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FUNDING VITAL EMERGING AND DEVELOPING MARKET PROJECTS: HOW GEMS AND PRIVATE MARKETS CAN HELP ACHIEVE SCALE

RESEARCH REPORT

CONTENTS

I. INTRODUCTION

KEY POINTS

- ✓ Global challenges are best addressed globally. Many market participants estimate that Emerging Markets (EMs) require trillions of dollars in order to invest in infrastructure and transform their economies. This cannot be financed by Multilateral Development Banks (MDBs) and Development Financial Institutions (DFIs) alone. Private institutional capital is required to achieve the scale necessary to overcome global and local challenges.

- ✓ Private Institutional Capital is constrained by factors such as the lack of reliable and consistent data, MDBs, with their rich experience in EMs, are in the position to alleviate certain data issues.

- ✓ Granular historical default and recovery data across the countries and sectors, experienced and recorded by MDBs, is a key component for ARC Ratings and other market participants to produce robust assumption for risk assessment, preventing a more conservative approach in the absence of data. With high-quality and reliable data, ARC could supply the analysis, tools, and ratings to better assess the risk of complex transactions in various legal jurisdictions and assist in the analysis required for market participants to invest efficiently and at sufficient scale.

- ✓ One such major initiative to alleviate issues associated with lack of available and reliable data is the Global Emerging Markets Risk Database Consortium (GEMs). This is a joint initiative between the European Investment Bank Group and the World Bank Group that has pooled credit default risk data from 25 MDBs that provides default and recovery rates data from Private, Sub-Sovereign, Sovereign and Sovereign Guaranteed lending from 1994 to 2022. Although the granular dataset is yet to be published, finding a solution for market participants to use this data could be a game changer to achieve the necessary scale.

- ✓ GEMs has stated its willingness to facilitate increased market transparency. However, this effort has been challenged by confidentiality aspects and agreements with the 25 MDBs and other DFIs on releasing this data to the wider market. There are potential solutions from which ARC and other market participate could benefit from: (i) for GEMs to release an "anonymised" dataset to the market; (ii) to focus disclosure efforts on how each MDB member maps each loan to GEMs internal scales; or (iii) to release the data to institutions that are equipped to handle confidential information daily, such as Credit Rating Agencies (CRAs).

II. REACHING THE SCALE

The global challenges highlighted by the UN's Sustainable Development Goals (SDGs) require a synchronised effort across countries, and developing markets are central to those goals. However, not all regions and jurisdictions are equipped with the tools to achieve the same results. International conflicts, global inflation and consequent interest rate hiking cycles have further restrained financial flows to developing countries, and an additional US$3.9 trillion could be required just to reach the SDGs by 2030[1]. Multilateral Development Banks (MDBs) and other Development Financial Institutions (DFIs) are providing funding to build infrastructure and more robust and accessible financial services in Emerging Markets (EMs); but a common view across capital markets is that only with the participation of private capital can proper scale for these essential projects be reached. Indeed, according to Hubert Danso of Africa Investors, "Private investors can provide their funds and expertise to specific industries and sectors but may be reluctant to fund EMs at scale because of the lack of reliable and consistent information to perform accurate risk assessments".

Market participants agree that it is essential to mobilise private and public funds to finance key projects in EMs to collectively benefit from achieving the SDGs. However, the lack of reliable and high-quality data remains a challenge, for both the buying and selling parties that seek to accurately assess the risk and reward components necessary to get transactions completed in a timely basis and to achieve the scale required for the SDGs.

The Global Emerging Markets Risk Database Consortium (GEMs) is a joint initiative between the European Investment Bank Group and the World Bank Group with the objective of resolving this data gap by pooling credit default risk data from 25 MDBs[2]. The experience of these institutions has been translated into a dataset that offers an insight into default and recovery rates across regions, income groups and sectors, all indispensable inputs in credit risk modelling. Yet, the effort remains a collaboration between its MDBs and DFIs members and little information other than summary reports has been released to private capital market participants, due in large part to concerns around confidentiality.

