of lending by MDBs includes loans provided directly to the sovereign or guaranteed by the sovereign. All such loans within a given country are linked through cross-default clauses and, therefore, have identical default behaviour.

This report relies on data from the ten MDBs providing such sovereign and sovereign-guaranteed lending, working together under the GEMs framework. Future reports will aim to further enhance the scope and significance of statistics presented, making them as valuable as possible for member institutions and the wider community.

Compiling the report required extensive collaboration and technical harmonisation between the MDBs that provide this type of financing — representing a major achievement of GEMs. The presented outputs give important insights into MDBs' default statistics. Moreover, this report highlights the unique features and potential of the GEMs risk database and explains the methodological framework and various applications of GEMs statistics. Such output statistics are presented in the final section, which provides aggregated default statistics on sovereign-guaranteed lending.

This report marks a milestone as the first sharing of GEMs' insights beyond the membership — a proud moment that builds on over a decade of successful cooperation.

In parallel with this report, GEMs is publishing a similar default statistics report focused on *Private and sub-sovereign lending, 1994–2020* (without sovereign guarantees). The first report on that topic was published last year and received positive comments from members and the public.

GEMs is pleased to make this publication freely available as a public good. Further refinements and developments will doubtless be needed to make GEMs statistics as reliable and relevant as possible. Nonetheless, we hope this report will offer readers valuable and unique insights into the credit experiences of MDBs involved in sovereign and sovereign-guaranteed lending. GEMs looks forward to gathering feedback and working with stakeholders to maximise the value it can bring to the wider community.

GEMs at a glance

GEMs collects de-identified data from MDBs and DFIs on their performing and non-performing exposures. In return, these member institutions gain access to GEMs output statistics across various dimensions, such as geography, sector and time period. Detailed GEMs statistics allow members to calibrate and benchmark internal models, set pricing and capital requirements, and make better-informed investment decisions. The GEMs consortium also helps to build technical alignment and share best practices among member institutions, including through semi-annual working-level meetings. The compilation of GEMs risk statistics relies on sharing a sound methodological framework. Bringing together data and expertise from over 20 public development finance institutions and multilateral development banks, GEMs offers a…

- ✓ **Harmonised dataset** reflecting 23 years of experience investing in emerging markets and a total contract amount of €979.5 billion in sovereign and sovereign-guaranteed lending alone.

- ✓ **Framework for MDB and DFI collaboration** among 24 member institutions to improve risk-management practices across the industry.

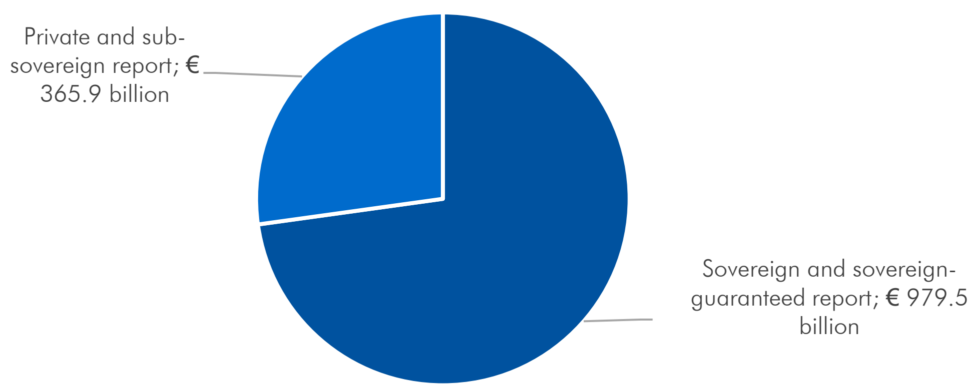
- ✓ **Trusted data collection and processing platform** hosting a scalable data model, which can be expanded to cover other contract-level data on investment projects.

- ✓ **Statistics resource for member MDBs and DFIs** — GEMs outputs, default rates, recovery rates and rating migrations enable better-informed investment decisions for emerging market investments.

- ✓ **Public good data source for aggregated statistics** — the reported default rates for *Private and sub-sovereign lending* and for *Sovereign and sovereign-guaranteed lending* provide an anchor for risk perceptions.

- ✓ **Risk data hub of contract-level information** for private and sub-sovereign lending and for sovereign and sovereign-guaranteed lending — among the largest such datasets for emerging markets and developing economies.

Graph 1: Distribution by type of counterparty of total contract volumes (amount signed)



Greater volumes of private investment are needed to realise the full potential in emerging markets, and thereby support efforts to tackle climate change and achieve the Sustainable Development Goals. Accordingly, institutions must work together to address some of the current obstacles to investment. Key priorities include supporting the preparation of well-designed projects, facilitating the use of public resources to mitigate risks, promoting an enabling legal and contractual environment, and ensuring greater levels of standardisation, transparency and data availability. Given the scarcity of high-quality data and the strictness of regulatory requirements for more sophisticated risk-management practices, reliable metrics are needed.

Through GEMs, member MDBs and DFIs are committed to addressing the investment gap by sharing their experience and market knowledge among themselves and with investors. Currently, 24 MDBs and DFIs are collaborating to pool and harmonise their data, thereby generating superior statistics to those available to any individual market participant. Thus, **GEMs is a unique and complementary data source for current and potential investors in emerging markets, helping to refine their risk perceptions and facilitating better-informed decision-making**. Members work together to build a joined-up system delivering more than the sum of its parts — as highlighted by the G20 Eminent Persons Group on Global Financial Governance. The lack of reliable emerging markets data and hence the value of the GEMs risk database content is not applicable only to MDBs and DFIs but also to private investors and other stakeholders constrained by the same persistent data gap.

With little readily available, standardised, transparent and high-quality data on investment projects in emerging markets, risk perceptions can be skewed, leading to suboptimal investment decisions. Institutions with little or no experience in such markets have to rely on risk assumptions based on limited data. Also, many investors are required by regulations to invest only in assets with certain risk profiles. By anchoring risk perceptions with actual data, GEMs aims to help unlock capital to fill investment gaps.

Rating agencies have long acknowledged the specificities of MDBs providing sovereign and sovereign-guaranteed lending, such as preferred creditor status. However, lacking comprehensive, high-quality data on the extent of this preferential treatment, agencies have assessed its impact conservatively, thereby limiting the potential leverage that MDBs could achieve. **By compiling robust statistics on the combined default and loss experiences of MDBs, GEMs aims to provide a better foundation for rating agencies' methodological assessments.**

With input data from member institutions, GEMs produces high-quality statistics that enable the calibration and benchmarking of internal models, better estimate provisioning, greater accuracy in setting capital requirements, and better-informed investment decisions. GEMs statistics serve as an objective, reliable and statistically significant base for discussing regulatory compliance, capital adequacy and risk-management practices with auditors, rating agencies and supervisors. Moreover, GEMs statistics can be a powerful tool for balance sheet optimisations, enabling transparent assessment of portfolio risks when third parties engage in risk-transfer or co-financing operations with MDBs/DFIs — thereby supporting crowding-in of additional funding to emerging markets.

