

Research papers

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Capital Markets Usage by Development Banks

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Résumé

Cette publication analyse le rôle des marchés de capitaux dans le financement du développement. Nous identifions les banques publiques de développement (BPD) actives sur ces marchés et examinons leur comportement financier.

Ce travail s'appuie sur les données de la PDBDatabase (2025) et de Bloomberg, portant sur 522 institutions, pour un total d'actifs de 13 900 Mds (\$) en 2025. Parmi celles-ci, seulement une institution sur quatre accède directement aux marchés de capitaux, et concentre pourtant plus de 88% des actifs du secteur et détiennent 7 500 Mds (\$) de dette.

L'accès aux marchés est particulièrement concentré en Asie et en Europe, tandis que les institutions des pays à revenu faible ou intermédiaire sont confrontées à de nombreux obstacles. La taille des institutions apparaît aussi comme un facteur déterminant, influant à la fois sur le levier des PDB et sur leur choix de devise d'émission : la monnaie locale est privilégiée par les institutions nationales, tandis que les supranationales (ou banques multilatérales de développement) recourent davantage au dollar.

Dans l'ensemble, nous mettons en évidence le potentiel important des marchés de capitaux pour accroître les ressources disponibles en faveur du développement, malgré d'importantes inégalités actuelles.

Nous proposons trois recommandations : faciliter l'accès direct des BPD aux marchés de capitaux, encourager une augmentation maîtrisée de l'effet de levier chez les BPD émettrices, et créer une entité indépendante, un « super-supranational », pour diriger des fonds bien notés vers les institutions de plus petite taille.

Abstract

This paper analyzes the role of capital markets in development finance. It identifies which Public Development Banks issue bonds, examines how and to what extent they leverage their capital, and what insights their market behavior offers.

It uses data from the PDBDatabase (2025) and Bloomberg, covering 522 institutions with combined assets exceeding USD 13.9 trillion as of 2025. Only around one-fourth (139 institutions) access capital markets directly, yet they hold over 88% of sector assets and USD 7.5 trillion in outstanding debt, revealing significant market asymmetries.

Market engagement is notably concentrated in Asia and Europe, while institutions from low- and middle-income countries face considerable barriers. Institutional size strongly influences market access, affecting financial leverage, measured by asset-to-equity ratios, and strategic currency choices: local currency for national institutions versus USD for supranational entities (i.e. multilateral development banks). Overall, the findings emphasize the potential of capital markets to significantly enhance resource mobilization for development, while highlighting pronounced disparities in market access and capabilities across different regions and institution types.

The note concludes by formulating three policy recommendations: expanding direct capital-market access for PDBs, encouraging prudent increases in leverage among existing issuers, and creating an independent capital-markets-dedicated "super-supranational" entity to channel investment-grade funding to smaller institutions.

Introduction

As of May 2025, access to capital markets remains unevenly distributed among development banks worldwide. In particular, institutions based in the Global South often face major barriers when trying to raise funds through bond markets. This is not only due to their financial fundamentals, but also to how the global financial system is structured – notably around asset classes and credit ratings that shape investor behavior. Fixed income markets are segmented into categories such as sovereigns, supranationals and agencies (SSA), corporates, municipals, and financial institutions. The SSA category, which benefits from strong investor demand and investment-grade ratings (BBB- or above), is largely dominated by issuers from high-income countries and multilateral institutions. By contrast, development banks from emerging markets are typically classified under the broad label of “emerging market financials” and often receive speculative-grade ratings (BB+ and below), limiting their appeal to mainstream investors.

This classification has tangible consequences: only a narrow set of specialized funds are mandated to invest in speculative-grade emerging financials. More conservative institutional investors –such as pension funds, insurers, and central banks – are either prohibited from holding such assets or demand significantly higher yields to compensate for the perceived risk. Yet many development banks in the Global South are public policy institutions with strong balance sheets and low historical default rates. The core issue is one of perceived risk: in the absence of a distinct asset class for development banks, these institutions are structurally penalized in market-based financing. Changing investor perceptions around the credit worthiness of development banks from emerging markets is likely to be a slow and uncertain process. As Daniela Gabor (2021) argues [1], these limitations are embedded in what she terms the *Wall Street Consensus* – an emerging development

paradigm that promotes de-risking mechanisms and the creation of standardized, investable asset classes designed to attract institutional capital into development finance.

One proposal is to create a supranational issuer, composed of emerging-market development banks. This entity could issue bonds in the SSA (sovereign, supranational and agency) segment – benefiting from an investment-grade rating and thus more favorable financing conditions– and channel the proceeds to its member institutions. Such an approach would allow smaller development banks to benefit from the credibility and scale effects of a pooled supranational entity, improving their market access and borrowing conditions. However, any effort in this direction requires first a clear diagnostic of the current landscape –which institutions access markets, under what terms, and with what financial implications–, and this is the objective of the present study.

As of May 2025, 522 Public Development Banks (PDBs) and Development Finance Institutions (DFIs) operate across over 155 countries and economies, playing a crucial role in global economic development [2]. Together, these institutions manage assets exceeding \$13.9 trillion (\$22 trillion when including housing finance and pensions entities such as Fannie Mae and Freddie Mac). The diversity of these institutions is striking, spanning supranational, national, and regional development banks, with mandates ranging from broad economic objectives to specialized sectors such as agriculture, climate finance, and small and medium-sized enterprises. They collectively finance approximately 7% of total annual global investment [3] (10% with housing entities), making them key players across the world in mobilizing resources for economic resilience and sustainable development. At the same time, recent United Nations report estimates the financing gap at US \$4trillion for

achieving the Sustainable Development Goals (SDGs)[4], underscoring both the magnitude of this gap and the opportunity for development banks to help bridge it. In this context, recent research highlights how PDBs can leverage long-term funding tools, including sustainable bond issuances, to strengthen their catalytic role in financing just and green transitions [5].

The landscape of Public Development Banks is broad and heterogeneous. To bring analytical coherence to this diversity, we adopt the minimal set of core features proposed by Peking University and the Agence Française de Développement [2,6] : PDBs are legally distinct institutions that pursue public policy objectives and operate with some form of government support, while maintaining relative financial autonomy through access to capital markets or institutional financing, rather than relying exclusively on regular budget transfers.

However, despite their significant economic role, only a small fraction of development banks finances itself through capital markets. Based on our findings, as of 2025, only about one-fourth of PDBs - 139 institutions- had direct market access. These institutions alone accounted for \$7.5 trillion in outstanding debt as of January 2025, with cumulative issuances reaching \$9.6 trillion since 2022. Capital market development banks exhibit a distinct profile: although they represent only one-fourth of all development banks, they hold more than 50% of total development bank assets and are concentrated in just 43 countries and economies. This highlights a profound asymmetry within the development finance

sector, where the largest institutions can leverage their assets to finance large-scale projects, while smaller banks must rely primarily on contributions and operational revenues, limiting their capacity to scale development efforts.

The urgency of mobilizing capital for development worldwide has gained fresh political momentum. In December 2024, the G20 formally endorsed the Roadmap towards Better, Bigger and More Effective Multilateral Development Banks [7], a set of thirteen recommendations that call on shareholders to raise MDB capital. The Roadmap estimates that MDB lending must at least triple by 2030 and that balance sheet optimization alone could unlock an additional US \$357 billion in lending headroom over the next decade.

This study widens the scope beyond MDBs to include every public development bank and development finance institution, regardless of ownership structure. It seeks to analyze capital market institutions, exploring who they are, how they leverage their capital, and what insights their market participation provides for enhancing investment mobilization across all PDBs. In doing so, the note investigates why many PDBs, although legally entitled to issue bonds, remain marginal players in bond markets. Ultimately, the paper argues that strengthening development institutions depends on two complementary levers: expanding capital market access to a broader set of banks (extensive margin), and optimizing the leverage capacity of those already active in the markets (intensive margin).

I – Data Characterization

I.1 – Sources

I.1.1 – The PDBDatabase (2025)

This study uses the Public Development Banks (PDBs) and Development Finance Institutions (DFIs) Database, the world's first comprehensive database of development finance institutions. Originally launched in 2017 by the Institute of New Structural Economics (INSE) at Peking University, the database was later expanded through collaboration with the French Development Agency (AFD). It identifies PDBs worldwide and provides key institutional and financial information, including their mandates, financial indicators, and governance structures. To strengthen the dataset, we manually completed missing data on assets and equity by consulting official institutional reports. We use the march 2025 edition of the PDB Database, where the latest available data are from 2023.

We use five qualification criteria¹ to identify and include PDBs[2]:

1. Being a standalone legal entity,
2. Deploying fund-reflow-seeking financial instruments as their main products and services,
3. Having funding sources that go beyond periodic budgetary transfers,
4. Pursuing a proactive public policy mandate,
5. Being subject to government steering of corporate strategy.

We also chose to exclude entities primarily focused on housing finance in high-income countries and in Gulf countries, as their inclusion could artificially inflate aggregate figures and distort the analysis. The list of excluded and modified PDBs is provided in Table 1 and 2 of the Appendix. Altogether, they represent approximately \$8 Tn in assets. For example, the US institutions Fannie Mae (Federal National Mortgage Association) and Freddie Mac (Federal Home Loan Mortgage Corporation) do not originate loans for development projects but instead purchase mortgages from lenders, pool them into mortgage-backed securities, and sell them to investors [8].

¹ The United States Agency for International Development (USAID) does not qualify as a PDB, as it is a non-autonomous government agency, which primarily provides grants rather than loans. However, with average annual disbursements of \$23 billion since 2001, USAID accounts for the majority of U.S. foreign assistance [9]. We therefore chose to include it in the database to avoid underrepresenting the scale of U.S. development financing.

I.1.2 – Market Data

To complement this dataset, we integrated financial market data to identify and analyze capital market institutions. While financial data on green bonds are accessible through dedicated platforms such as the Climate Bonds Initiative [10], no equivalent centralized database exists for development bond issuances, which led us to manually construct our own dataset from financial market information. Using Bloomberg data from March 2025, we collected detailed information on debt issuance for each institution present in the PDBDatabase (2025), allowing for a more comprehensive analysis of their financing strategies and market presence. This includes insights into their total outstanding debt as of March 2025, along with associated variables such as credit ratings, yields, and currencies of issuance. In parallel, we also gathered available data on sovereign bond issuances corresponding to each institution's country, enabling a comparison between institutional and sovereign borrowing conditions.

It is important to note that our identification of "capital market institutions" is based exclusively on the presence of outstanding debt as of March 2025. Only institutions with active, non-matured issuances are classified as capital market participants. As a result, some institutions—such as the Brazilian Development Bank (BNDES)—do not appear in our list despite past activity in bond markets, simply because all of their previous issuances had reached maturity at the time of data collection. This approach ensures consistency with our objective of analyzing current access to market-based financing, as major issuers tend to operate on a rolling basis, maintaining continuous market presence through recurrent issuance.