III. PERCEPTION VS REALITY, THE LACK OF DATA FOR RISK ASSESSMENTS

Historical defaults and losses, as dreaded as they are by markets and Credit Rating Agencies (CRAs), are necessary to understand how to provide better security for investors. Market participants and many models assess the past to drive the assumptions for future performance. Hence, high-quality data can drive market participants to make informed decisions to select projects and determine how much funds to allocate to each based on reliable assessments of expected performance.

Credit and scoring tools have typically been developed for markets with an abundance of data, and for EMs, more data is necessary for these tools to be reliable and to properly reflect the credit risk in these regions. The lack of sufficient historical data remains a key obstacle, and the consequence is that market participants typically adopt conservative views on risk and in some cases are unable to perform their analysis. For ARC Ratings (ARC), the data in platforms such as GEMs could allow ARC to successfully

[1] Emerging markets and the SDGs: Investing where it's needed most. Samuel Bevan (abrdn)
[2] The Global Emerging Markets Risk Database Consortium (GEMs): https://www.gemsriskdatabase.org/

make risk assessments and (re)calibrate its assumptions across EMs securitisation transactions, potentially distinguishing among countries and industries.

As a result, GEMs could offer a vital solution for EMs, where access to credit remains limited and information is not easily recorded. DFIs mandate of providing financial and technical resources where other financial institutions remain reluctant due to perceived risk, implies that in some regions MDBs are the only institutions that accumulate key performance data at a significant scale. If these institutions choose to share their data, all market participants will benefit, ultimately supporting developing countries to achieve their SDGs promptly and effectively.

A synchronised effort between information providers, CRAs and ARC could alleviate issues related to the lack of available and reliable data, offering the consistency and acceptance of that data by market participants. ARC could facilitate the increased involvement of institutional capital by rating transactions and by providing investors with tools calibrated to reflect the complexity of these EMs and its various legal jurisdictions. Investors can further benefit from tools that will assist in allocating limited funds more efficiently by better assessing investment and first-loss risk. ARC, with GEMs data, could ultimately assist in closing the gap, either financial or time required, for private capital to invest in essential projects for development.

IV. THE GLOBAL EMERGING MARKETS RISK DATABASE CONSORTIUM (GEMS)

GEMs pools statistics on observed default rates, rating migration matrixes and recovery rates from the experience of 25 MDBs and other DFIs. The full dataset is not available to the public, but recently GEMs published a set of reports that summarise the data gathered by its members from 1994 to 2022. The published data for default and recovery rate statistics is offered at an aggregated level to ensure that datapoints are not identifiable. ARC has summarised some of the major aspects included in these reports below. Although the published data is appreciated, it does not offer most private market capital participants the information necessary to make investments at scale. It is also important to note that these reports do not include any explicit insights into the drivers of defaults, including economic, political, global, or structural factors; the reports are limited to summarising the dataset.

DEFAULT STATISTICS

Default Data Statistics are split into two categories available to the public. The first considers the information provided by 19 MDBs for private and sub-sovereign entities[3]. The second set includes direct lending to sovereign countries and sovereign-guaranteed lending with data provided by 11 MDBs[4]. Figure 1 offers a summary of the number of entities and the size of exposure included in the two Default Statistics volumes:

[3] Default Statistics Volume 1: Private and Sub-Sovereign Lending (1994-2022) by GEMs. Defaults are defined with one of six conditions in this volume: (i) non-payment within 90 days of being due, (ii) specific provision raised against a loan, (iii) a partial or full write-off of an outstanding loan, (iv) an agreement to distressed restructuring, (v) bankruptcy, or (vi) a realisation of the loan security.

[4] Default Statistics Volume 2: Sovereign and Sovereign Guaranteed Lending (1998-2022) by GEMs. The report offers information regarding 23 defaulted sovereigns between the years 1998 and 2022.

Geographic Region	Private		Sub-Sovereign		Sovereign	
	Counterparts	Exp. (€bn)	Counterparts	Exp. (€bn)	Counterparts	Exp. (€bn)
East Asia & Pacific	829	20.29	56	7.81	28	232.10
Europe & Central Asia	3,615	142.79	541	56.06	44	203.80
Latin America & Caribbean	2,105	51.68	118	15.91	35	433.60
Middle East & North Africa	649	24.83	130	30.89	17	116.60
South Asia	797	16.37	24	6.15	8	175.70
Sub-Saharan Africa	1,498	28.11	246	15.50	47	76.60
Total	***9,493***	***284.07***	***1,115***	***132.32***	***179***	***1,238.40***

Figure 1
Source: Global Emerging Markets Risk Database Consortium (GEMs)

Figure 2 shows the historical annual default rates from 1994 to 2022, based on counterparts from the private and sub-sovereign sectors. The infrastructure sector annual default rate reached 6.4% in 2020, with its most recent value at 3.2%[5]. The financial services sector fared better with a 3.1% rate in 2020 and a 1.9% rate in 2022[6].