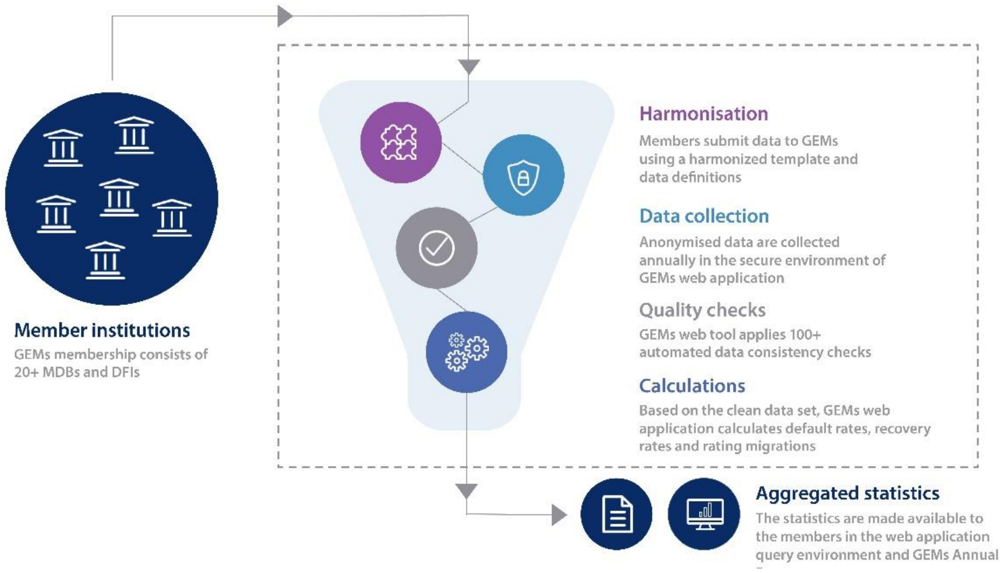
To date, only consortium members have had access to GEMs statistics on sovereign and sovereign-guaranteed lending. This report initiates the wider sharing of aggregated statistics, which may be of significant value to a diverse group of stakeholders, ranging from academics to regulators and commercial entities. The specific application of GEMs statistics may vary across different institutions. GEMs therefore looks forward to receiving feedback from readers of this report and to working with stakeholders to improve the focus and content of future publications.

From data to statistics

Data processing and quality controls

GEMs members have jointly developed a data submission process and risk methodology that aim to protect data confidentiality, ensure high-quality data, and enable the compilation of various types of output statistics.

Graph 2: GEMs data aggregation process



The complete GEMs historical dataset is submitted by the consortium's member institutions annually, leading to updates of previous data and additions of new data. Thus, data quality continuously improves over time. Post the independent consultant audit performed during 2017 on the GEMs' data submission process, the necessary action points have been addressed in order to ensure consistency and adherence to GEMs guidelines by all submitting institutions. All information provided by institutions is de-identified and held in confidence.

The dataset applied in this report contains data from the ten GEMs members that provide sovereign and sovereign-guaranteed lending. The data have been pooled following the GEMs process described above, building on historical data. Although the covered period is 1998–2020, seven of the ten institutions were only able to provide data from 2005 onwards. Consequently, sovereign defaults experienced by these institutions before that year do not appear in the statistics. The data included in this report already represent the vast majority of information available from members on sovereign and sovereign-guaranteed lending. Nonetheless, the GEMs consortium intends to expand the dataset in future public reports to cover more institutions and a longer time period.

Methodology

The GEMs risk database includes credit data for standard debt products. The database structure enables analysis of default and loss statistics along various relevant dimensions, providing quantitative facts to underpin discussions around specific lending segments, such as particular sectors or country groups.

For reporting on sovereign and sovereign-guaranteed lending, the reference data are organised by sovereign counterpart and include, for example, information on the geographic region and country income group. Regional and income classifications follow the World Bank's country groupings, thus facilitating the dissemination of information and comparative analysis across other widely available data sources. Detailed descriptions can be found in the glossary.

Sovereign lending by MDBs constitutes direct lending to sovereign countries and sovereign-guaranteed lending refers to lending to the sovereign's states (in case of a federal government structure), institutions and agencies with an explicit guarantee by the corresponding sovereign to pay overdue amounts if individual borrowers do not pay on time. All such lending operations within a country are connected via contractual cross-default clauses within the remits of each lending institution. This means that if any operation falls into arrears, the MDB will apply arrears sanctions simultaneously to all operations pertaining to the implicated sovereign. To reflect the specific format of sovereign and sovereign-guaranteed lending, the following methodology has been used to prepare this report:

- Default events are defined as a payment delay on any operation beyond the materiality threshold applicable to each respective MDB.
- Default events are only considered resolved upon full payment of all overdue amounts (principle, interest and any applicable charges) on all loans pertaining to the sovereign in default.
- In cases where multiple MDBs had exposure to a sovereign,
    - a default event is registered if there is a default pertaining to a contractual obligation concerning any of the lending institutions; and
    - the amounts of exposure are combined and counted as one exposure.
- To the extent available, the average of ratings by the main rating agencies (Standard & Poor's, Moody's, Fitch) is used as the GEMs rating for a given sovereign, thus ensuring the use of a consistent rating scale among member MDBs contributing data. For cases where no such rating is available, OECD or WRR ratings[1] are used. A sovereign is categorised as not rated ("NR") if neither additional source provides a rating.

[1] The Organization for Economic Cooperation and Development (OECD) and the World Risk Report (WRR) have provided credit ratings for countries since 1999 and 2009, respectively.

Highlights

The default rates presented in this report are substantially lower than those reported in other publications on sovereign and sovereign-guaranteed lending, such as the databases maintained by rating agencies.

This superior performance is explained by the specific features of MDBs: multilateral institutions benefit from stringent arrears policies, solid shareholding structures and preferred creditor status for their sovereign and sovereign-guaranteed loans.

In particular, preferred creditor status is a widely accepted principle under which MDBs have historically been prioritised for debt repayment if a borrower experiences financial distress.

Preferred creditor status has been a cornerstone for MDBs, allowing them to operate with low losses. Although not legally enforceable, it entails the following expectations:

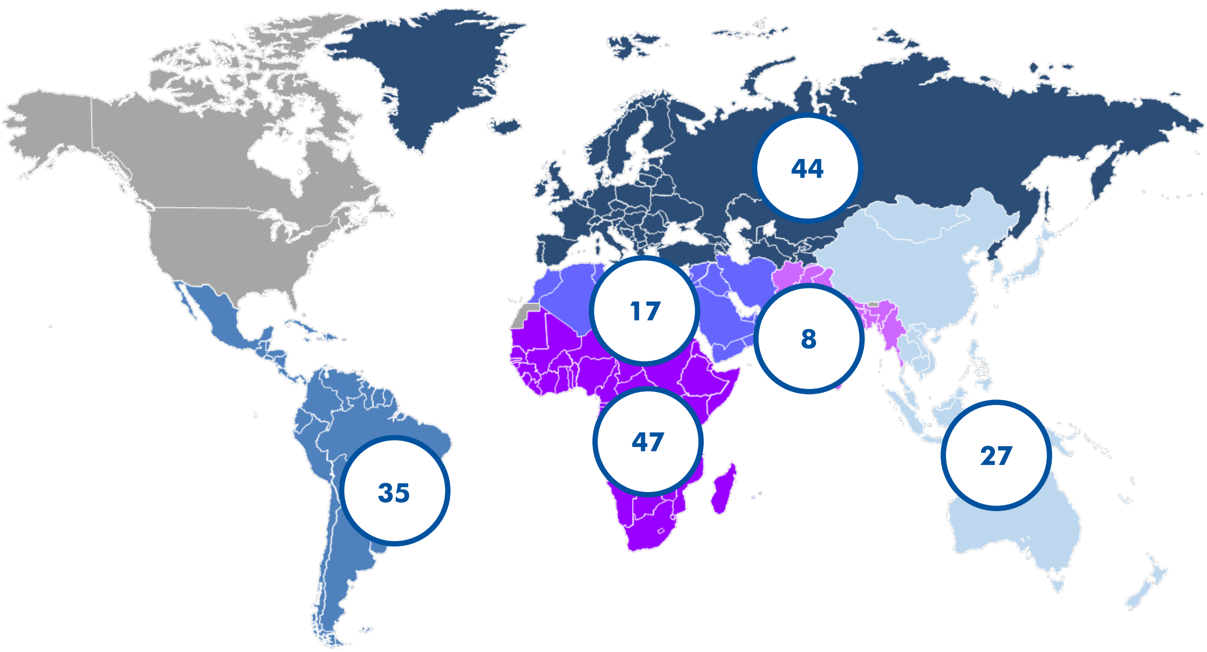
1. Countries commit to timely payment of their obligations to MDBs.
2. Countries commit to exempt MDBs from generalised payment moratoria or exchange-rate controls.
3. The International Monetary Fund has traditionally set preferred creditor status for itself and MDBs as a precondition for providing funding to crisis countries.
4. MDBs are exempt from participating in sovereign debt rescheduling. This benefit is granted by official creditors organised under the Paris Club and officially recognised in the *Paris Club agreed minutes*. It exempts MDBs from the "comparability of treatment" clause, which requires all creditors to seek rescheduling terms comparable to those agreed by the Paris Club.