I.2 – Description of the PDBDatabase (2025)

Public Development Banks and Development Finance Institutions represent a diverse range of entities that operate across various levels of government and regions worldwide. Of the 522 institutions retained in the dataset, 66.8% (349 institutions) function at the national level, while 22.6% (118 institutions) operate at the subnational level. A smaller proportion, 10.5% (55 institutions), is classified as supranational entities (i.e. multilateral development banks, MDBs), which have a broader regional or global mandate: they operate across multiple countries and are established by agreements between several sovereign states. Figure 1 illustrates how assets are distributed across the different categories.

I.2.1 – Volume Trends

As of 2023, the total assets of PDBs worldwide amount to 14 trillion USD, while total equity stands at \$2.1 Tn ². Its trend over time is depicted in Figure 2. A distinct dynamic is observed between 2019 and 2020, during which total assets increased significantly – primarily driven by government-backed institutions in Europe and the Americas. This surge reflects the countercyclical role of national and subnational PDBs, which expanded their balance sheets to provide critical financial support in response to the COVID-19 economic crisis. In contrast, supranational institutions did not display a comparable increase in assets over the same period, suggesting a more limited balance sheet adjustment to the crisis. This asset increase underscores the countercyclical role of national and subnational [11].

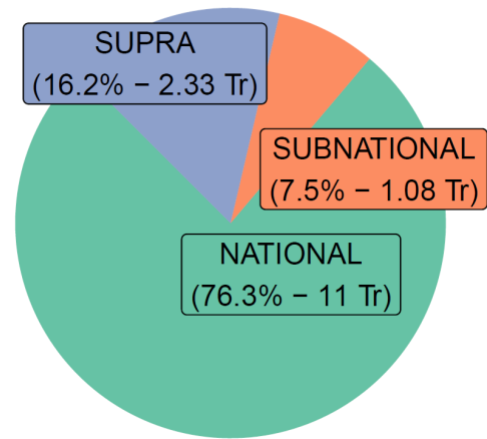


Figure 1: PDBs Assets by Source

Source: PDBDatabase (2025)

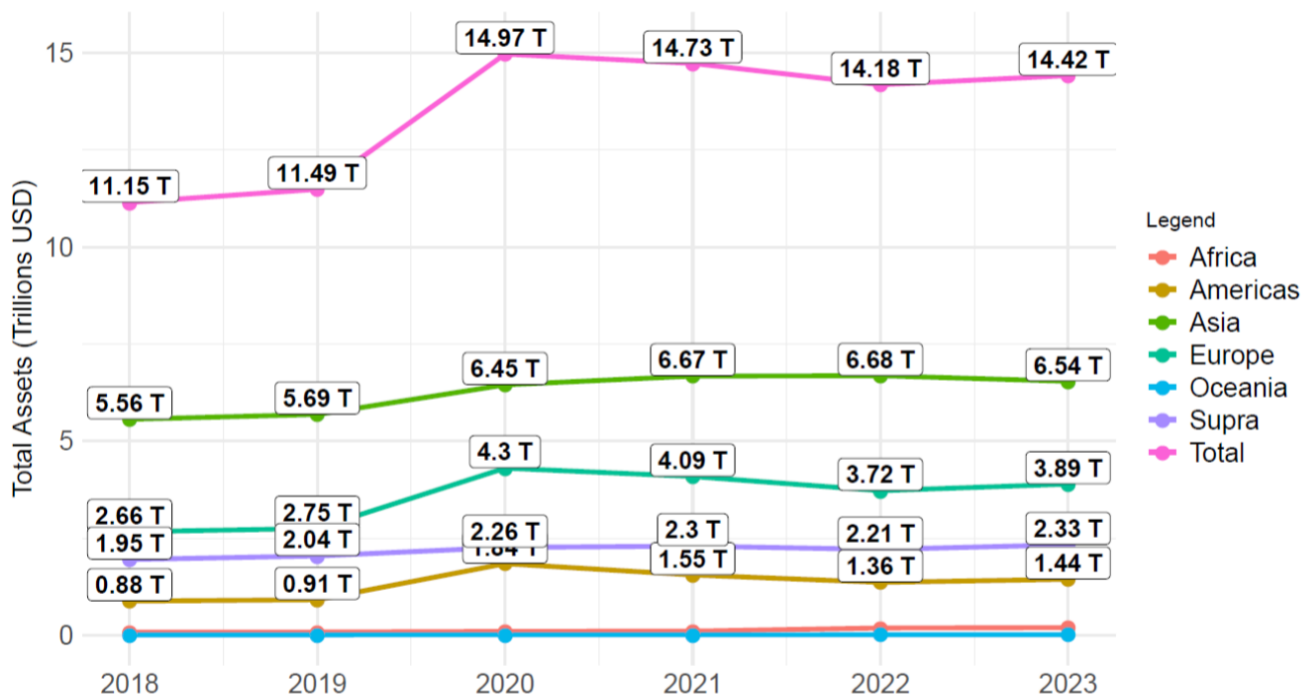


Figure 2: Evolution of Total Assets, by Continent

Source: PDBDatabase (2025)

² Reminder : housing institutions from high-income countries (such as Fannie Mae and Freddie Mac) are excluded.

I.2.2 – Geography of Assets

Public Development Banks (PDBs) are unevenly distributed across the world. As shown in Figure 3, national and subnational development institutions in Asia account for 45.4% of total institutional assets, excluding supranational entities such as the Asian Development Bank, which is categorized separately. Notably, China stands out as the largest global contributor, with assets totaling \$4.8 trillion, representing 34.4% of the world's total—surpassing even a continent as Europe, which holds \$3.7 trillion (27% of total assets).

This uneven distribution creates significant disparities in financial capacity across regions. Africa, for instance, holds only 1.4% of total PDB assets, raising concerns about its ability to finance its own development. While some institutions allocate resources beyond their national borders to support global development objectives —most notably China and supranational entities, which together account for 75% of development assets invested internationally (Figure 4)— this redistribution is not sufficient to bridge the strong imbalances between regions in asset capacity. More information on the intracontinental distribution of PDBs assets is provided in Figure 31 in the Appendix. It reveals a high degree of concentration even within continents, with a handful of countries accounting for the vast majority of regional assets.

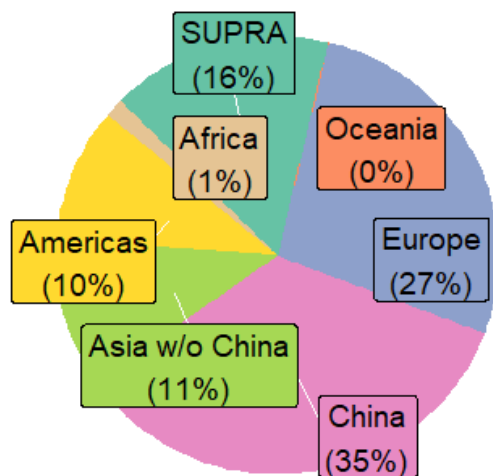


Figure 3: 2023 Asset Distribution of PDBs

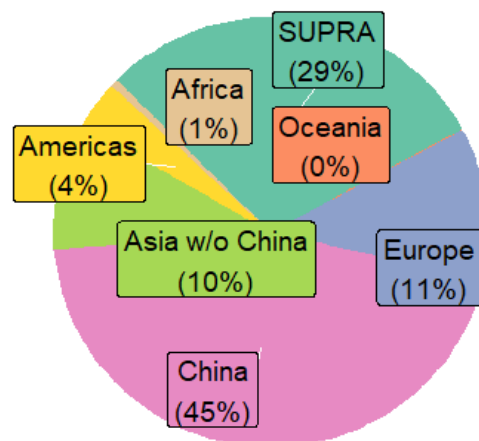


Figure 4: 2023 Asset Distribution of PDBs Investing Internationally

Source: PDBDatabase (2025)

The China Development Bank & The Export-Import Bank of China

The China Development Bank (CDB) is the world's largest development finance institution and the leading Chinese bank for foreign investment and financing cooperation. While most of CDB's loans support domestic projects, the bank began lending for international projects in the early 2000s [12].

Between 2008 and 2021, China's two main development finance institutions—CDB and the Export-Import Bank of China (CHEXIM)—made 1,099 overseas development finance commitments to 100 countries, totaling \$498 billion [12]. This represented 83% of the sovereign lending volume of the World Bank over the same period. Loans were issued across nearly every continent, with significant concentrations in Southeast Asia, Africa, and South America. These institutions' activity has been highly concentrated, with 59% of all commitments —\$296.3 billion—going to the top ten borrowers: Angola, Argentina, Bangladesh, Brazil, Ecuador, Iran, Kazakhstan, Pakistan, Russia, and Venezuela. The top three sectors financed were extraction and pipelines, transport, and power, together accounting for \$331 billion, or 66% of the total.

In recent years, China's overseas sovereign loan commitments have declined steadily. In 2020 and 2021, only 28 loan commitments were recorded, amounting to 10.5 billion—the lowest level in years. This decline aligns with a new approach emphasizing smaller, and more targeted projects [13].

II – PDBs Accessing Financial Markets

This section presents the main innovation of our study: the characterization of development institutions that access financial markets. Unlike commercial banks, typical PDBs do not collect deposits and instead rely on four primary sources of funding: equity capital, credit lines from other financial institutions (often other PDBs), government transfers, and bond issuance. The latter, which requires access to capital markets, is essential for expanding the institution's balance sheet, but remains unavailable to many.

To explore this dimension, we used Bloomberg data to match institutions from the PDBDatabase (2025) with their bond issuances, thereby constructing a dedicated dataset of PDBs operating in financial markets. Our objective in this section is to identify which types of institutions issue debt on financial markets and to analyze the characteristics of their issuances.

II.1 – Typology of Actors

II.1.1 – Institutional Characteristics

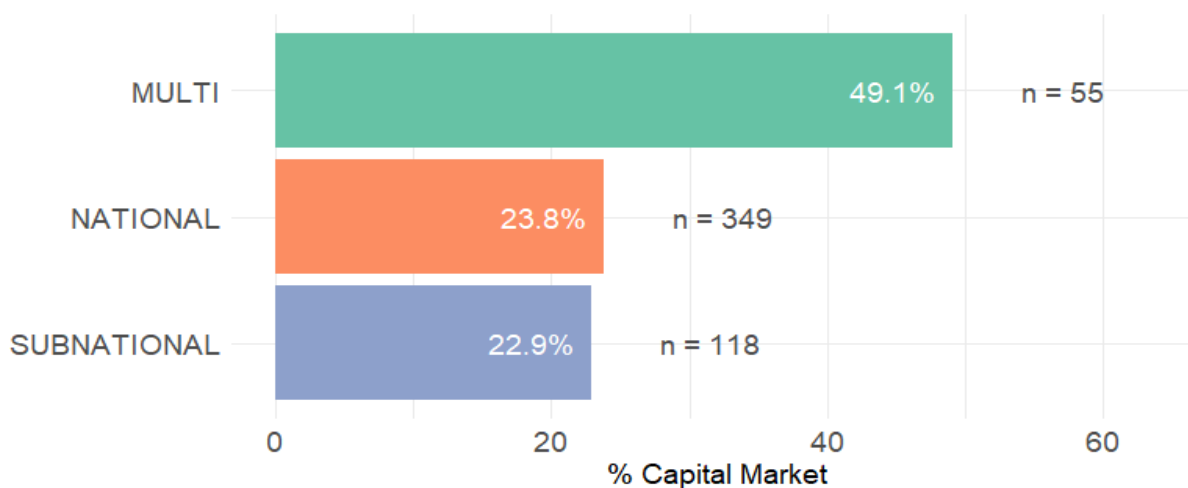


Figure 5: Share of Capital Market PDBs by Institution Type (number of institutions)

Source: PDBDatabase (2025) and Bloomberg (March 2025)

Among the 522 PDBs in the PDBDatabase (2025), only 139 –representing 27%– finance themselves through capital markets, having issued an outstanding amount of \$7 Tn as of May 2025. Of this amount, \$1.33 Tn was issued in 2024, \$1.18 Tn in 2023, and \$1 Tn in 2022 – figures that include only debt that remains outstanding, excluding issuances that have already matured. Capital market participation varies significantly by institutional type:

supranational entities have far greater access to capital markets than national or subnational institutions (Figure 5). Within the latter group, a clear positive correlation emerges between asset size and capital market participation: larger institutions are those that issue the most bonds (Figure 6).