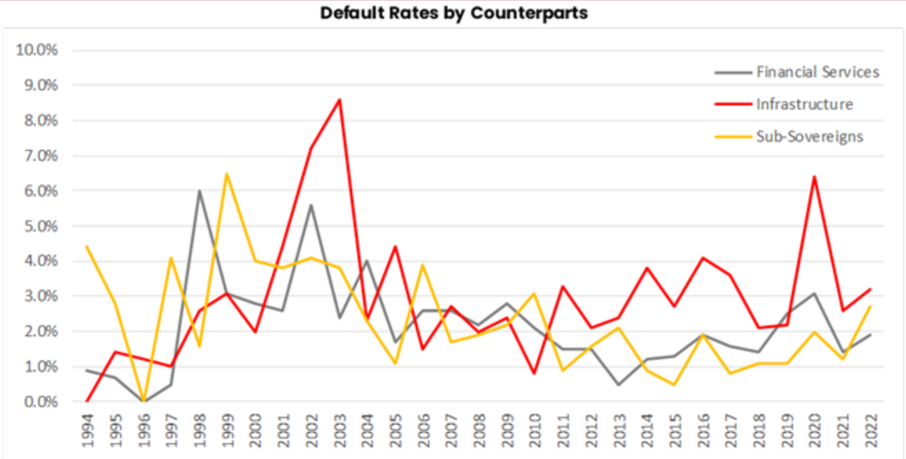

Figure 2
Source: Global Emerging Markets Risk Database Consortium (GEMs)

The data in this figure illustrates both the potential benefits of the GEMs reports and their limitations. One the side of the benefits, these rates provide a more reliable notion of the level of risk in EMs, or at least provide one more reference point for interested parties. For example, ARC's 1-year cumulative expected default rates for assets in the "B" category is 5.52%, just below the annual default rate for the infrastructure assets in the GEMs dataset in 2020[7]. While recent, more favourable rates for the financial services assets fare closer to ARC's "BB" category, which sees a 1.23% 1-year cumulative expected default rate. On the side of the limitations, it is important to note that the reports do not disclose any

5 The infrastructure sector dataset includes the following types of entities: Oil & Gas Storage & Transportation, Environmental & Facilities Services, Air Freight & Logistics, Airlines, Marine, Railroads, Trucking, Airport Services, Highways & Rail tracks, Marine Ports & Services, Health Care Facilities, Alternative Carriers, Integrated Telecommunication Services, Wireless Telecommunication Services, Electric Utilities, Gas Utilities, Multi-Utilities, Water Utilities, Independent Power Producers & Energy Traders, Renewable Electricity, and Health Care Real Estate Investment Trusts – REITs.

6 The Financial Services sector dataset includes the following types of entities: Diversified Banks, Regional Banks, Thrifts & Mortgage Finance, Other Diversified Financial Services, Multi-Sector Holdings, Specialized Finance, Consumer Finance, Asset Management & Custody Banks, Investment Banking & Brokerage, Diversified Capital Markets, Insurance Brokers, Life & Health Insurance, Multi-line Insurance, Property & Casualty Insurance, and Reinsurance.

7 Credit Ratings and Other Analytical Products – Definitions and Scales (ARC Ratings), page 10.

insights regarding the tenor or credit quality of the assets which have historically defaulted, or the comparability of the credit quality of assets originated by different MDBs. These factors are necessary to contextualise and potentially map instances of default.