Report dataset composition

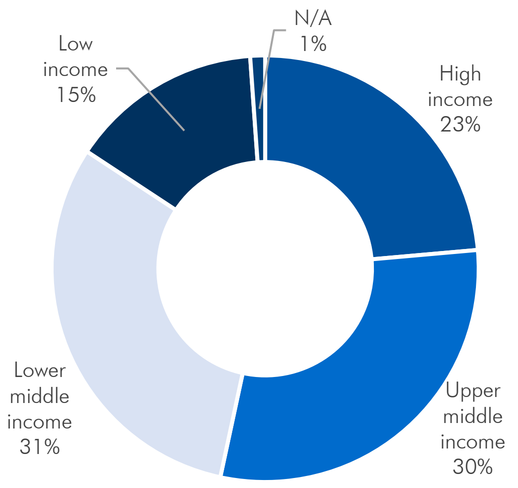
Geographical distribution

The ten MDBs contributing to this report are all mandated to support a wide range of economies, including emerging markets and low-income countries. They comprise the African Development Bank (AfDB), Asian Development Bank (ADB), Asian Infrastructure Investment Bank (AIIB), Council of Europe Development Bank (CEB), European Investment Bank (EIB), Inter-American Development Bank (IDB), International Bank for Reconstruction and Development (IBRD), International Fund for Agricultural Development (IFAD), Islamic Development Bank (IsDB), and New Development Bank (NDB)

Graph 3: Number of sovereign counterparts by World Bank Group region



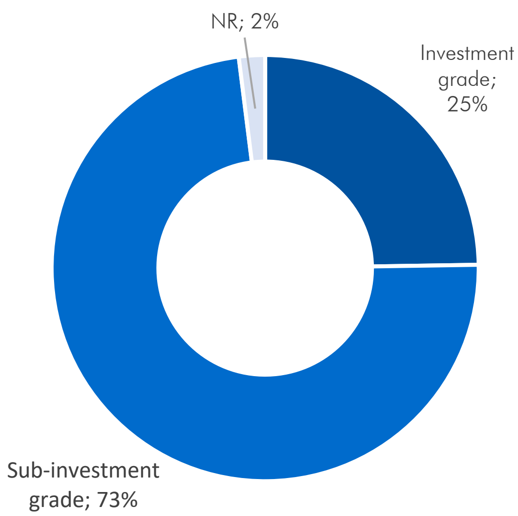
Graph 4: Distribution of sovereigns by World Bank Group country income group[2] as of year-end 2020



The dataset covers a broad spectrum of countries ranging from low to high income.

Middle- and low-income countries account for 76% of exposures in the dataset.

Graph 5: Distribution of sovereigns by credit rating grade as of year-end 2020



For the purposes of this report, a corresponding GEMs credit rating scale builds upon the average of ratings from the three main rating agencies to the extent available.

Exposures to non-investment grade sovereigns (not rated or with a sub-investment grade GEMs rating) account for 75% of the dataset. These data thus provide unique statistics on these investment categories.

[2] A few countries are not included in any World Bank income group. These are shown as "N/A."

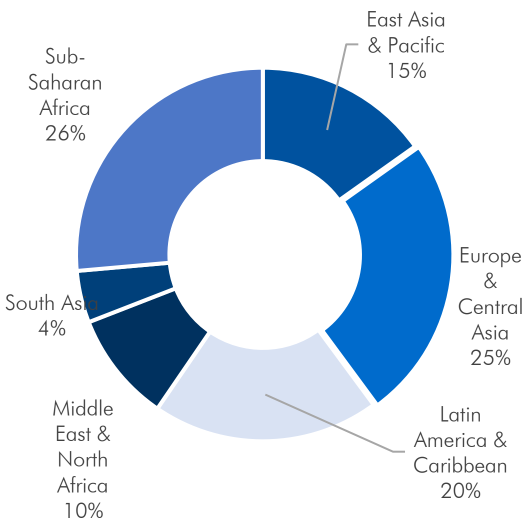
Distribution of sovereigns as per World Bank classification system and OECD membership

For the period 1998–2020, 15 default events have been recorded by GEMs members. The dataset covers MDBs' exposures to 178 sovereigns encompassing all continents with the exception of Antarctica.[3] The following tables and graphs provide overviews of the dataset composition.

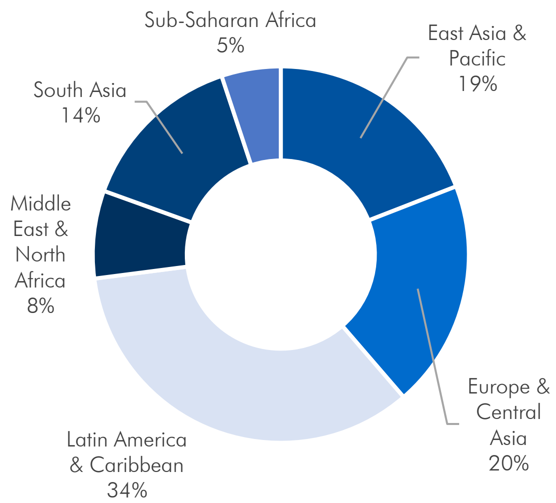
Table 1: Dataset composition by World Bank Group region

Region	Number of Sovereigns	Number of Default Events	Volume (bn €)
East Asia & Pacific	27	1	187.1
Europe & Central Asia	44	0	191.7
Latin America & Caribbean	35	2	335.9
Middle East & North Africa	17	1	73.8
South Asia	8	0	141.1
Sub-Saharan Africa	47	11	49.9
Total	178	15	979.5

Graph 6: Distribution of sovereigns by World Bank Group region



Graph 7: Distribution of contract volumes (signed amount) by World Bank Group region



[3] The Glossary lists all countries included in each region according to the World Bank Group classification system. However, the exposures included in this report do not pertain to every sovereign listed in the region definitions.

Table 2: Dataset composition by 2020 OECD membership

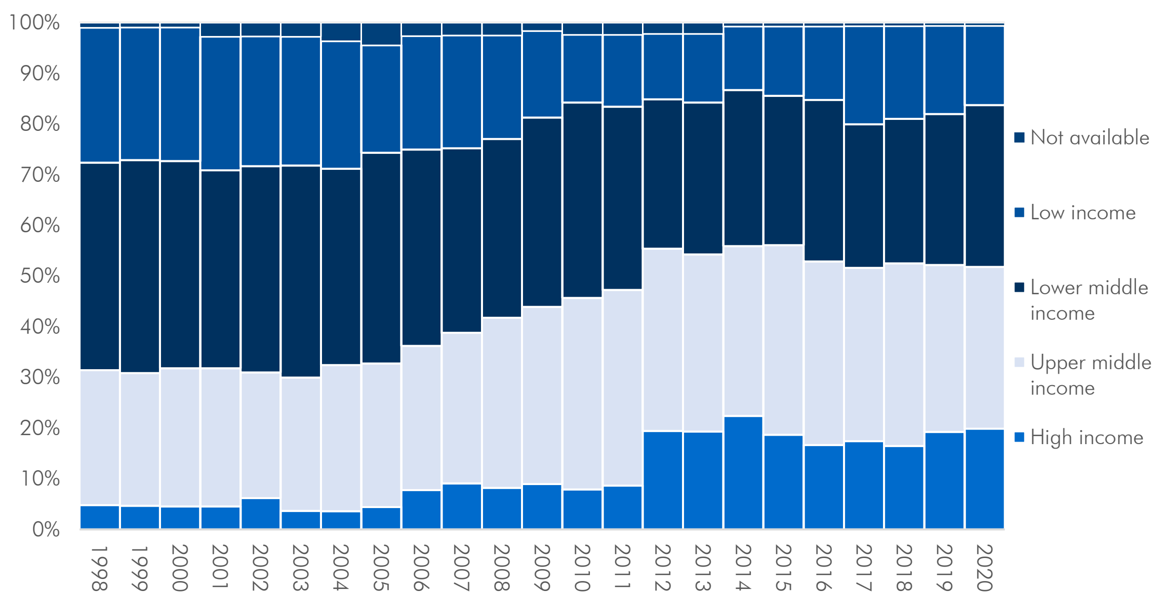
	Number of sovereigns	Number of default events	Volume (bn €)
OECD/Non-OECD			
OECD	21	0	162.5
Non-OECD	157	15	817.0
Total	178	15	979.5

Table 3 shows the distribution by country income group at year-end 2020, while Graph 8 illustrates how the income group distribution has evolved over time. Together, these demonstrate the strong willingness of MDBs to invest, in line with their mandates, in lower-income segments of emerging markets, while also reflecting that many countries have moved into higher-income categories over time.