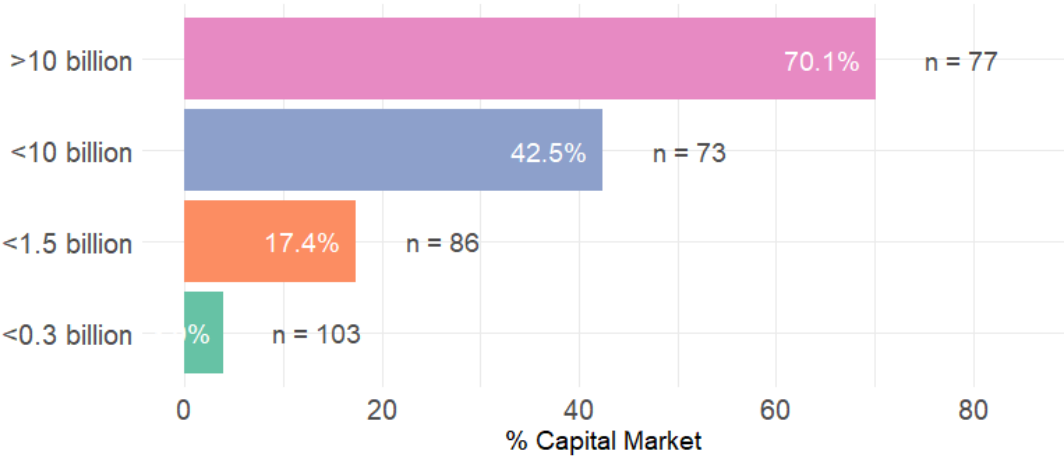


Figure 6: Share of Capital Market PDBs by Asset Size in National and Subnational PDBs (number of institutions)

Source: PDBDatabase (2025) and Bloomberg (March 2025)

This distinction between capital market participants and others is crucial, as accessing bond markets provides these institutions with an additional source of funding, allowing them to complement traditional financing mechanisms such as government transfers, and financial result. Capital markets are therefore a key instrument for mobilizing private sector resources. In contrast, the 73% of PDBs that don’t access capital markets must rely exclusively on their equity, limiting their financial flexibility and ability to scale their operations. The ability to issue bonds thus represents a strategic advantage, enabling institutions to expand their lending capacity, smooth out funding cycles, and reduce reliance on a single source of capital [14].

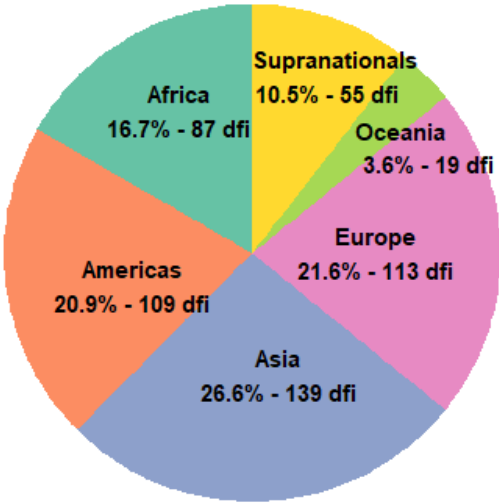
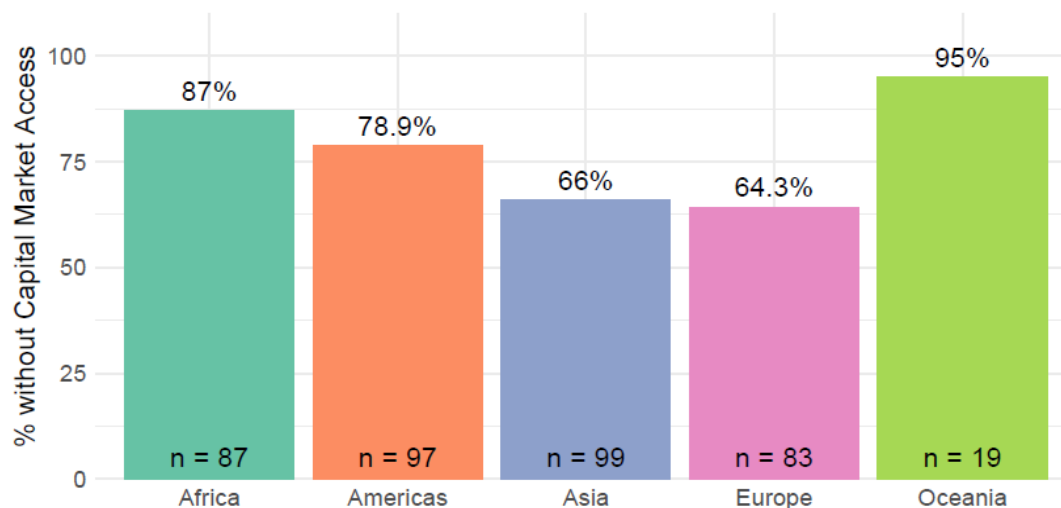


Figure 7: Number of Capital Market PDBs

Source: PDBDatabase (2025) and Bloomberg (March 2025)

Figure 8: Share of Institutions without Capital Market Access by Continent (number of institutions)

Source: PDBDatabase (2025) and Bloomberg (March 2025)



II.1.2 – Geography and Institutions

Access to capital markets requires either the existence of functioning and liquid domestic markets –a condition that is far from universal–, or access to international capital markets at a competitive cost, which is often hindered by the margins charged by financial intermediaries. Strengthening domestic markets is therefore not only the most direct path to expanding access, but also a means of enhancing financial sovereignty. PDBs can support this effort by participating in market activity, fostering financial infrastructure, and enhancing investor confidence. However, such dynamics remain highly uneven across the globe. Supranational, European and Asian institutions are overrepresented among those with capital market access (Figure 7), reflecting more advanced financial systems and greater investor confidence. In contrast, many institutions in Africa, Latin America, and smaller economies continue to operate in underdeveloped or fragmented financial environments, underscoring where efforts to build and deepen capital markets are most urgently needed.

This disparity is particularly evident at the regional level: supranational entities, as well as European and Asian government agencies, are significantly overrepresented among the PDBs that have access to capital markets, benefiting from well-developed financial markets and strong investor confidence (Figure 9).

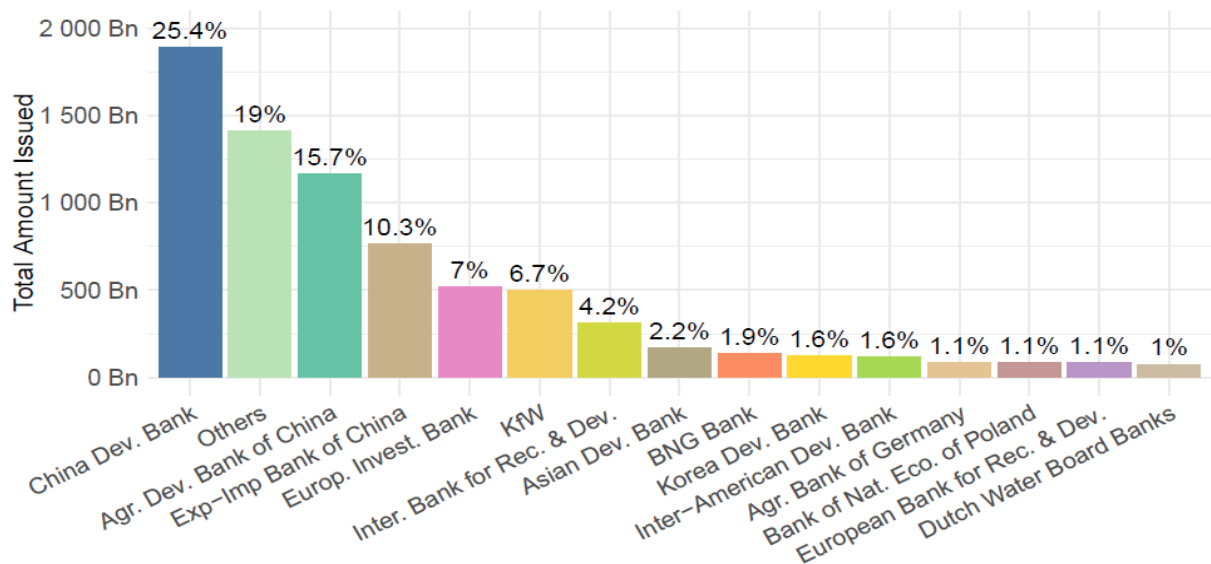


Figure 9: 03/2025 Outstanding Amount of Development Debt by Institution (>1% of total in Other)

Source: Bloomberg (March 2025)

When analyzing the total outstanding debt issued by development institutions (Figure 10), China emerges as the dominant issuer, accounting for 51.7% of the total —more than twice the amount issued by supranational entities. It is followed by Germany, the Netherlands, Korea and France, although their issuance volumes are significantly smaller and not directly comparable to China's.

