

# DEFAULT AND RECOVERY RATE ANALYSIS

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# 1. EXECUTIVE SUMMARY

IDB Invest, the private sector arm of the IDB, headquartered in Washington, D.C., operates in the financial services sector providing investment and advisory services to private enterprises in Latin America and the Caribbean. The organization aims to foster economic development, alleviate poverty, and enhance social outcomes through sustainable investments, working with a diverse client base that includes large corporations, small and medium-sized enterprises (SMEs), and financial institutions.

The analysis draws on 28 years of data, highlighting IDB Invest's strong performance in managing credit risk within emerging markets. Despite the inherent challenges of these regions, the average default rate remains low at 1.8%, demonstrating the effectiveness of IDB Invest's robust risk management framework. This low default rate underscores the resilience of the institution's investment strategies and its ability to navigate complex economic environments.

IDB Invest's recovery rate further reinforces its strong financial profile, with an average recovery rate of 69%. This high recovery rate reflects the organization's rigorous approach to credit risk and asset management, ensuring that even in instances of default, substantial value is recovered.

The report provides a detailed breakdown of default and recovery rates across various sectors, regions, and income groups. It reveals that financial intermediaries exhibit the lowest default rates compared to other sectors, while infrastructure projects show particularly high recovery rates, indicative of the solid structuring and strategic importance of these investments.

Regional analysis indicates that there are no significant differences in default rates across the Southern Cone, Andean, and Central America & Caribbean regions. However, recovery rates tend

to be higher in high-income countries, reflecting differing economic conditions and legal frameworks that facilitate debt recovery.

IDB Invest's commitment to maintaining a high-quality, diversified portfolio is evident in its comprehensive approach to risk management and sustainable investment. By continuing to prioritize sound governance and proactive risk mitigation, IDB Invest not only supports economic development but also ensures financial stability and sustainability in its operations.

This report reaffirms the strength of the MDB asset class and the critical role of IDB Invest in fostering economic resilience and growth in Latin America and the Caribbean.

The statistics and analysis contained in this report reflect IDB Invest's and IDB's non-sovereign lending experience. Greater significance can be derived from combining this information with that of similar institutions that operate in comparable regions or emerging markets more broadly. The Global Emerging Markets Risk Database Consortium (GEMs) is a collaboration of such institutions, including IDB and IDB Invest, which are aggregating their data (including the data used to generate this report) to support investment and development in emerging markets. The statistics derived from GEMs will provide deeper insight into markets where it is difficult to find reliable credit information, and this report seeks to supplement these efforts.



## 2. METHODOLOGY

This report analyzes 28 years of data collected for IDB and IDB Invest non-sovereign operations since 1996.

### *Default Rate*

IDB Invest defines default in accordance with Basel and GEMs (Global Emerging Markets Risk Database Consortium) standards. A default is identified when any of the following conditions occur:

- Non-payment within 90 days of the due date (non-accrual status) or it is likely, based on current information and events, that IDB Invest will not be able to collect all amounts due under the loan's contractual terms, both in amounts and timing.
- A specific provision is made against a loan.
- Litigation or other significant legal actions are expected in the near future.
- There is a write-off of an outstanding loan, either fully or partially.

The default rate calculation is performed at the counterparty level using dynamic annual cohorts (average full-year observations). Each cohort consists of counterparties that are performing, newly defaulted, completed, or newly added within that year. Each counterparty record is a unique observation within that cohort, excluding defaults carried over from the previous cohort. Therefore, a counterparty could be present in multiple cohorts.

The default rate of a particular year is calculated as the number of counterparties defaulted, divided by the total number of counterparties in that cohort. The total default rate is calculated as the total number of defaults divided by the sum of counterparties for each cohort.

### *Recovery Rate*

IDB Invest utilizes the cash-flow approach to calculate recovery rates. This comprehensive calculation provides a more accurate representation of the value recovered, as it accounts for the timing and magnitude of recovered amounts, ensuring that all cash flows are appropriately valued.

The recovery rate formula is presented below:

$$\text{Recovery Rate} = \left( \frac{\text{NPV of Amounts Recovered}}{\text{Exposure at Default}} \right) \times 100$$

Where:

- NPV of Amounts Recovered is the Net Present Value (NPV) at the date of default, of all cash flows recovered from the defaulted loan. The discount rate utilized for the NPV calculation is the transaction interest rate.
- Exposure at Default is the outstanding exposure of the loan at the moment of default, including principal, interest, and undisbursed commitments.