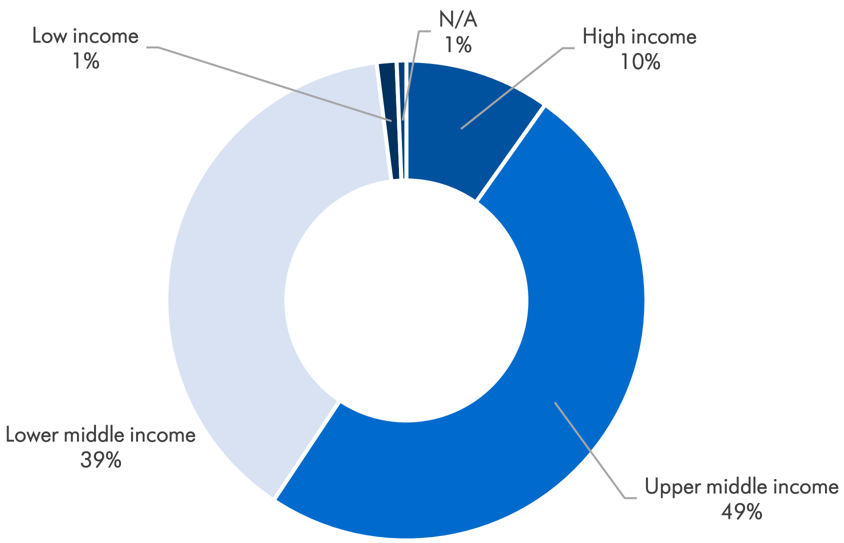
Table 3: Dataset composition by World Bank Group country income group at year-end 2020

World Bank country income group	Number of sovereigns	Number of default events	Volume (bn €)
High income	42	1	96.2
Upper middle income	53	2	485.0
Lower middle income	55	6	378.9
Low income	26	5	13.1
N/A	2	1	6.4
Total	178	15	979.5

Graph 8: Dataset composition by World Bank Group country income group from 1998 to 2020

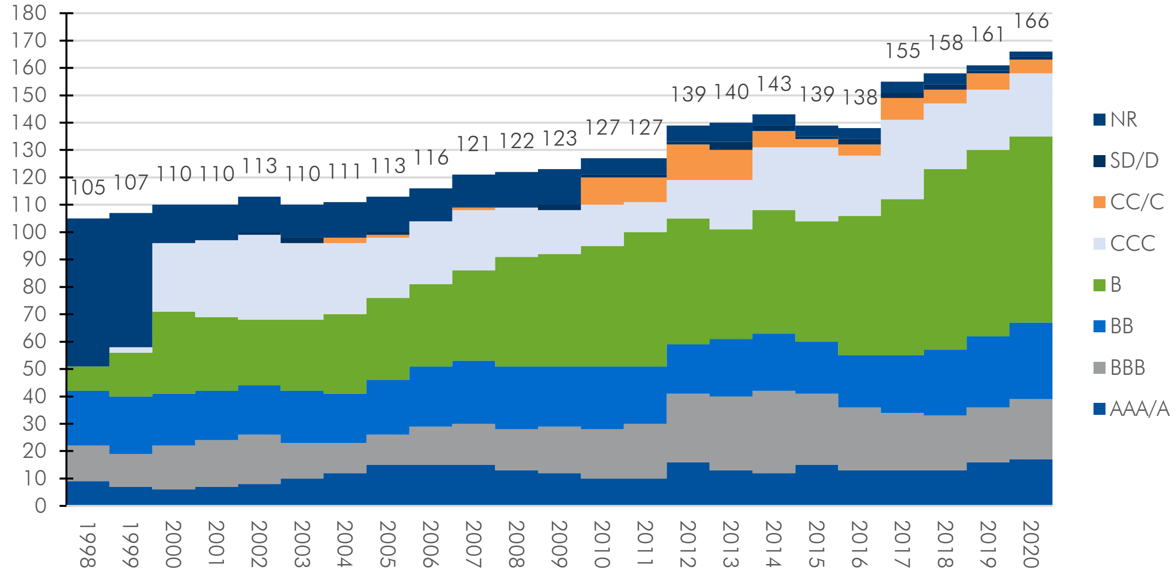


Graph 9: Distribution of contract volumes (total signed amount) by country income group at year-end 2020



Graph 10 highlights the evolution of GEMs ratings for sovereigns over time. It shows that a large proportion of MDBs' sovereign exposure has consistently been sub-investment grade.

Graph 10: Evolution of sovereigns by credit rating categories*



(*) NR = This denotes sovereigns with no rating by a rating agency, the OECD or WRR. Rating categories as of 1 January each year.

Table 4: Aggregate loan amount per country at year-end 2020 (€ million)

Afghanistan	693.8	Gambia, The	217.3	Pakistan	32,329.7
Albania	2,191.1	Georgia	4,715.9	Palau	55.7
Algeria	1,330.2	Germany	44.4	Panama	8,524.1
Andorra	8.4	Ghana	399.0	Papua New Guinea	2,664.5
Angola	4,891.8	Greece	241.0	Paraguay	5,578.2
Antigua and Barbuda	15.8	Grenada	43.8	Peru	7,349.8
Argentina	50,911.9	Guatemala	7,291.5	Philippines	24,578.6
Armenia	2,059.1	Guinea	718.3	Poland	11,752.0
Azerbaijan	7,376.6	Guinea-Bissau	35.0	Portugal	363.9
Bahamas, The	1,024.8	Guyana	877.3	Qatar	0.3
Bahrain	987.6	Haiti	53.7	Romania	9,582.3
Bangladesh	21,407.4	Honduras	3,457.7	Russian Federation	4,771.4
Barbados	914.9	Hungary	41,673.0	Rwanda	627.9
Belarus	1,727.2	Iceland	3.0	Samoa	139.0
Belgium	288.5	India	72,345.3	San Marino	7.2
Belize	334.4	Indonesia	57,191.1	São Tomé and Principe	11.8
Benin	734.1	Iran, Islamic Rep.	2,447.4	Saudi Arabia	174.2
Bhutan	491.0	Iraq	4,236.2	Senegal	2,850.4
Bolivia	6,507.9	Ireland	41.0	Serbia	7,636.7
Bosnia and Herzegovina	2,365.2	Italy	372.3	Seychelles	217.2
Botswana	1,895.3	Jamaica	4,312.3	Sierra Leone	317.7
Brazil	70,664.0	Jordan	5,431.7	Sint Maarten (Dutch part)	44.2
British Virgin Islands	5.5	Kazakhstan	11,105.6	Slovak Republic	1,183.8
Brunei Darussalam	4.6	Kenya	2,534.1	Slovenia	20.9
Bulgaria	2,138.8	Kiribati	27.5	Solomon Islands	88.1
Burkina Faso	971.5	Korea, Dem. People's Rep.	40.3	Somalia	19.3
Burundi	108.8	Korea, Rep.	7,270.5	South Africa	4,577.4
Cabo Verde	406.1	Kosovo	403.8	Spain	1,162.5
Cambodia	2,698.3	Kyrgyz Republic	1,267.5	Sri Lanka	9,170.0
Cameroon	3,135.1	Lao PDR	1,531.9	St. Kitts and Nevis	22.2
Central African Republic	24.5	Latvia	673.3	St. Lucia	25.5
Chad	499.5	Lebanon	3,297.2	St. Vincent and the Grenadines	18.7
Chile	5,839.5	Lesotho	242.1	Sudan	679.0
China	65,241.4	Liberia	116.7	Suriname	1,173.6
Colombia	38,322.1	Lithuania	660.7	Sweden	2,844.0
Comoros	13.6	Madagascar	389.4	Syrian Arab Republic	1,284.4
Congo, Dem. Rep.	1,148.9	Malawi	290.9	Tajikistan	851.5
Congo, Rep.	651.1	Malaysia	1,548.3	Tanzania	1,333.1
Cook Islands	76.6	Maldives	352.7	Thailand	3,610.9
Costa Rica	5,996.7	Mali	610.8	Timor-Leste	224.3
Côte d'Ivoire	3,289.6	Malta	58.1	Togo	168.0
Croatia	3,993.2	Marshall Islands	82.5	Tonga	59.8
Cuba	42.2	Mauritania	431.6	Trinidad and Tobago	1,732.0
Cyprus	762.6	Mauritius	1,030.6	Tunisia	13,067.1
Czech Republic	200.0	Mexico	57,045.8	Turkey	38,287.0
Djibouti	143.5	Micronesia, Fed. Sts.	76.4	Turkmenistan	842.0
Dominica	5.1	Moldova	852.3	Tuvalu	7.5
Dominican Republic	8,564.3	Mongolia	2,117.3	Uganda	1,618.2
Ecuador	3,262.6	Montenegro	1,110.2	Ukraine	13,540.1
Egypt, Arab Rep.	2,744.7	Morocco	17,131.7	Uruguay	9,472.1
El Salvador	7,166.5	Mozambique	657.7	Uzbekistan	9,613.3
Equatorial Guinea	91.9	Myanmar	1,457.0	Vanuatu	85.8
Eritrea	27.8	Namibia	896.0	Venezuela, RB	6,294.7
Estonia	21.5	Nauru	4.4	Vietnam	15,647.8
Eswatini	626.9	Nepal	4,298.2	West Bank and Gaza	172.1
Ethiopia	987.2	Nicaragua	2,958.6	Yemen, Rep.	317.4
Fiji	556.0	Niger	506.9	Zambia	973.9
Finland	636.4	Nigeria	4,374.3	Zimbabwe	659.7
France	331.5	North Macedonia	2,004.8		
Gabon	2,939.0	Oman	1,022.9	Total	979,549.5