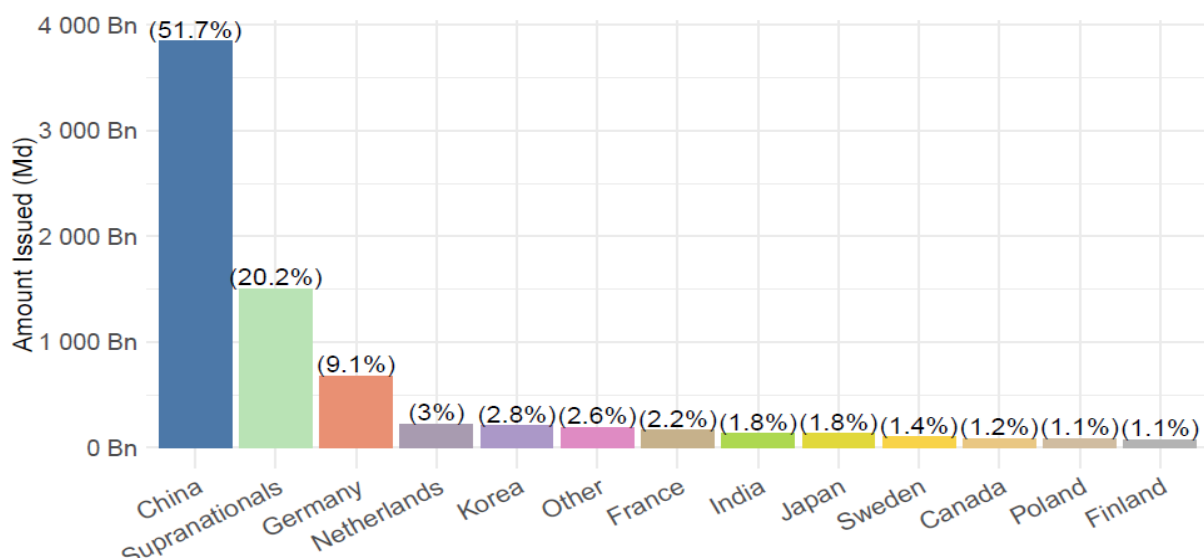


Figure 10: 03/2025 Outstanding Amount of Development Debt by Country (>1% of total in Other)

Source: Bloomberg (March 2025)

Once again, Asia and Europe stand out as the primary regions for debt issuance (Figure 11). Not only are their PDBs more numerous among those accessing financial markets, but they also issue significantly larger amounts compared to their counterparts in other regions. This suggests that, beyond having greater access to bond markets, these institutions leverage them more intensively as a funding source.

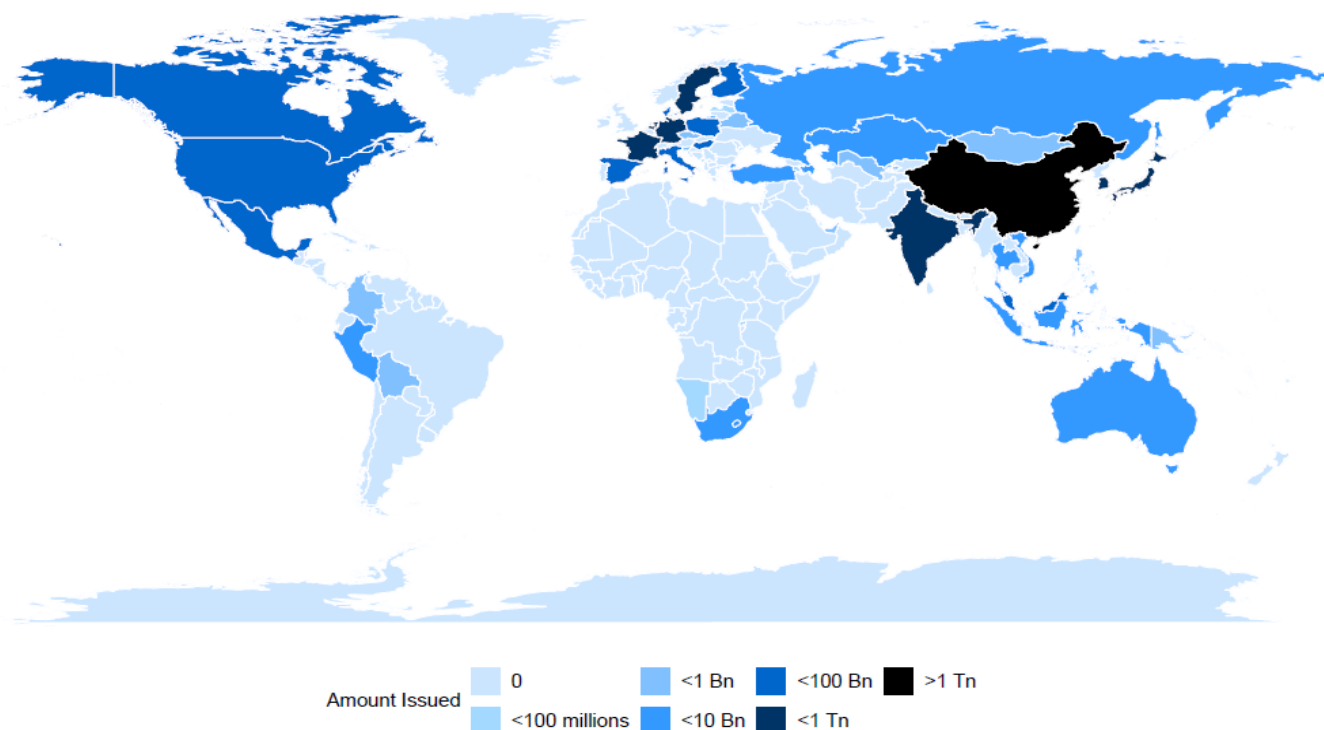


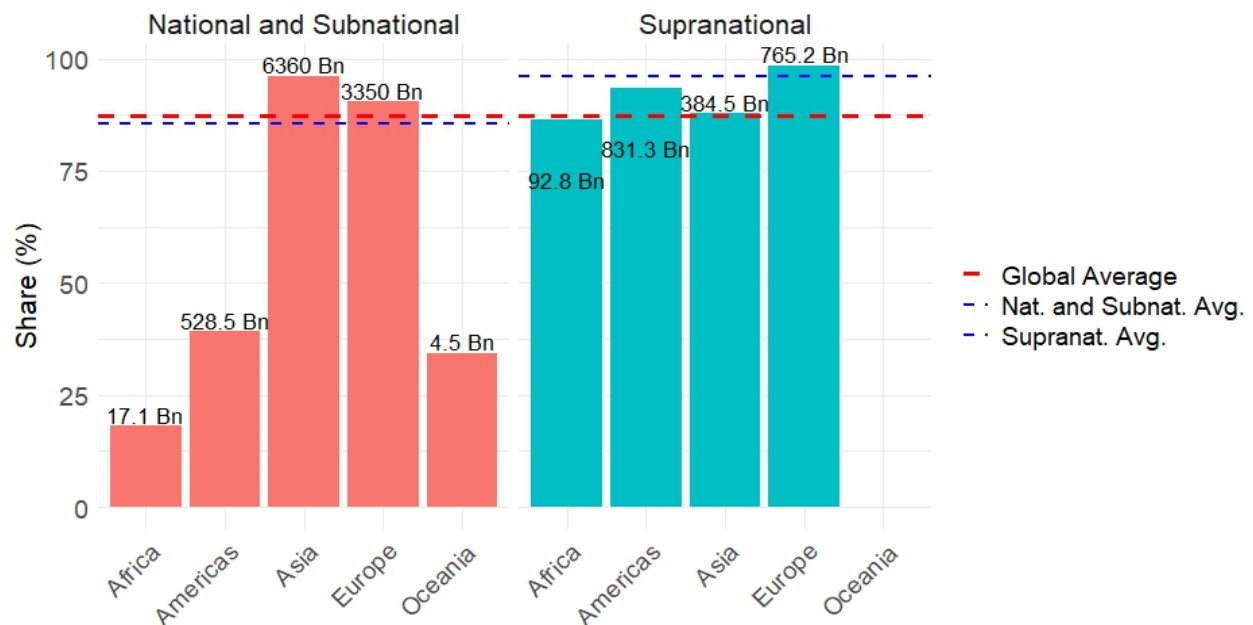
Figure 11: Q3/2025 Outstanding Government Amount

Source: Bloomberg (March 2025)

This pattern is further reinforced by the extreme concentration of debt issuance among a handful of institutions (Figure 10). The dominance of just four issuers —the China Development Bank, the Agricultural Development Bank of China, the Export-Import Bank of China, and the German KfW— shows that not only do Asia and Europe lead in market access, but the bulk of debt issuance within these regions is concentrated in a few powerful entities. Meanwhile, issuers from Africa and the Americas, even when they do access financial markets, tend to issue at a much smaller scale. This reflects deeper structural differences, such as degree of sovereign support, financial model, or disparities in financial market development (case for Africa or South America), which ultimately shape the ability of PDBs to tap into bond markets at scale [15].

Figure 12: Share of Capital Market Institutions' Assets in Total by Continent

Source: PDBDatabase (2025)



The significant size of capital market institutions becomes evident when comparing their share of total assets. Figure 12 shows the proportion of capital market institutions' assets relative to the total assets of all PDBs, by continent. Although they represent only 26% of PDBs, they account for 88% of total assets, with significant regional disparities: in Asia and Europe, capital market institutions account for a significantly larger share of total development finance assets within their respective region, in stark contrast to other continents where such institutions play a much smaller role. Among supranationals, the share reaches 93%, with only 49% of them having access to capital markets.

II.2 – Currency Distribution of Debt Issuance

A closer look at capital market activity shows clear differences in the currencies used for bond issuance across regions and institutions. A key trend is the strong reliance on local currencies by national and subnational PDBs, which are issuing a substantial share of their debt in domestic currency. This pattern is particularly evident among Chinese institutions – world’s largest issuers—, which issue almost exclusively in their local currency, the Chinese yuan (see Figure 13). Likewise, many European countries, Korea or Japan also rely heavily on their domestic markets, issuing predominantly in local currency. The currency distribution of the twelve largest national and subnational issuers is presented in Figure 32 of the appendix.

This strategy offers clear advantages: it eliminates foreign exchange risk and enhances access to a stable domestic investor base. As such, it contributes to mitigating currency mismatch, i.e. the imbalance between the currency of liabilities and that of assets. The data suggest that many PDBs pursue a relatively prudent approach in this regard.

Yet this apparent caution contrasts with the situation faced by many institutions in lower-income countries. There, limited domestic market depth often leaves little choice but to borrow in foreign currency, exposing issuers to substantial exchange rate risk [16]. This creates a paradox: the institutions most vulnerable to currency mismatches are also those least able to avoid them, reinforcing structural financial vulnerabilities.