### 3. SCOPE OF OBSERVATIONS

The analysis has been performed in a database of 3,470 observations in 822 unique counterparties.

Each observation is unique and will only appear once across all segments.

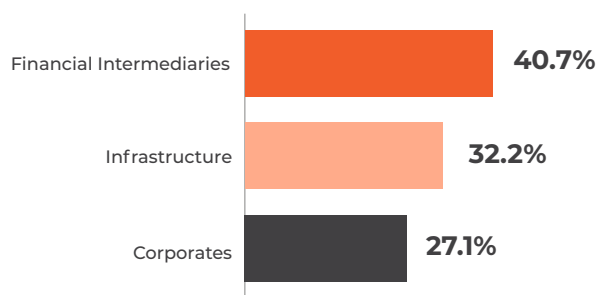
The observations presented in this study do not include short-term trade finance facilities, short-term supply chain facilities, and equity investments.

The recovery rate analysis only includes resolved contracts.

All observations have been mapped to IDB Invest business sectors as follows:

- **Infrastructure:** energy, transport, water and sanitation, and social infrastructure;
- **Corporates:** agribusiness, manufacturing, tourism, and telecommunications, media and technology;
- **Financial Intermediaries:** financial institutions, investment funds, and non-banking financial institutions.

Figure 1 - Observations breakdown by business sector

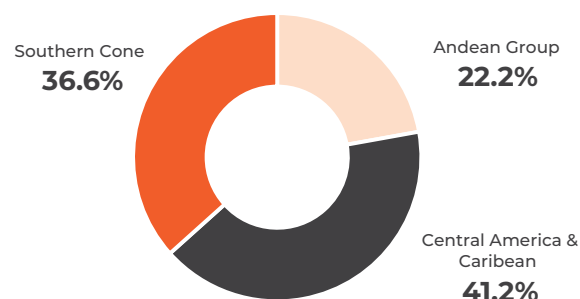


IDB Invest country coverage is divided into the following regions:

- **Southern Cone:** Argentina, Brazil, Chile, Paraguay, Uruguay;
- **Andean:** Bolivia, Colombia, Ecuador, Peru, Venezuela;
- **Caribbean:** Bahamas, Barbados, Guyana, Jamaica, Suriname, Trinidad & Tobago;
- **Central America:** Belize, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Haiti.

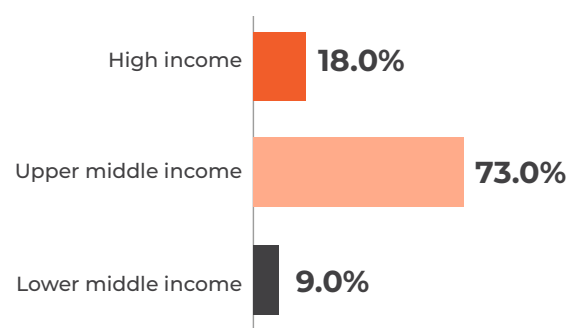
To support the statistical significance of the numbers presented in this report, the Caribbean region was aggregated to the Central America region.