Table 5: Number of MDBs with sovereign exposure per country for each given period

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Afghanistan					1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Albania	3	3	3	3	3	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Algeria	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1
Andorra																							1
Angola	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	4	4	4
Antigua and Barbuda	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
Argentina	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Armenia	2	2	2	2	2	2	2	2	2	3	3	3	4	4	4	4	4	4	4	4	4	4	4
Azerbaijan	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5
Bahamas, The	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1
Bahrain	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bangladesh	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	4	4	5	5	5	5	5
Barbados	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2
Belarus	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Belgium													1	1	1	1	1	1	1	1	1	1	1
Belize	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	3	3	3	3	3	3
Benin	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4
Bhutan	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Bolivia	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4
Bosnia and Herzegovina	2	2	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Botswana	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	3	3	3	3	3
Brazil	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4
British Virgin Islands	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Brunei Darussalam								1	1	1	1	1	1	1									
Bulgaria	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Burkina Faso	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4
Burundi	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
Cabo Verde	2	2	2	2	2	2	2	2	2	2	2	3	4	4	4	4	4	4	4	4	4	4	4
Cambodia	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	4
Cameroon	3	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5
Central African Republic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Chad	2	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	2	2	2	2
Chile	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
China	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	6
Colombia	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Comoros	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2
Congo, Dem. Rep.	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3
Congo, Rep.	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Cook Islands	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Costa Rica	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Côte d'Ivoire	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Croatia	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Cuba																1	1	1	1	1	1	1	1
Cyprus	3	3	3	3	3	3	3	3	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1
Czech Republic	1	1	1	1	1	1	1	1	1	1	1												1
Djibouti	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Dominica	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	1	1	1	1
Dominican Republic	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4
Ecuador	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
Egypt, Arab Rep.	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6
El Salvador	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Equatorial Guinea	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
Eritrea	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1
Estonia	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	1	1					
Eswatini	2	2	2	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Ethiopia	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Fiji	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	4
Finland						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
France																		1	1	1	1	1	1
Gabon	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	4	4	4	4	4	4	4	4

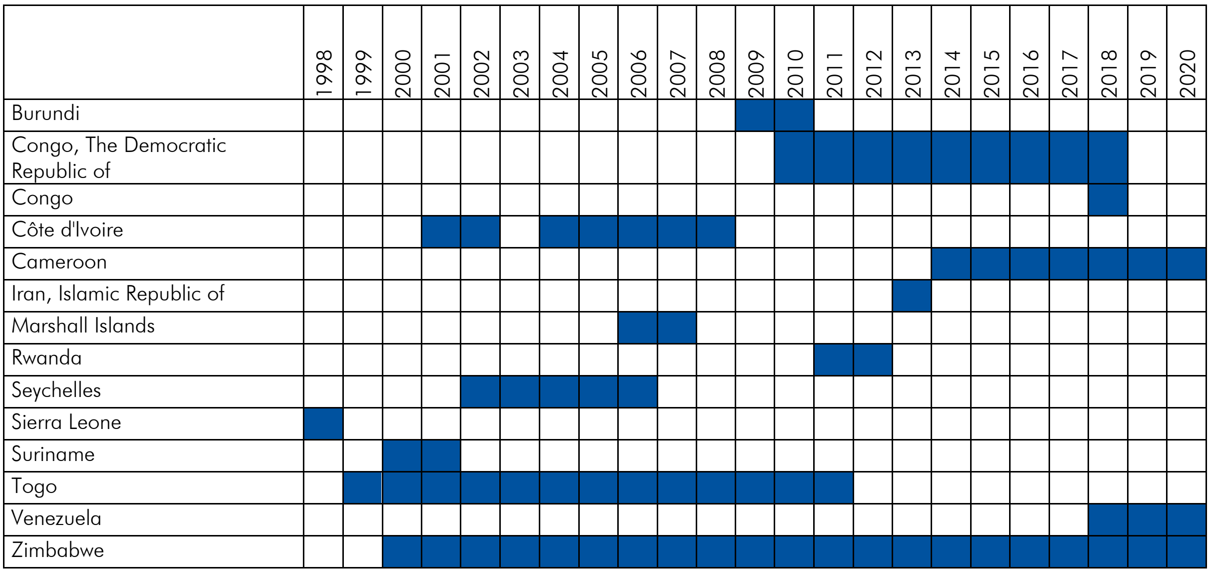
Table 5: Number of MDBs with sovereign exposure per country for each given period (ctd)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Gambia, The	2	2	2	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2
Georgia	2	2	2	2	2	2	2	2	2	2	3	3	4	4	4	4	4	4	4	5	5	6	6
Germany																						1	1
Ghana	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2
Greece	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Grenada	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2
Guatemala	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Guinea	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Guinea-Bissau	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Guyana	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	2	2	3	3	3
Haiti	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Honduras	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	3	3	3	3	3	3
Hungary	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1
Iceland						1	1	1	1	1	1	1	1	1	1	1	1	1					
India	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	6	6	6	6
Indonesia	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6
Iran, Islamic Rep.	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Iraq	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2
Ireland																	1	1	1	1	1	1	1
Italy					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Jamaica	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Jordan	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Kazakhstan	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4
Kenya	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Kiribati	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1
Korea, Dem. People's Rep.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Korea, Rep.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2							
Kosovo				1	1	1	1	1	1	1	1	1	1	1	1	2	2	3	3	3	3	3	4
Kyrgyz Republic	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	5
Lao PDR	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4
Latvia	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Lebanon	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Lesotho	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	2	2
Liberia	2	2	2	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
Lithuania	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
Madagascar	2	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Malawi	4	4	4	4	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	2	2	2	2
Malaysia	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2
Maldives	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	5
Mali	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3
Malta					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Marshall Islands	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mauritania	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	3
Mauritius	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Mexico	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Micronesia, Fed. Sts.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Moldova	1	1	2	2	2	2	2	2	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Mongolia	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	4	5
Montenegro				1	1	1	2	2	2	2	2	2	2	3	3	3	3	3	3	4	4	4	4
Morocco	3	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Mozambique	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3
Myanmar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
Namibia	1	1	1	2	2	2	2	2	2	3	3	3	3	3	2	2	2	2	2	2	2	2	1
Nauru		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Nepal	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	4
Nicaragua	3	3	3	3	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3
Niger	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3
Nigeria	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
North Macedonia	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Oman	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2