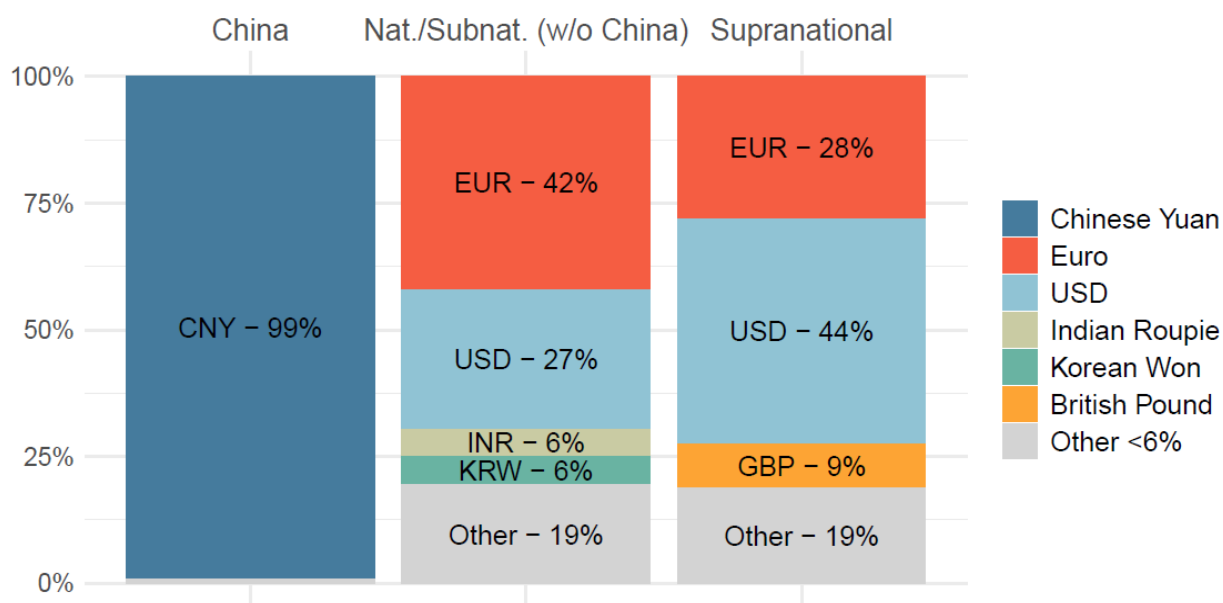


Figure 13: Distribution of Currencies in National and Subnational Issuances

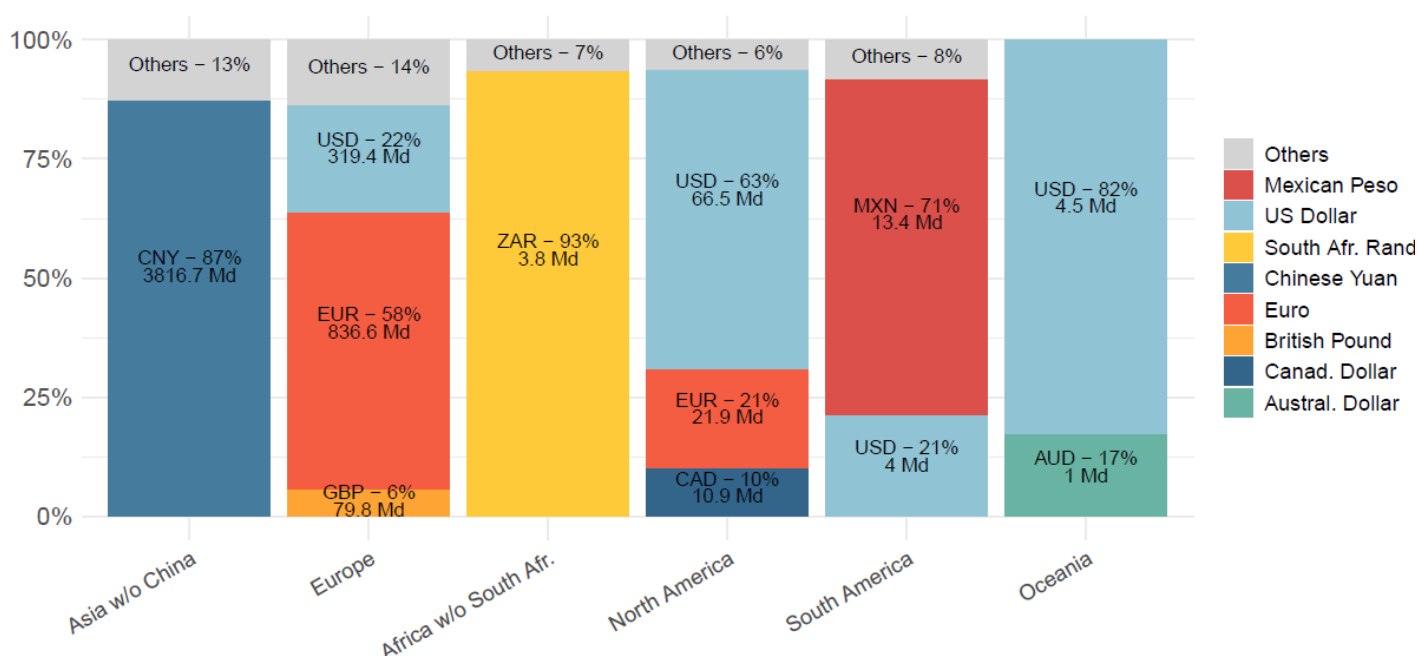
Source: Bloomberg (March 2025)

In contrast, supranational institutions tend to issue extensively in US dollars, leveraging the currency's global liquidity and the depth of dollar-denominated capital markets, which enables broader access to international investors. While euro-denominated issuances represent 28% of total supranational issuances (Figure 13), this is largely attributable to the European Investment Bank (EIB), which alone has issued the equivalent of USD 299 billion in euros (see Figure 33 in the appendix), accounting for 20% of all supranational issuances. Excluding the EIB –and to a much lesser extent the Council of Europe– all other supranational entities issue predominantly in US dollars, regardless of their geographic location (see Figure 33 in the appendix).

Some institutions adopt more diversified currency strategies. For example, the African Development Bank issues across a range of currencies, including USD (the largest share, 47%), AUD, EUR, GBP, and ZAR, reflecting a balanced approach between global reach and regional relevance. Detailed information on the distribution of issuance currencies by the top twelve supranational entities is available in Figures 33 in the appendix.

Figure 14: Distribution of Currencies in the Outstanding Amount (/Continent)

Source: Bloomberg (March 2025)



II.3 – Credit Ratings and Maturity Structure of Issuances

The financial ratings of these institutions are closely tied to their institutional status. Government-backed entities typically carry the credit rating of their respective sovereigns. However, not all bond issuances benefit from the same level of state support. Some are backed by explicit guarantees, while others rely solely on implicit backing through statutory liability regimes or the moral and financial responsibility of the shareholder³.

Credit Rating Mechanisms for National and Subnational Development Banks

Credit ratings are formal evaluations of an issuer's creditworthiness – its ability to meet debt obligations. Issued by the major agencies (S&P, Moody's, Fitch), these ratings apply to all entities seeking to raise capital on financial markets – from corporations and sovereigns to, of course, public development banks (PDBs). Letter-grade ratings rank default risk, with the highest grades (AAA/Aaa) indicating very strong credit quality, while lower grades (BB/Ba and below) reflect elevated risk.

National and subnational development banks in emerging markets are assessed under this same framework. However, a development bank's rating usually cannot exceed its government's sovereign rating (the so-called "sovereign ceiling") [17]. Even a strong state- or region-backed bank will be capped by the country's weaker national score. For example, South Africa's development bank (DBSA) has a 2023 national-scale rating of AA and a 2023 Moody's foreign-currency rating of Ba3 [18], roughly corresponding to the country's sovereign grade at that time. In practice, even a well-run regional development bank may be rated only BB – if its country's government bonds are rated BB.

Credit rating changes are intended to reflect an issuer's evolving financial situation – typically responding ex post to improvements or deteriorations in credit fundamentals. However, these adjustments can also have self-reinforcing effects. A downgrade, for instance, may raise borrowing costs, and undermine investor confidence, thereby aggravating the financial stress it was meant to reflect. This dynamic is particularly pronounced in emerging markets, where access to capital is more sensitive to perceived risk [19]. In this sense, ratings are not only descriptive – they can also shape financial trajectories.

³ Case of the French Development Agency (AFD) for example. As a public industrial and commercial institution (EPIC) fully owned by the French State, AFD benefits from an implicit guarantee through its legal status and the State's role as sole shareholder and backstop.

This distinction plays a crucial role in shaping investor perception and pricing, and can significantly influence an institution's effective access to capital markets.

These variations in institutional backing and creditworthiness are reflected in the global distribution of financial ratings among PDB issuers. A large share of issuances are rated in the 'A' category, largely driven by the weight of Chinese institutions and China's sovereign rating (A1 by Moody's, A+ by S&P and Fitch, as of 2025 – see Figure 15). In contrast, supranational institutions generally benefit from higher credit ratings, with many achieving AAA status (Figure 16). This superior credit quality significantly enhances their ability to access capital markets on favorable terms, contributing to lower borrowing costs and broader investor appeal.

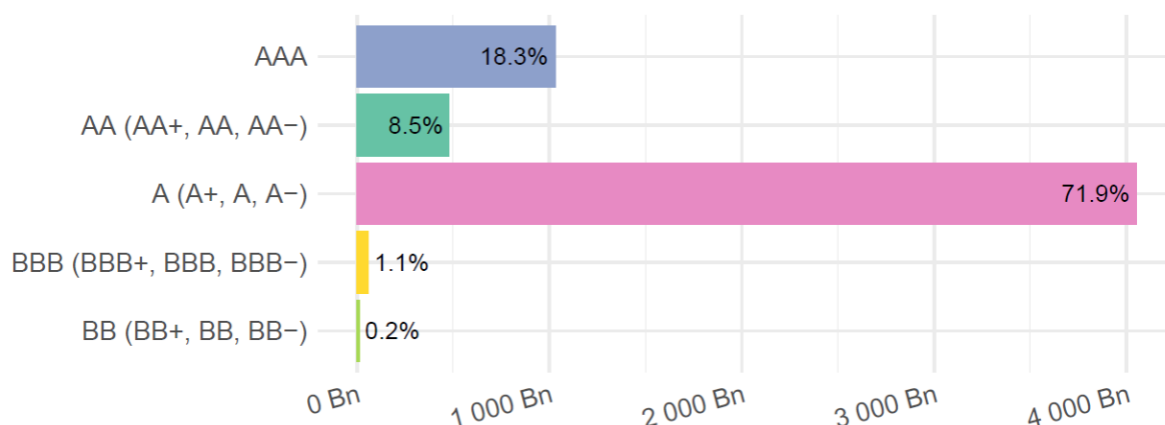


Figure 15: National and Subnational Issuances by Credit Rating

Source: Bloomberg (March 2025)

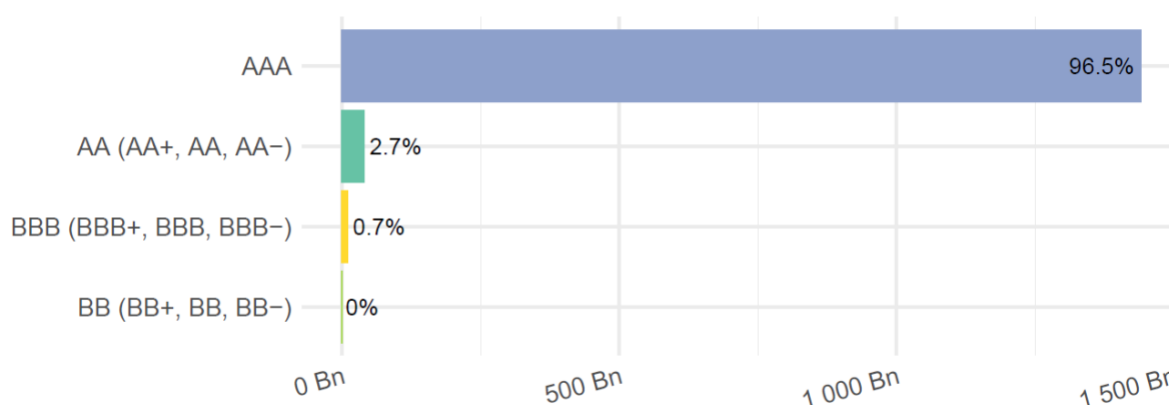


Figure 16: Supranational Issuances by Credit Rating

Source: Bloomberg (March 2025)

In terms of maturity, Figure 17 shows that issuance patterns are broadly similar across national, subnational and supranational institutions. National and sub-national agencies tend to issue across a wide range of tenors, with a clear concentration at standard benchmark maturities — 5, 10, 15, 20, and 30 years. Supranational institutions, by contrast, display a more continuous distribution across maturities, with fewer pronounced peaks around key tenors such as 5, 10, and 30 years. The maturity distribution of the six largest supranational entities is presented in Figure 34 in the appendix. The patterns are very similar across institutions, with comparable issuance behaviors along the maturity spectrum.