Figure 2 - Observations breakdown by region



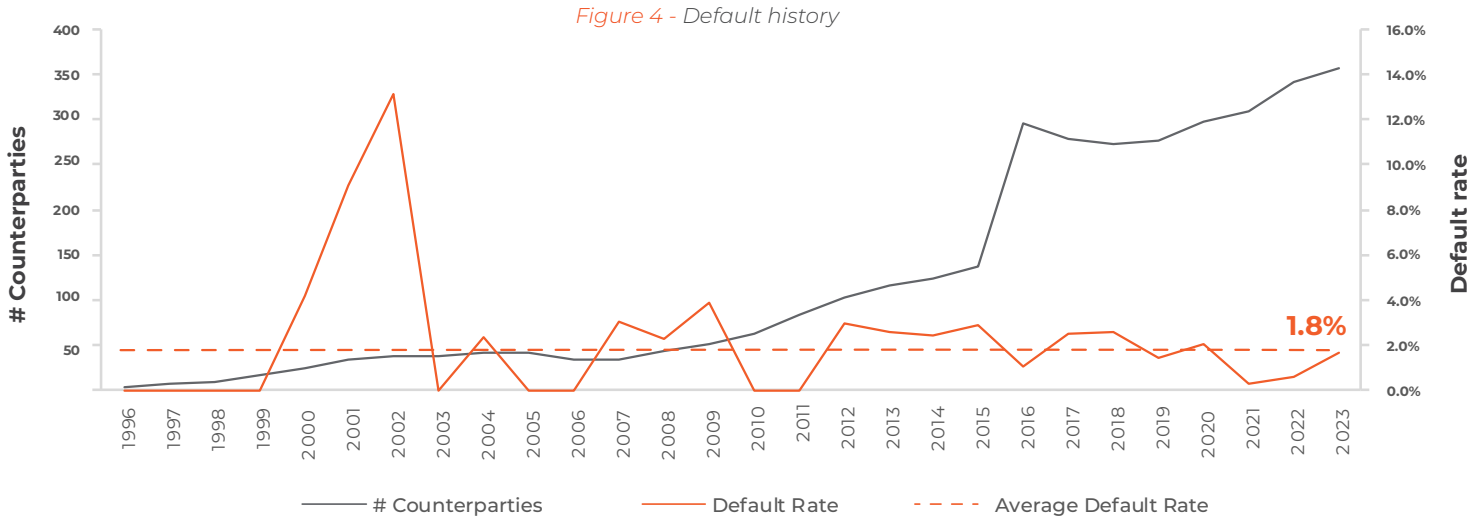
This report also provides a statistical breakdown based on the World Bank country classification by income level (FY24). As per this classification, a country can be mapped into four groups: low, lower middle, upper middle, and high.

Figure 3 - Observations breakdown by WB income group



# 4. DEFAULT RATE ANALYSIS

As presented in figure 4, the average default rate is 1.8%, demonstrating an excellent credit performance, particularly in the challenging environment of emerging markets in Latin America and the Caribbean.



The higher default rates observed between 2001 and 2002 are mainly explained by 6 counterparties impacted by the crisis in Argentina. Considering the period between 2003 and 2023, the average default rate falls to 1.6%.

Default rates are not significantly different by region or by WB income group.

Figure 6 - Default rate by region

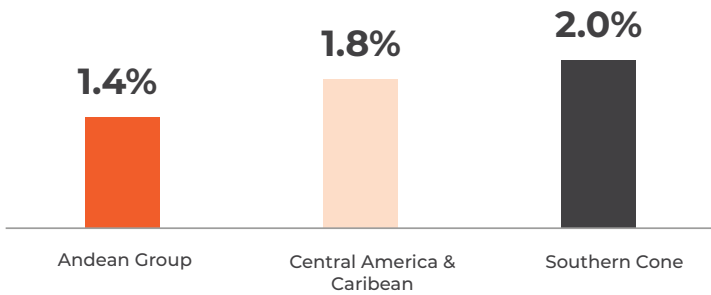
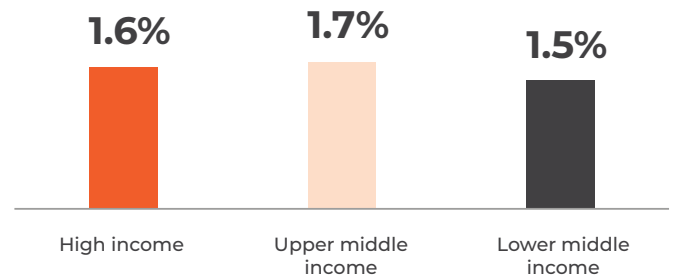
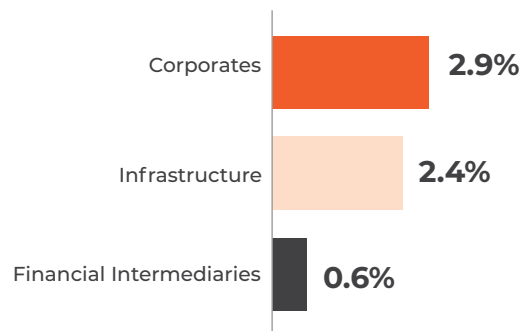