Table 5: Number of MDBs with sovereign exposure per country for each given period (ctd)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Pakistan	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6
Palau														1	1	1	1	1	1	1	1	1	1
Panama	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Papua New Guinea	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4
Paraguay	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Peru	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3
Philippines	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4
Poland	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Portugal	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Qatar								1	1	1	1	1	1	1	1	1							
Romania	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2
Russian Federation	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3
Rwanda	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	2	2	2	2	2
Samoa	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
San Marino				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
São Tomé and Principe	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Saudi Arabia		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				1	1
Senegal	4	4	4	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Serbia				1	1	1	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Seychelles	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4
Sierra Leone	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Sint Maarten (Dutch part)																						1	1
Slovak Republic	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1
Slovenia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
Solomon Islands	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Somalia	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
South Africa	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3
Spain				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sri Lanka	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	5	5
St. Kitts and Nevis	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1
St. Lucia	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1
St. Vincent and the Grenadines	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1
Sudan	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Suriname	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3
Sweden																					1	1	1
Syrian Arab Republic	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Tajikistan	1	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	5	5	5	5	5
Tanzania	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Thailand	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Timor-Leste															1	2	2	2	2	2	2	2	2
Togo	1	1	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3
Tonga	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2
Trinidad and Tobago	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Tunisia	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Turkey	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6
Turkmenistan	1	1	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	2	2	2
Tuvalu		1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Uganda	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4
Ukraine	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Uruguay	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Uzbekistan	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	5
Vanuatu	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1
Venezuela, RB	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2
Vietnam	2	2	2	2	2	2	2	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4
West Bank and Gaza	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yemen, Rep.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Zambia	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Zimbabwe	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	2	2	2	2	2	2

Graph 11: Sovereigns with non-accrual events (over 180 days overdue) for each given period



Default rate statistics

The GEMs default rate calculation is sovereign-based and follows the cohort approach used by rating agencies. The statistics derived from members' data are presented at an aggregated level to maintain database integrity and ensure data are not identifiable.

Table 6: Average annual default rate by rating group during the period 1998–2020

Year	Default rate		
	All ratings	Investment grades	Sub-investment grades and not rated
1998	1.0%	0.0%	1.2%
1999	0.9%	0.0%	1.1%
2000	1.8%	0.0%	2.3%
2001	0.9%	0.0%	1.2%
2002	0.9%	0.0%	1.1%
2003	0.0%	0.0%	0.0%
2004	0.9%	0.0%	1.1%
2005	0.0%	0.0%	0.0%
2006	0.9%	0.0%	1.1%
2007	0.0%	0.0%	0.0%
2008	0.0%	0.0%	0.0%
2009	0.8%	0.0%	1.1%
2010	0.8%	0.0%	1.0%
2011	0.8%	0.0%	1.0%
2012	0.0%	0.0%	0.0%
2013	0.7%	0.0%	1.0%
2014	0.7%	0.0%	1.0%
2015	0.0%	0.0%	0.0%
2016	0.0%	0.0%	0.0%
2017	0.0%	0.0%	0.0%
2018	1.3%	0.0%	1.6%
2019	0.0%	0.0%	0.0%
2020	0.0%	0.0%	0.0%
Simple average 1998-2020:	0.5%	0.0%	0.7%

Graph 12: Annual default rates of sovereigns per investment grade group

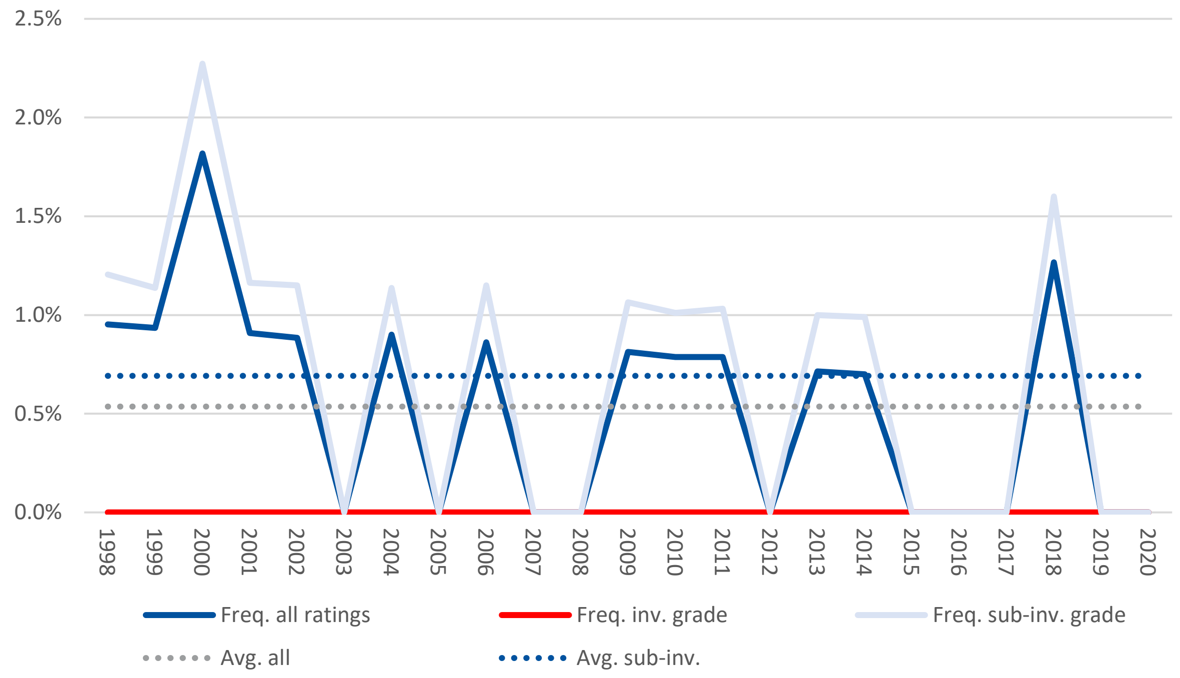
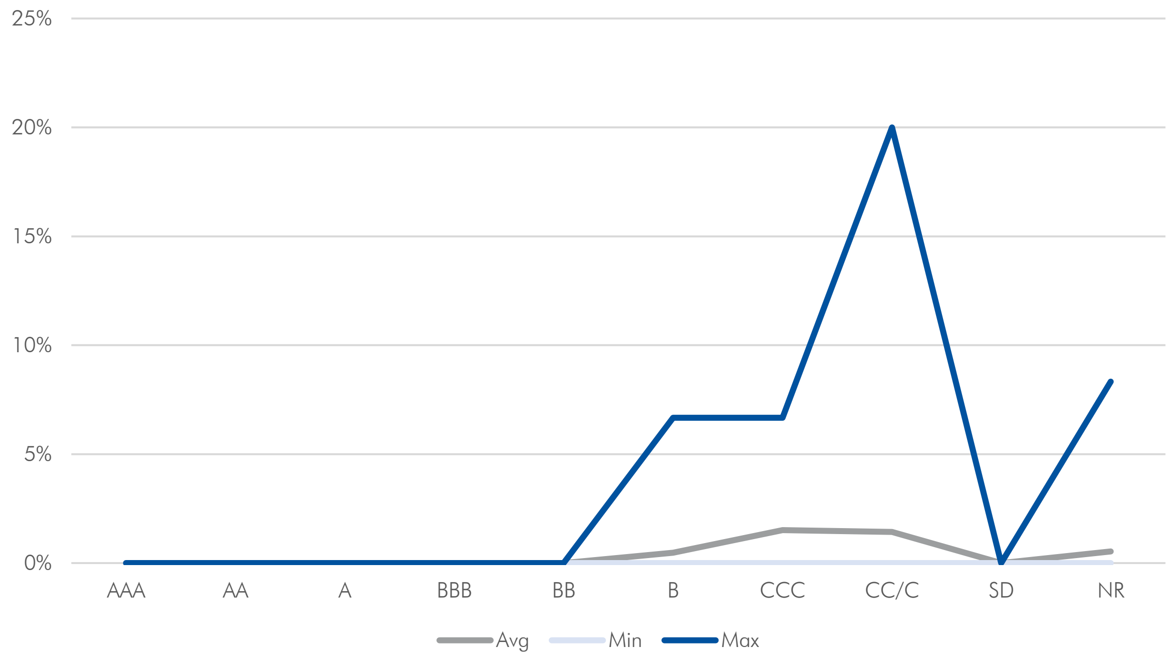