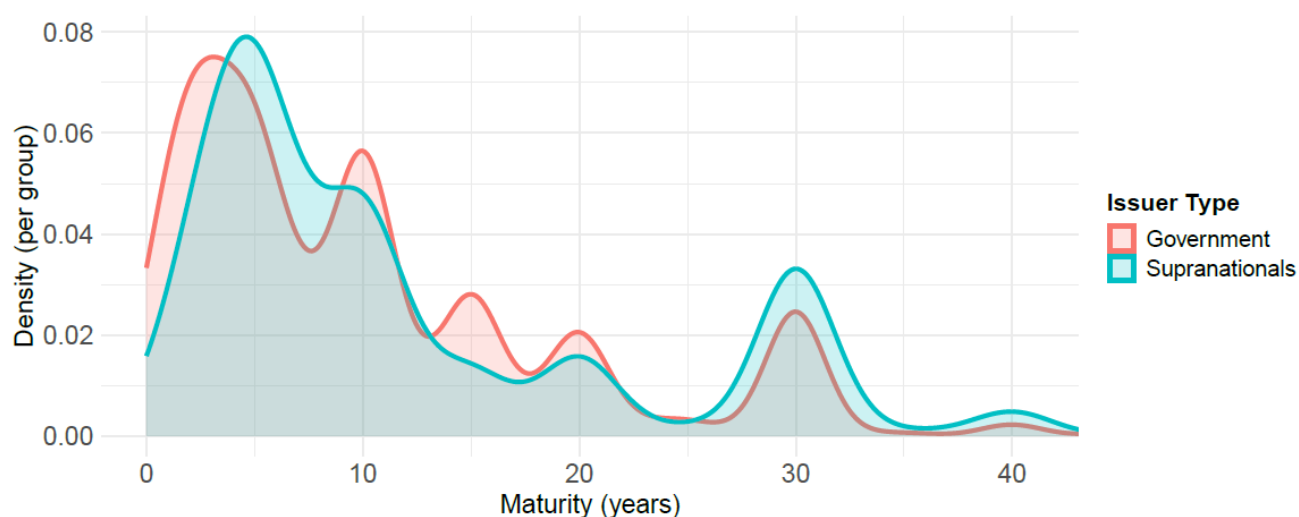


Figure 17: Supranational Issuances by Credit Rating

Source: Bloomberg (March 2025)

Note: Government issuances refers to national and subnational bonds

When breaking down national and sub-national issuance by continent (Figure 18), the same core maturities — 5, 10, 15, 20, and 30 years— consistently appear. However, distinct regional patterns emerge: Asian issuers tend to spread issuance more evenly within the very short-term range (0–5 years) ; North America stands out at the ultra-short end (≤ 1 year) and again around the 15–20 year mark ; while Europe adopts a broader mix, frequently issuing at “non-round” tenors such as 7, 12, or 18 years, and issuing in significant volumes at the 30-year maturity.

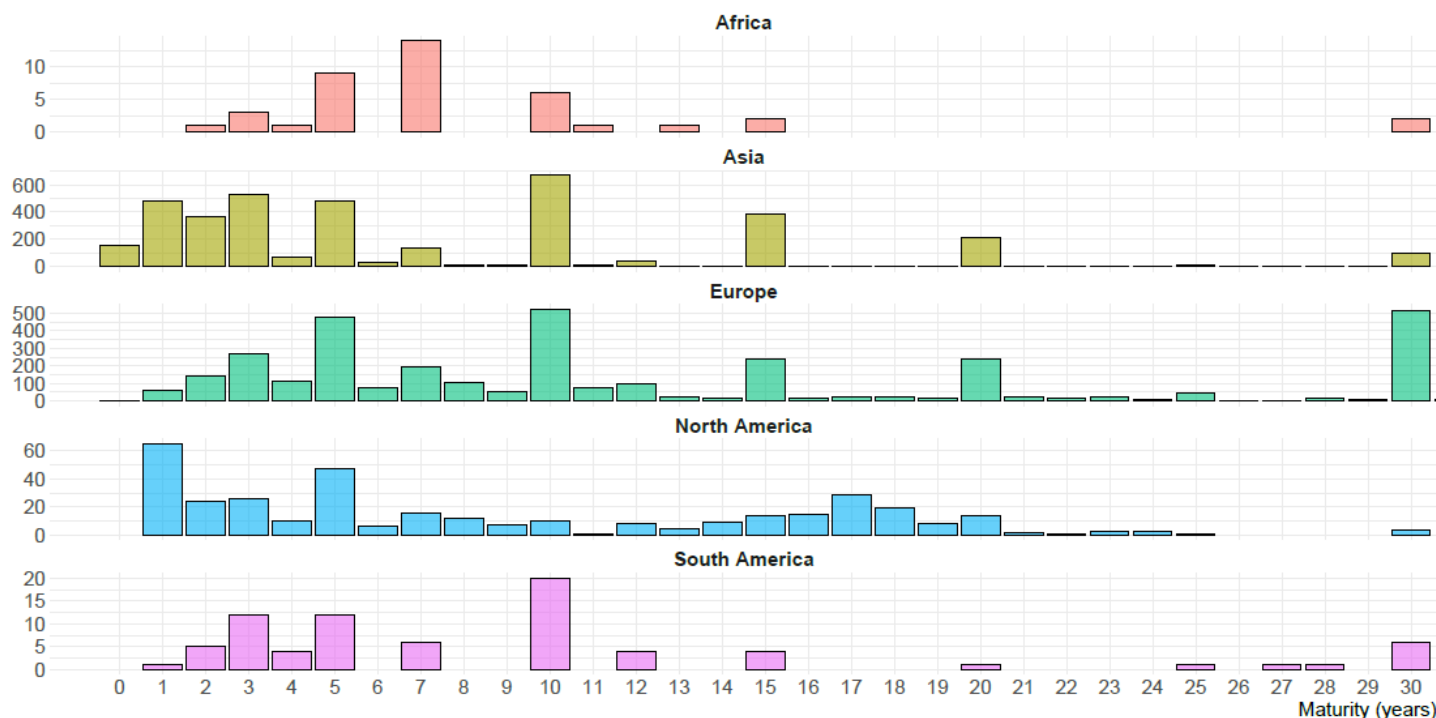
Apart from these regional nuances, there is no major structural difference between issuer types: all of them tend to gather around a small set of familiar maturities and show only minor differences from one market to the next.

We also examined the distribution of maturities by institutional mandate, as shown in Figure 35 in the appendix. No major patterns emerge across categories, with the exception of the group of INTL institutions (international financing of private sector development),

which consists of 10 entities and displays a notably homogeneous issuance profile, concentrated between 0 and 20 years.

Figure 18: Maturity Distribution of Government Issuances by Continent (Number of Bonds)

Source: Bloomberg (March 2025)



II.4 – Specifying the Scope of Development Objectives

While earlier sections included institutions, operating in both developed and developing countries, our focus here is narrower: we concentrate on institutions whose activities target poverty reduction in lower-income countries. We are therefore interested in institutions that operate in low- and middle-income countries, as classified by the World Bank for fiscal year 2024 [20]. Specifically, we retain PDBs owned by and operating in low- and middle-income countries, as well as those from high-income countries that invest abroad. Although it is not always possible to determine the exact destination of these foreign investments, we observe two categories of institutions that systematically engage in international development finance: export-import banks and development banks with a dedicated mandate towards poverty reduction or international cooperation, such as AFD or the JICA. We chose to include both in our development category. While development banks typically fall clearly within our scope, export-import banks are retained despite a more indirect fit, given their frequent involvement in cross-border financing and the difficulty of drawing a strict operational boundary.

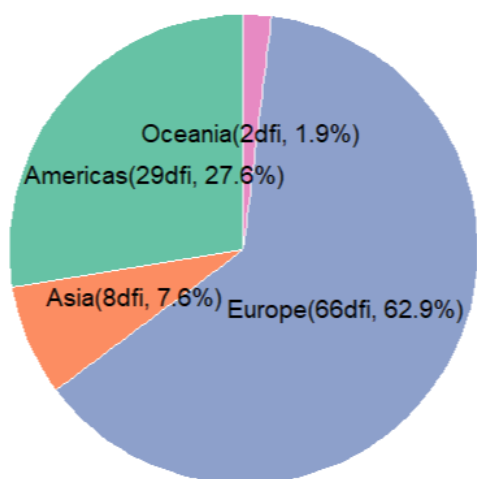


Figure 19: Number of Institutions Not Targeting Low- and Middle-Income Countries

Source: PDBDatabase (2025)

We also choose to treat China as a high-income country for the purpose of this selection. Although China is classified by the World Bank as an upper-middle-income country, its unique position as the world's largest bilateral lender and its predominant focus on domestic financing justify a differentiated treatment. To better align with our poverty-focused definition of development, we therefore include only those Chinese institutions that operate abroad in this section.⁴

Once this selection is applied, the sample of development institutions is reduced to 417 entities —105 institutions are excluded— representing a total of 8.66 billion USD in 2022 assets, or 61% of the total assets in our PDBDatabase (2025). Among the institutions that are excluded —those that do not target

low-income countries— we primarily observe European and some American entities with a domestic mandate (cf Figure 19). This outcome is consistent with our selection criteria, which exclude institutions from high-income countries when their operations are limited to their own domestic markets, while retaining all institutions based in low- and middle-income countries, regardless of their geographical scope of activity.