GEMs' 1-Year PDs		
GEMs Rating		PD
GI 1 to GI 10: Investment grades PDs from CRAs reports		
The highest grades below investment grades	Gs 1	1.34%
	Gs 2	1.45%
	Gs 3	2.06%
	Gs 4	2.74%
	Gs 5	3.48%
	Gs 6	4.61%
	Gs 7	7.00%
Gs 8 to Gs 10: Worse sub-investment grades PDs from CRAs reports		
Default	D	100%

Figure 3
Source: Global Emerging Markets Risk Database Consortium (GEMs)

In addition to default performance, GEMs also produce a Master Scale, partially based on its observed default rates, and detailed in figure 3. For example, the "Gs 1" grade indicates a 1-year PD of 1.34%, while ARC's own cumulative 1-year PD is significantly lower in its "BB+" category, 0.71%. For the "Gs 7" grade, the PD increases to 7.00%, between ARC's "B" and "B-" categories. However, there are no insights or published reports on the defaults observed by rating category to validate or map GEMs' Master Scale, limiting the comparison with ARC's own scale or with any scale from other market participants.

Although ARC appreciates the effort to publish the latest set of reports, the aggregated nature of these summaries hides critical aspects such as specific causes of default, and the country or asset class each instance of default relates to. These datapoints can provide a better understanding on how assets within regions and industries correlate, potentially allowing market participants to derive their own assessment of risk and default drivers, or to map assets to their own scales.

The last aspect to consider for Default Statistics, applicable also to Recovery Statistics, is whether there is a perceived or actual preferential creditor status. It is important for private investors to identify when the GEMs data reflects different conditions from what they could face on their own. This argument further relates the need for GEMs to release more and detailed data so market participants can perform a risk assessment customised to their own conditions and risk preferences.

RECOVERY STATISTICS

GEMs report on Recovery Statistics considers information from 19 MBDs for private and sub-sovereign lending for the same period, 1994 to 2022[8]. Recovery Rate is defined as the ratio between the discounted cash flows received (or expected to be received) and the outstanding amount at default. The data refers to contracts with a resolved default event that: (i) has no further outstanding balance, (ii) recovers, and the counterpart is continuing to meet debt service on this contract, or (iii) that returns to performing after a restructuring event.

Figure 4 summarises the rates described in this report, which consider 11,486 private entities and 2,794 sub-sovereign counterparts. The finance services sector holds a 40.9% share of the data, the infrastructure sector 14.6%, and the remaining 44.5% belongs to unspecified sectors.

8 Recovery Statistics: Private and Sub-Sovereign Lending (1994-2022) by GEMs

Recovery Rates by Contracts				
Geographic Region	**Private Counterparts**		**Sub-Sovereign Counterparts**	
	Infrastructure	Financials	Infrastructure	Financials
East Asia & Pacific	65.0%	62.90%	99.3%	3.5%
Europe & Central Asia	79.1%	73.80%	99.7%	99.8%
Latin America & Caribbean	73.1%	65.40%	-	95.0%
Middle East & North Africa	87.9%	82.60%	100.0%	-
South Asia	68.9%	78.60%	-	-
Sub-Saharan Africa	94.3%	82.10%	99.0%	99.7%

Figure 4

Source: Global Emerging Markets Risk Database Consortium (GEMs)

The information summarised in the table holds similar conclusions as those detailed in the previous section; there is a clear benefit as the data could offer a new more favourable perspective of EMs or at least a new reference point for interested parties. For example, 1st Lien Corporate Loans and High-Yield bonds in CLO transactions in developed market have recently shown recovery rates around 60%, similar to what CRAs typically consider for secured bonds in more developed EMs[9]. GEMs recovery rates across regions are consistently above, although it is important to consider MDBs' preferential creditor status and other limitations of the data.

More detailed information is required for ARC to assess how representative these recovery rates are for different asset classes across these regions, specific jurisdictions, and time. Furthermore, without the knowledge of which securities were included in each loan or what are the conditions by which each of these loans resolved its default, it is not possible to infer how representative these rates can be for private capitals looking to invest on their own.

Regardless, the GEMs effort must be praised as a necessary step into providing private capital the level of transparency demanded. This effort shows that the lack of reliable and consistent information can be mitigated, and that MDBs can play a leading role in providing confidence and the data to mobilise capital into EMs.