Table 7: Average annual default rate by rating category during the period 1998–2020

	AAA	AA	A	BBB	BB	B	CCC	CC/C	SD	NR
1998		0.0%	0.0%	0.0%	0.0%	0.0%				1.9%
1999		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			2.0%
2000		0.0%	0.0%	0.0%	0.0%	6.7%	0.0%			0.0%
2001		0.0%	0.0%	0.0%	0.0%	0.0%	3.6%			0.0%
2002		0.0%	0.0%	0.0%	0.0%	0.0%	3.2%		0.0%	0.0%
2003			0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
2004			0.0%	0.0%	0.0%	0.0%	3.8%	0.0%		0.0%
2005		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2006		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			8.3%
2007		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
2008		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0%
2009		0.0%	0.0%	0.0%	0.0%	0.0%	6.3%		0.0%	0.0%
2010		0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%	0.0%	0.0%
2011		0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%
2012	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2013	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.6%	0.0%	0.0%	0.0%
2014	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%
2015	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2016	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2017		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2018	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	20.0%	0.0%	0.0%
2019	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2020	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 8 and Graph 13: Annual default rate statistics[4] by rating category

	Avg	StdDev	Min	Max
AAA	0.0%	0.0%	0.0%	0.0%
AA	0.0%	0.0%	0.0%	0.0%
A	0.0%	0.0%	0.0%	0.0%
BBB	0.0%	0.0%	0.0%	0.0%
BB	0.0%	0.0%	0.0%	0.0%
B	0.5%	1.5%	0.0%	6.7%
CCC	1.5%	2.3%	0.0%	6.7%
CC/C	1.4%	5.2%	0.0%	20.0%
SD	0.0%	0.0%	0.0%	0.0%
NR	0.5%	1.8%	0.0%	8.3%



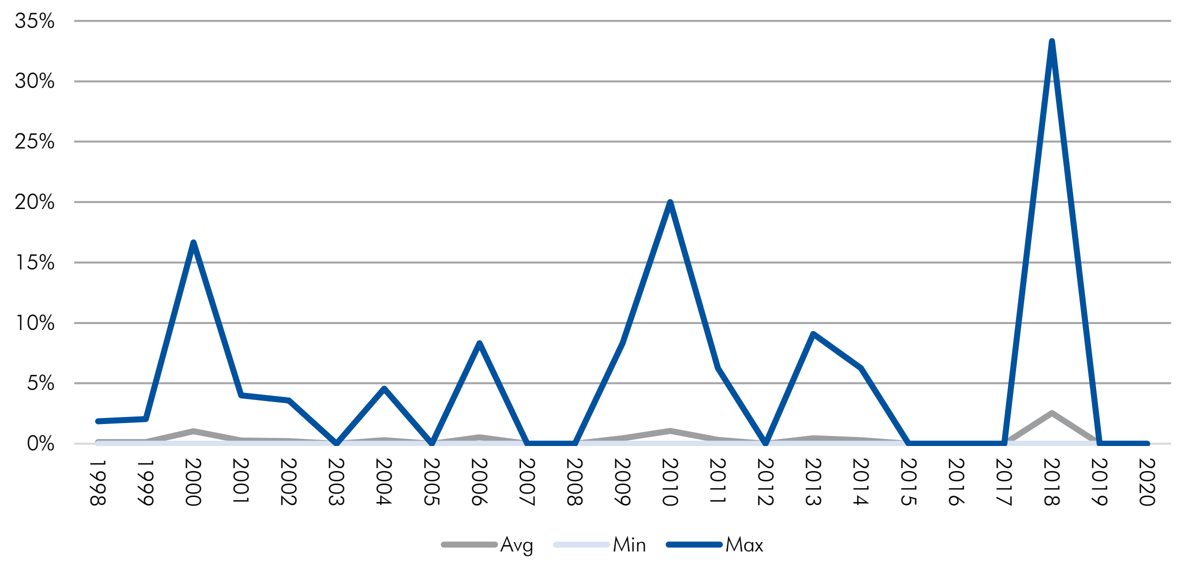
[4] The statistics represented have been calculated for each rating category based on the respective results over the years of observations (1998 to 2020). For each rating category and year, the number of defaults during that year was divided by the number of sovereigns with active exposure, thereby producing the default rate. The statistics have been calculated over these groups of results.

Table 9: Annual default rates for sub-investment grade sovereigns by rating and year during the period 1998–2020

	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	CC	C	SD	NR
1998	0.0%	0.0%	0.0%	0.0%	0.0%								1.9%
1999	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%				2.0%
2000	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	0.0%	0.0%	0.0%				0.0%
2001	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		4.0%				0.0%
2002	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%			0.0%	0.0%
2003	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%			0.0%	0.0%
2004	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		4.5%	0.0%			0.0%
2005	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
2006	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				8.3%
2007	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%		0.0%
2008	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%				0.0%
2009	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.3%			0.0%	0.0%
2010	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%		0.0%	0.0%	0.0%
2011	0.0%	0.0%	0.0%	0.0%	6.3%	0.0%	0.0%		0.0%		0.0%	0.0%	0.0%
2012	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%
2013	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%		0.0%		0.0%	0.0%	0.0%
2014	0.0%	0.0%	0.0%	0.0%	6.3%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
2015	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%
2016	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2017	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2018	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%		20.0%	0.0%	0.0%
2019	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
2020	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%