As expected, when examining the spatial distribution of assets held by institutions aligned with our definition of development, we observe a markedly different geographical landscape (see Figure 20 and 21). Europe and the Americas largely fade from the picture, while Asia continues to hold a dominant position. This is primarily driven by the presence of major Chinese development banks with an

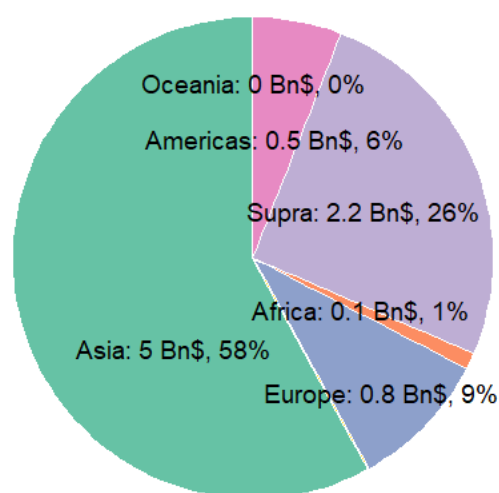


Figure 20: Assets Matching our Development Criteria

Source: PDBDatabase (2025)

⁴ For a thorough analysis regarding the assessment of Chinese development co-operation financial flows : *China's Development Co-operation*, OECD Working Paper [21]

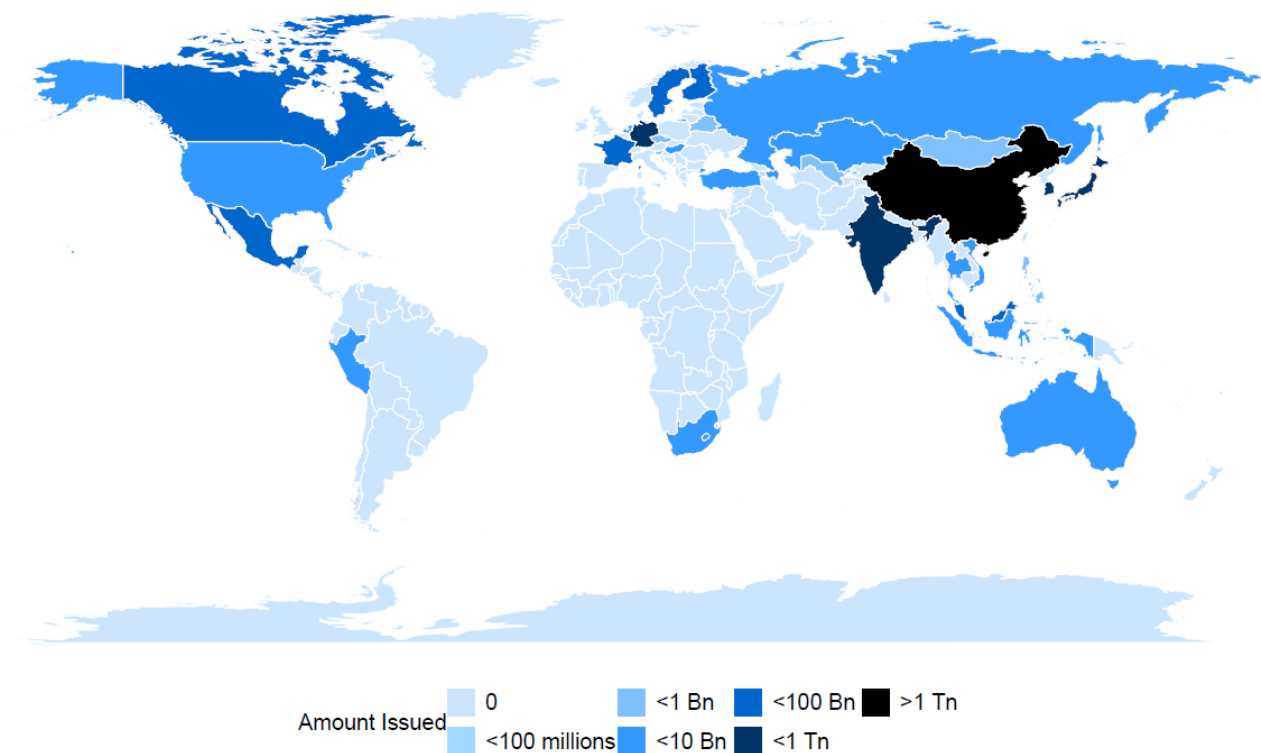
international mandate, such as the China Development Bank and the Export-Import Bank of China.

Among the institutions aligned with our definition of development —those targeting low- and middle-income countries— only 83 out of 417 (approximately 19%) access capital markets. This proportion is notably lower than that observed among institutions outside our development scope, where 34 out of 105 institutions (approximately 32%) issue debt on capital markets.

This discrepancy is largely explained by the fact that government-backed institutions in lower-income countries often face structural barriers to accessing capital markets, including weaker credit ratings, limited market depth, and underdeveloped financial infrastructure.

Development-oriented institutions that do access capital markets account for a substantial share of total issuance. They represent 5.3 trillion USD in outstanding debt, equivalent to 72% of the total outstanding debt issued by all PDBs in the database (7.5 trillion USD). In other words, a significant portion of capital raised through bond markets by public development institutions is channeled through actors that target low- and middle-income countries. This stock of outstanding debt thus constitutes the real financial leverage available to support development goals within these regions. It also underscores the critical role of market-based financing in scaling up development efforts, particularly when concessional resources are insufficient or declining.

Figure 21: Outstanding for Low- and Middle-Income Country Development
Source: Bloomberg (March 2025)



III – Leveraging Capital for Development

In the previous section, we identified which institutions tap into capital markets, thereby gaining access to broader sources of funding. However, access alone does not fully capture an institution's financial capacity. What also matters is the extent to which this access is used, namely, how much debt is actually raised. In this regard, financial leverage plays a pivotal role: by increasing their debt relative to equity, institutions can significantly scale up the volume of assets deployed for development. Assessing leverage is therefore essential to understanding how institutions transform access to capital into operational capacity.

In this section, the Asset-to-Equity ratio is used as a proxy to evaluate the financial leverage of PDBs. It reflects the extent to which an institution finances its assets through equity versus debt. A higher ratio generally indicates a greater reliance on borrowed capital relative to own funds, suggesting a more expansive leveraging strategy to increase financial capacity. Conversely, a lower ratio implies a more conservative capital structure, with a stronger equity base.

To support this analysis, the PDB&DFI Database was manually completed using publicly available information. As a result, coverage for this indicator reached a relatively high level: only 35.6% of values were missing in 2022 and 41% in 2023. These rates are particularly encouraging given the heterogeneity of reporting practices across institutions. As shown in Table 3 (Appendix), however, missing values are unevenly distributed across regions and ownership categories. In particular, Africa and Asia account for a significant share of the missing values, reflecting limited availability of balance sheet data in public sources.

To ensure consistency in the analysis and limit the impact of extreme values, the Asset-to-Equity ratio was trimmed to retain only observations between 0 and 100. Values falling outside this range were excluded, as they correspond to a small number of institutions with atypical financial structures.

Specifically, negative values were observed for two U.S. institutions: the Export-Import Bank of the United States and the U.S. Small Business Administration. These cases likely reflect specific institutional characteristics and were excluded from the sample. At the upper end of the distribution, ratios above 100 were recorded for two European institutions: the Wirtschafts- und Infrastrukturbank Hessen and the Nordic Development Fund. These unusually high values likely reflect distinctive capital structures or balance sheet practices, which diverge from the general profile of development banks and therefore were excluded from the comparative analysis.

The mean Asset-to-Equity ratio stands at 7.1 for 2023 (median=3.3, Q1= 1.5, Q3= 8.3), though values vary widely across institutions, as we will show below.

Key Capitalization Measures for MDBs by Rating Agency

- ❖ **Moody's:** Uses a leverage ratio as the primary capital adequacy metric for multilateral development banks. It is defined as development-related assets and liquid assets rated A3 or lower, divided by usable equity, where usable equity is total shareholders' equity excluding callable capital [22]. A lower leverage ratio (i.e. more equity relative to assets) indicates a stronger capital position.
 - *Example:* Moody's reports that IDA's 2023 leverage ratio remains very low, well below the 2.5x median for Aaa-rated peers [22].
- ❖ **S&P Global:** Uses a Risk-Adjusted Capital (RAC) ratio, which measures an MDB's total adjusted capital relative to its risk-weighted assets [23]. S&P applies MDB-specific adjustments in this framework – for example, large single-borrower exposures are offset by the benefits of preferred creditor status (reflecting the strong sovereign repayment record to MDBs). Exceptionally high RAC ratios denote very robust capitalization; S&P has noted that a top-rated MDB could face rating pressure if its post-adjustment RAC falls below roughly 23% [24].
 - *Example:* In its 2024 analysis, S&P calculated IDA's RAC ratio at 62%, one of the highest in the sector [23].
- ❖ **Fitch Ratings:** Uses two key capital metrics for MDBs. The Equity-to-Adjusted Assets (E/A) ratio is equity divided by adjusted total assets, with off-balance-sheet guarantees included in the asset base. The Usable Capital/Risk-Weighted Assets (FRA) ratio is defined as usable capital (excludes callable capital) over risk-weighted assets. Fitch's criteria consider an E/A above 25% and an FRA above 35% as indicative of "excellent" capitalization levels [25].
 - *Example:* Fitch reports that IDB Invest's 2023 E/A ratio stood around 29%, and its FRA exceeded 40%, placing it in the top assessment category for capital adequacy [25].

In this paper, we adopt a capitalization metric applicable to all development institutions –multilateral, national and subnational– based on the ratio of total assets (which are, by mandate, development-oriented) to equity. This measure is conceptually aligned with Moody's leverage ratio, as it captures the extent to which equity supports the institution's development-related exposures. By construction, the Asset-to-Equity ratio is always greater than one under this metric, and a ratio of two corresponds to 100% leverage.

III.1 – Variation in Leverage by Ownership and Region

In terms of level of ownership, Figure 22 reveals a clear increase in variability as institutions move from multilateral to national and then to subnational levels. Subnational entities exhibit significantly greater dispersion in their Asset-to-Equity ratios compared to other ownership types. The interquartile range for subnational institutions is nearly five times larger than that of multilateral institutions, indicating a much broader diversity in financial structures and leverage practices at the local or regional level.