V. POTENTIAL ALTERNATIVES AND SOLUTIONS

As stated in previous section, although efforts have been made to release summarised data, GEMs current disclosure will not allow private investors to have the necessary data to make informed decisions. The lack of disclosure will not allow CRAs to accurately assess risk, resulting in either very conservative assumptions or the inability to assign ratings. Investors will naturally either price the lack of data into their investments or simply turn away from these transactions. Ultimately, this will mean that the institutional capital needed to achieve required scale and truly partner with MDBs and other DFIs to bring key funds for EMs infrastructure and achieve UN's SDGs will not happen.

[9] Understanding Collateralized Loan Obligations (CLOs), Guggenheim (07/12/2023).

GEMs has stated its willingness to facilitate increased market transparency. However, this effort has been challenged by confidentiality aspects and agreements with the 25 MDBs and other DFIs on releasing this data to the wider market.

Notwithstanding the above, some potential solutions remain. One of these is for GEMs to release an "anonymised" dataset to the market, with key data on historical performance and scores being released but without the name of the borrower. In addition, an anonymised dataset could include information that specifies jurisdiction and asset class by counterpart, this will allow market participants to identify intrinsic risks by country and region; and to better identify default and recovery drivers. In addition, loan data on interest rate type, hedging, tenor, maturity, currency, size and outstanding amount, cause of default, recovery circumstances (when applicable), and if possible, the MDB that originated the loan could increase private market assessment of the data without impacting any individual counterpart. Investors, CRAs and other Private Market participants could construct and adjust their general sector inputs around defaults, recoveries and correlations and yet alleviate concerns on confidentiality.

Another potential solution is to focus disclosure efforts on how each member maps each loan to GEMs internal scales. Furthermore, GEMs could allow for certain market participants, such as CRAs, to view the inputs confidentially to make their assessments and map the inputs to their scales. Limiting the data to CRAs, who receive confidential information as part of their normal credit assessments, could alleviate some of the confidentiality aspects and allow for the scales present in other markets where CRAs facilitate capital raising. ARC, for example, with full access to the GEMs dataset, could calibrate its inputs on default behaviour, correlation, and recovery prosects based on this dataset and facilitate several transactions analysis. ARC would ultimately (re)calibrate and validate its assumptions for EMs, enhancing visibility on credit quality, industry, region, jurisdiction, and recovery experience for investors and other interested parties.

These are just some of the potential solutions to best utilise the GEMs data to mobilise private and public funds to finance key projects in EMs, and collectively benefit from achieving the SDGs.

VI. CONCLUSION

EMs require trillions of dollars to invest in infrastructure and transform their economies. This cannot be financed by MDBs and DFIs alone. Private, institutional capital is required to achieve the scale necessary to overcome global and local challenges and achieve the SDGs. While there are great opportunities for great returns in EMs, institutional capital is constrained by the lack of reliable and consistent data, and by regulatory capital requirements where credit ratings could be used to invest efficiently and at sufficient scale. The information that is required to better calibrate risk assumption and provide greater confidence is in the form of default and recovery statistics, datapoints that can only be generated by the experience that is lacking by private investors.

The GEMs initiative shows that MDBs and other DFIs play a pivotal role in directing private investment to EMs by sharing the data gathered with their decades of experience. While the information shared by GEMs to the public remains limited, it is important to highlight that it represents a critical step to setting the conditions that private investors and other market participants demand.

For an institution such as ARC, the level of detail that the GEMs dataset could offer would be reflected in the calibration and benchmarking of internal risk models. With the data, ARC could provide ratings to interested parties, and adjust its own publicly available tools to better reflect the risks in EMs, so that investors can perform their own assessments of risk with an enhanced degree of reliability.

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CONTACT DETAILS

ASHLEY THOMAS

Head of Structured Finance (UK)

ashley.thomas@arcratings.com

ALFONSO SALES

Senior Analyst, Special Projects

alfonso.sales@arcratings.com

JASON BARRASS

Chief Commercial Officer

jason.barrass@arcratings.com

ARC Ratings (UK) Limited

25 Cabot Square
Canary Wharf
London E14 4QZ
UNITED KINGDOM
+44 203 927 8600
arcratings_uk@arcratings.com

ARC Ratings, S.A.

Rua de São José
35 – 1º B
1150-321 Lisbon
PORTUGAL
+351 21 304 11 10
arcratings_eu@arcratings.com