Table 10 and Graph 14: Annual default rate statistics[5] by year

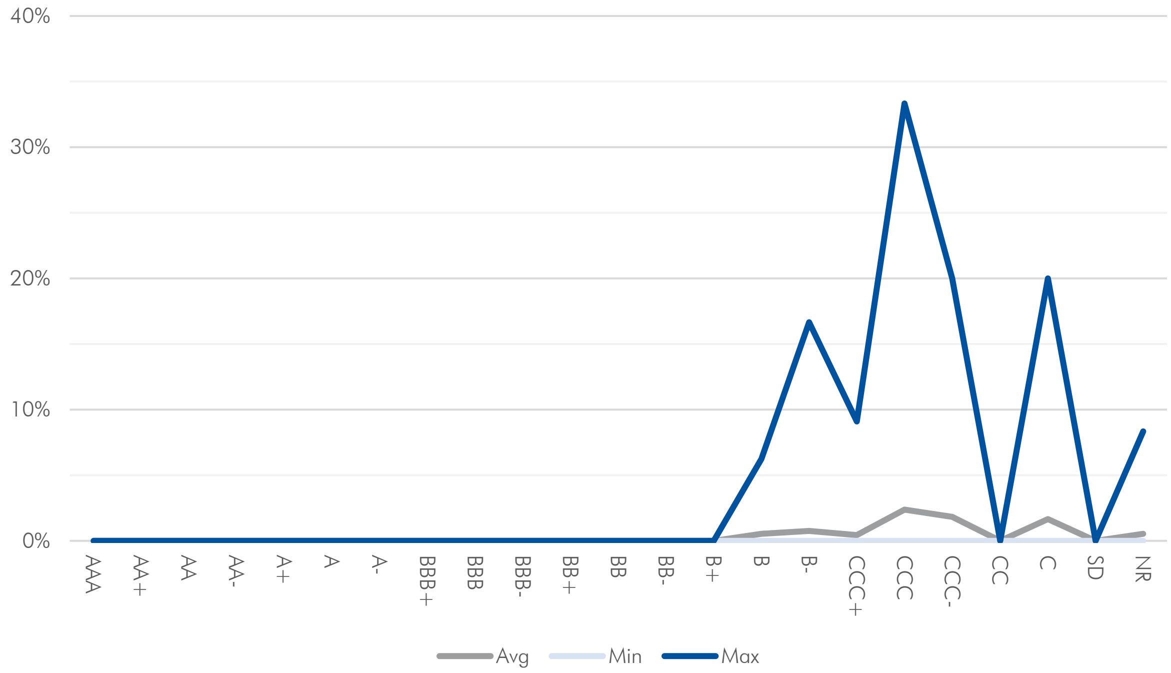
	Avg	StdDev	Min	Max
1998	0.14%	0.51%	0.00%	1.85%
1999	0.13%	0.51%	0.00%	2.04%
2000	1.04%	4.17%	0.00%	16.67%
2001	0.27%	1.03%	0.00%	4.00%
2002	0.21%	0.87%	0.00%	3.57%
2003	0.00%	0.00%	0.00%	0.00%
2004	0.28%	1.14%	0.00%	4.55%
2005	0.00%	0.00%	0.00%	0.00%
2006	0.52%	2.08%	0.00%	8.33%
2007	0.00%	0.00%	0.00%	0.00%
2008	0.00%	0.00%	0.00%	0.00%
2009	0.46%	1.96%	0.00%	8.33%
2010	1.05%	4.59%	0.00%	20.00%
2011	0.33%	1.43%	0.00%	6.25%
2012	0.00%	0.00%	0.00%	0.00%
2013	0.45%	2.03%	0.00%	9.09%
2014	0.30%	1.36%	0.00%	6.25%
2015	0.00%	0.00%	0.00%	0.00%
2016	0.00%	0.00%	0.00%	0.00%
2017	0.00%	0.00%	0.00%	0.00%
2018	2.54%	8.29%	0.00%	33.33%
2019	0.00%	0.00%	0.00%	0.00%
2020	0.00%	0.00%	0.00%	0.00%



[5] The statistics in this table have been calculated for each year based on the respective results for all observed ratings. For each year, the number of defaults during that year was divided by the number of sovereigns with active exposure, thereby producing the default rate for each year.

Table 11 and Graph 15: Annual default rate statistics[6] by rating

	Avg	StdDev	Min	Max
AAA	0.0%	0.0%	0.0%	0.0%
AA+	0.0%	0.0%	0.0%	0.0%
AA	0.0%	0.0%	0.0%	0.0%
AA-	0.0%	0.0%	0.0%	0.0%
A+	0.0%	0.0%	0.0%	0.0%
A	0.0%	0.0%	0.0%	0.0%
A-	0.0%	0.0%	0.0%	0.0%
BBB+	0.0%	0.0%	0.0%	0.0%
BBB	0.0%	0.0%	0.0%	0.0%
BBB-	0.0%	0.0%	0.0%	0.0%
BB+	0.0%	0.0%	0.0%	0.0%
BB	0.0%	0.0%	0.0%	0.0%
BB-	0.0%	0.0%	0.0%	0.0%
B+	0.0%	0.0%	0.0%	0.0%
B	0.5%	1.8%	0.0%	6.3%
B-	0.8%	3.6%	0.0%	16.7%
CCC+	0.4%	2.0%	0.0%	9.1%
CCC	2.4%	8.9%	0.0%	33.3%
CCC-	1.8%	4.6%	0.0%	20.0%
CC	0.0%	0.0%	0.0%	0.0%
C	1.7%	5.8%	0.0%	20.0%
SD	0.0%	0.0%	0.0%	0.0%
NR	0.5%	1.8%	0.0%	8.3%



[6] See footnote 4.

Glossary

Term	Definition
Cohort approach	A cohort consists of all counterparts with the same rating at a given formation date, which for GEMs is always end of day 31 December. Every year, a new cohort *j* is formed. The default or survival status of every counterpart in each cohort is then followed over a time horizon divided into years $i = (1,\ldots,T)$. In every year *i*, the marginal default rate is calculated as the proportion of counterparts defaulting in that year.
Default	A default event is defined as a payment delay on any sovereign-guaranteed operation that triggerst the materiality threshold as per internal lending and sanctioning procedures of each respective MDB.
Default rate	A default rate is computed through a static cohort approach similar to that used by rating agencies. The number of counterparts in each cohort stays constant over time, meaning it is not adjusted for matured or defaulted loans. Therefore, the cohort size at $i = 1$ is followed over the whole time horizon. In this report, default rates always refer to conditional default rates.
East Asia and Pacific	World Bank Group region definition (2020): American Samoa, Australia, Brunei Darussalam, Cambodia, China, Fiji, French Polynesia, Guam, Hong Kong SAR, China, Indonesia, Japan, Kiribati, Korea Dem. People's Rep., Korea Rep., Lao PDR, Macao SAR, China, Malaysia, Marshall Islands, Micronesia Fed. Sts., Mongolia, Myanmar, Nauru, New Caledonia, New Zealand, Northern Mariana Islands, Palau, Papua New Guinea, Philippines, Samoa, Singapore, Solomon Islands, Taiwan, China, Thailand, Timor-Leste, Tonga, Tuvalu, Vanuatu, Vietnam.
Europe and Central Asia	World Bank Group region definition (2020): Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Channel Islands, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Faroe Islands, Finland, France, Georgia, Germany, Gibraltar, Greece, Greenland, Hungary, Iceland, Ireland, Isle of Man, Italy, Kazakhstan, Kosovo, Kyrgyz Republic, Latvia, Liechtenstein, Lithuania, Luxembourg, Moldova, Monaco, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Russian Federation, San Marino, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, United Kingdom, Uzbekistan.
Exposure	The signed amount of the loan as of signature date, denominated in euros.
GEMs sovereign-guaranteed dataset	Includes all MDB-issued sovereign-guaranteed loans reported to GEMs and originated from 1 January 1998 to 31 December 2020.
Investment grade	Investment grade credit ratings are those equivalent to a BBB- or better rating. In this report, credit rating is an equivalent rating derived from the average of ratings assigned by Standard & Poor's, Moody's and Fitch (to the extent available).
Latin America and the Caribbean	World Bank Group region definition (2020): Antigua and Barbuda, Argentina, Aruba, Bahamas, Barbados, Belize, Bolivia, Brazil, British Virgin Islands, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Curaçao, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Sint Maarten (Dutch part), St. Kitts and Nevis, St. Lucia, St. Martin (French part), St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, Turks and Caicos Islands, Uruguay, Venezuela RB, Virgin Islands (U.S.)
Middle East and North Africa	World Bank Group region definition (2020): Algeria, Bahrain, Djibouti, Egypt, Arab Rep., Iran, Islamic Rep., Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Malta, Morocco, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Tunisia, United Arab Emirates, West Bank and Gaza, Yemen Rep.
OECD	The Organization for Economic Co-operation and Development, an intergovernmental economic organisation with 36 member countries. The OECD was founded in 1961 to stimulate economic progress and world trade.
Sovereign counterpart	A self-governing nation state, as defined by each of the MDBs, according to their internal processes.
Sovereign-guaranteed counterpart	For the purposes of this report a counterpart whose lending is guaranteed by a self-governing nation state.
South Asia	World Bank Group region definition (2020): Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka.
Sub-investment grade	Sub-investment (or speculative) grade credit ratings are those rated below investment grade, that is, below a BBB- equivalent rating. In this report, credit rating is an equivalent rating derived from the average of ratings assigned by Standard & Poor's, Moody's and Fitch (to the extent available).
Sub-Saharan Africa	World Bank Group region definition (2020): Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Dem. Rep., Congo, Rep., Côte d'Ivoire, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, The, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, São Tomé and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe.

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