Figure 7 - Default rate by WB income group



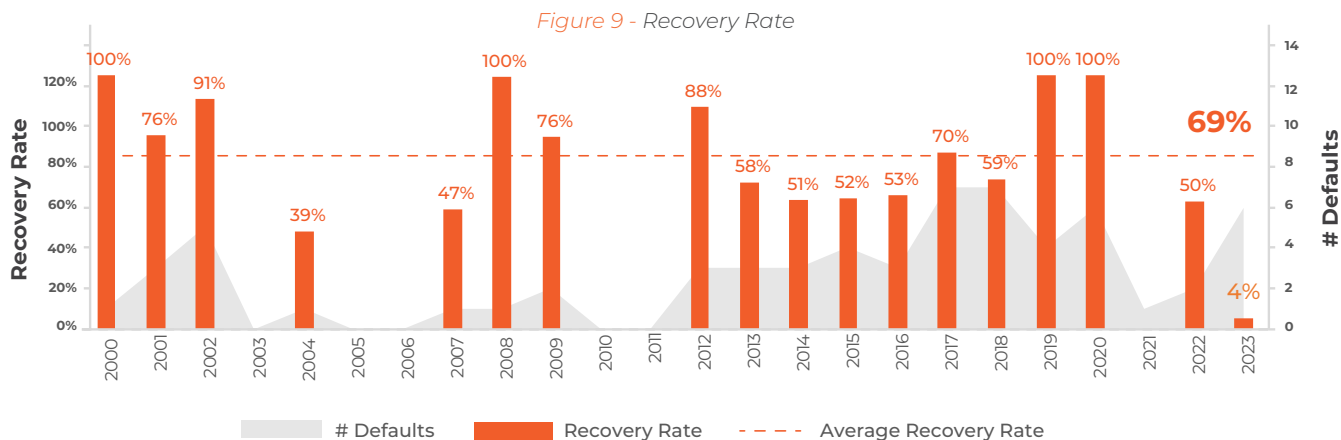
Financial Intermediaries have the lowest default rate compared to Corporates and Infrastructure.

Figure 8 - Default rate by business sector



# 5. RECOVERY RATE ANALYSIS

The average recovery rate of IDB Invest is 69%.



There is no significant difference in the recovery rates by region.

However, high income countries present a higher recovery rate.

Figure 10 - Recovery rate by region

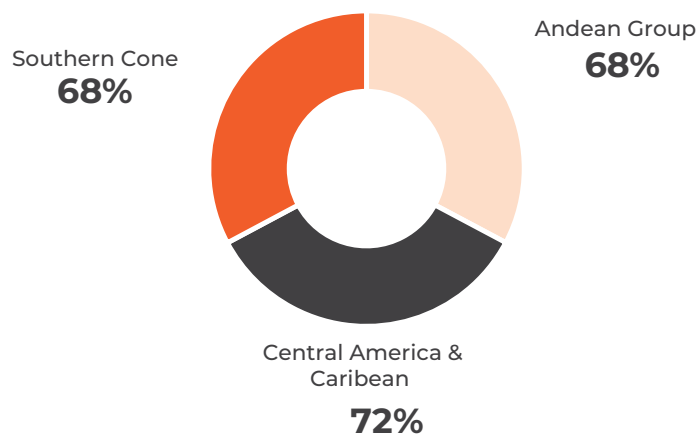
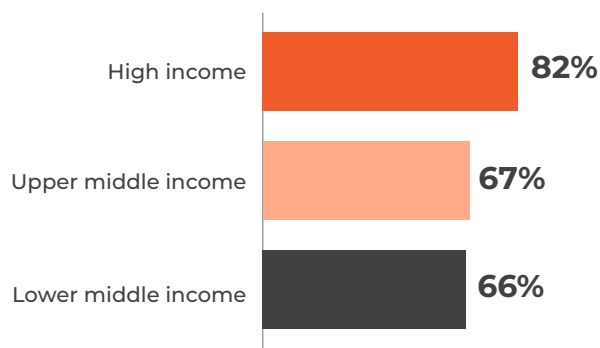
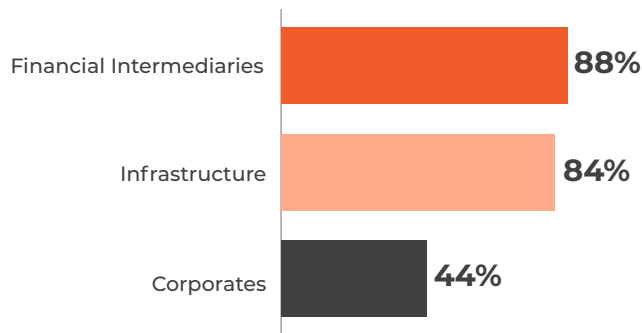


Figure 11 - Recovery rate by WB income group



The recovery rate for Infrastructure is very high denoting the credit strength in the structure of those transactions. Financial Intermediaries also present a high recovery rate, in the fewer existing cases of default. transactions. Financial Intermediaries also present a high recovery rate, in the fewer existing cases of default.

Figure 12 - Recovery rate by business sector



# 6.ANNEX

Table 1 - Historical default rate

Year	# Counterparties	# Defaults	Default (%)
1996	3		
1997	8		
1998	9		
1999	16		
2000	24	1	4.2%
2001	33	3	9.1%
2002	38	5	13.2%
2003	38		
2004	42	1	2.4%
2005	42		
2006	33		
2007	33	1	3.0%
2008	44	1	2.3%
2009	52	2	3.8%
2010	63		
2011	83		
2012	102	3	2.9%
2013	117	3	2.6%
2014	124	3	2.4%
2015	138	4	2.9%
2016	296	3	1.0%
2017	279	7	2.5%
2018	272	7	2.6%
2019	277	4	1.4%
2020	297	6	2.0%
2021	309	1	0.3%
2022	341	2	0.6%
2023	357	6	1.7%
<b>Total</b>	<b>3,470</b>	<b>63</b>	<b>1.8%</b>



Table 2- Historical default rates per business sector

Year	Infrastructure			Financial Intermediaries			Corporates		
	# Counterparties	# Defaults	Default (%)	# Counterparties	# Defaults	Default (%)	# Counterparties	# Defaults	Default (%)
1996	3								
1997	8								
1998	9								
1999	14			1			1		
2000	21	1	4.8%	1			2		
2001	30	1	3.3%	1			2	2	100.0%
2002	35	4	11.4%	1	1	100%	2		
2003	35			1			2		
2004	38			1			3	1	33.3%
2005	37			2			3		
2006	26			5			2		
2007	22			9			2	1	50.0%
2008	25	1	4.0%	15			4		
2009	25	1	4.0%	19	1	5.3%	8		
2010	27			26			10		
2011	27			38			18		
2012	30	3	10.0%	52			20		
2013	31	2	6.5%	63			23	1	4.3%
2014	31	1	3.2%	68			25	2	8.0%
2015	32	1	3.1%	79			27	3	11.1%
2016	59	1	1.7%	146	1	0.7%	91	1	1.1%
2017	68	2	2.9%	128			83	5	6.0%
2018	68	5	7.4%	117	1	0.9%	87	1	1.1%
2019	74			123	1	0.8%	80	3	3.8%
2020	82	2	2.4%	120	1	0.8%	95	3	3.2%
2021	78			129	1	0.8%	102		
2022	88			132	1	0.8%	121	1	0.8%
2023	95	2	2.2%	136	1	0.7%	126	3	2.4%
<b>Total</b>	<b>1,118</b>	<b>27</b>	<b>2.4%</b>	<b>1,413</b>	<b>9</b>	<b>0.6%</b>	<b>939</b>	<b>27</b>	<b>2.9%</b>

Table 3 - Historical recovery rate

Year	# Defaults (Total)	# Defaults (Resolved)	Recovery Rate (Resolved)
1996			
1997			
1998			
1999			
2000	1	1	100%
2001	3	3	76%
2002	5	5	91%
2003			
2004	1	1	39%
2005			
2006			
2007	1	1	47%
2008	1	1	100%
2009	2	2	76%
2010			
2011			
2012	3	3	88%
2013	3	2	58%
2014	3	2	51%
2015	4	3	52%
2016	3	3	53%
2017	7	4	70%
2018	7	6	59%
2019	4	1	100%
2020	6	2	100%
2021	1		
2022	2	2	50%
2023	6	1	4%
<b>Total</b>	<b>63</b>	<b>43</b>	<b>69%</b>

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