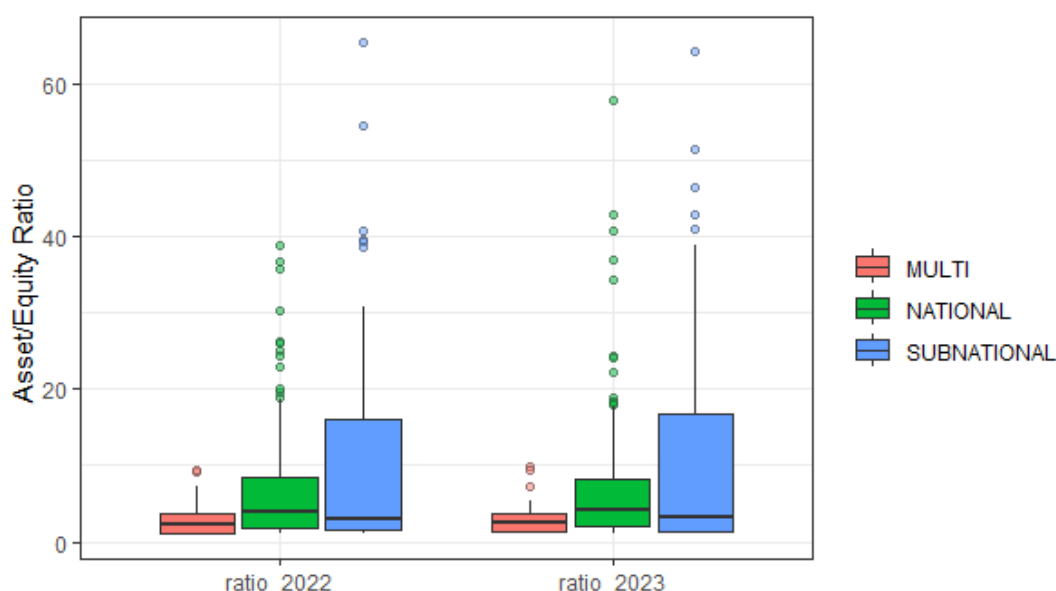


Figure 22: Boxplot of 2022 Assets/Equity Ratio by Institution Type

Source: PDBDatabase (2025)

This pattern is also reflected in the average and median Asset-to-Equity ratios across ownership types. For multilateral institutions, the mean is 8.4, while the median is significantly lower at 2.4. Similarly, national institutions show a mean of 6.5 and a median of 3.7, and subnational institutions exhibit the highest mean at 15.9, with a median of 2.6. In all three categories, the substantial gap between the mean and the median indicates a positively skewed distribution, likely driven by a small number of highly leveraged institutions that pull the average upward.

These findings suggest that, while most institutions maintain relatively moderate leverage levels, a few outliers with particularly active financial structures distort the overall picture. This is especially notable among subnational entities, where a handful of institutions appear to rely heavily on debt relative to their equity base.

Interestingly, multilateral institutions –despite having substantial financial resources– tend to make relatively limited use of leverage. This may reflect a more conservative approach to capital management [26], grounded in their reliance on member state contributions as a primary source of equity, rather than on external borrowing.

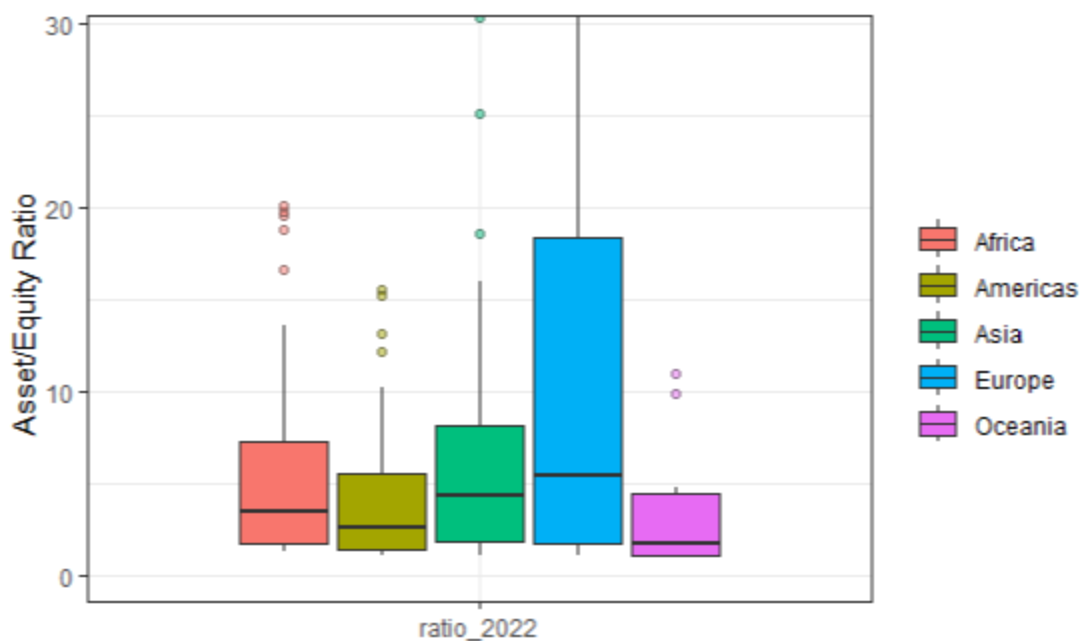


Figure 23: Boxplot of 2022 Assets/Equity Ratio by Continent for National and Subnational Entities

Source: PDBDatabase (2025)

Figure 23 confirms the previously noted regional disparities. African PDBs have among the lowest levels of capital leverage, with a median ratio of 3.0 (mean of 5.1), which likely reflects constrained access to debt markets. A similar pattern is observed among Oceanian institutions (median ratio of 1.6, mean of 3.4), although the sample size is smaller. American and Asian PDBs display relatively modest median ratios – 2.4 and 3.7, respectively (mean: 2.8 and 6.1)– suggesting moderate use of leverage, although Asian institutions appear slightly more active on average and include a few notable outliers with particularly high leverage. Europe, with a median ratio of 3.7 (mean of 18.6), stands out as by far the most active continent in terms of equity mobilization. For readability, the y-axis of the boxplot was capped at a ratio of 30, yet the actual distribution extends up to 60. This is largely driven by a cluster of highly leveraged institutions in Germany, along with, to a lesser extent, those in the Netherlands, Sweden, and France.

III.2 – Leverage, Financial Size, and Market Access

Although both level of ownership and geographic region are relevant explanatory factors for differences in asset/equity ratios across Public Development Banks, institutional size proves to be another significant determinant. Figure 24, where ratios are capped at 20 for better readability, reveals a strong positive relationship between institutional size and the asset/equity ratio.

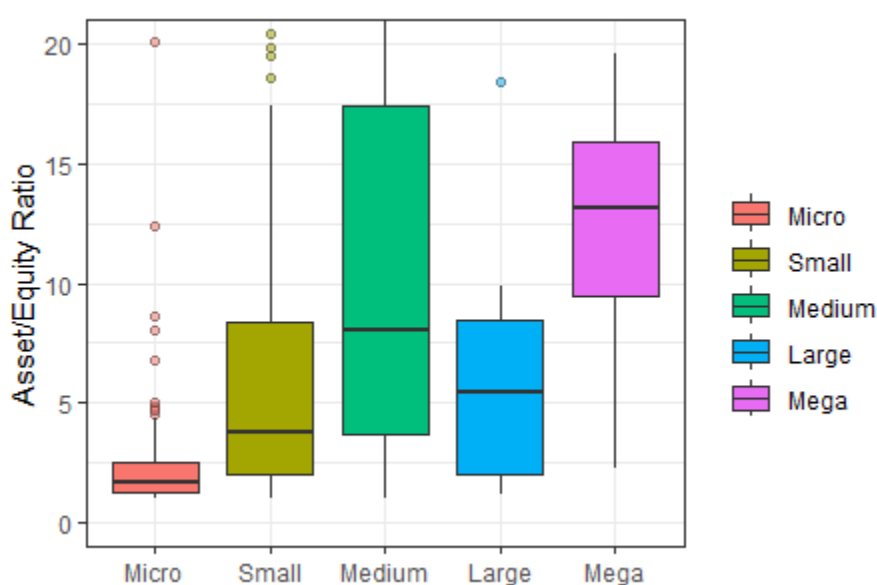


Figure 24: Boxplot of 2022 Assets/Equity Ratio by Institution Size

Source: PDBDatabase (2025)

PDBs are classified into five size categories, based on total assets, following the PDBDatabase [2]: mega (more than \$500 billion, 12 institutions), large (between \$100 billion and \$500 billion, 20 institutions), medium (\$20 billion to \$100 billion, 49 institutions), small (\$500 million to \$20 billion, 199 institutions), and micro (less than to\$500 million, 157 institutions). The average asset/equity ratios for each category are: Micro – 2.77, Small – 8.87, Medium – 22.1, Large – 6.24, Mega – 13.7.

These figures suggest that larger institutions enjoy significantly better access to debt financing opportunities, allowing them to leverage their equity more effectively – a dynamic that, in turn, contributes to further growth in their size. In contrast, smaller institutions tend to rely almost exclusively on their own capital, which substantially limits their ability to scale their operations.

When comparing institutions with access to capital markets to those without (Figure 25), we observe –as expected– that capital market institutions display significantly higher asset/equity ratios. Their ability to issue securities on financial markets allows them to raise debt more easily and operate with greater leverage.

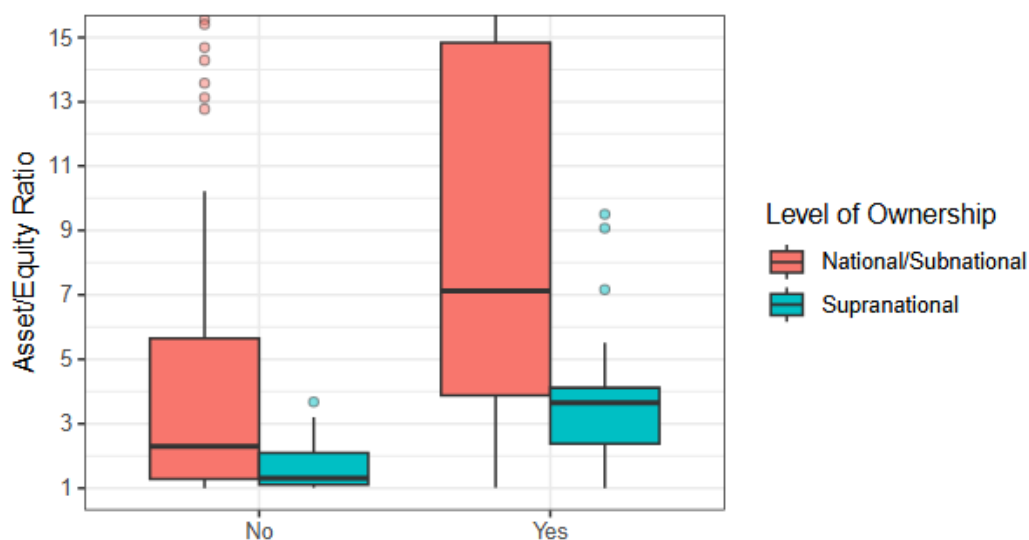


Figure 25: Boxplot of 2022 Assets/Equity Ratio by Capital Market Access

Source: PDBDatabase (2025)

The contrast is particularly stark for national and subnational institutions, where capital market access appears to influence leverage even more strongly than it does for multilateral development institutions.

In sum, the Asset-to-Equity ratio paints a clear hierarchy of leverage across PDBs. Multilaterals remain cautiously geared, while subnational banks show the widest spread, with a few outliers borrowing heavily. Europe leads on leverage; Africa and Oceania lag, underscoring regional financing gaps. Size and bond-market access are decisive: medium-to-mega institutions and capital-market issuers multiply their equity far more than micro or non-market peers. These disparities reveal where untapped leveraging capacity still exists, resources that could be mobilized to support future development efforts.

Understanding Bank Liabilities

A bank's liabilities represent the entirety of its funding sources—that is, the resources it draws on to grant loans, invest, or operate. These consist primarily of three main categories: debt (liabilities), equity and deposits –however most development banks do not collect deposits, unlike commercial banks. For institutions with access to capital markets, the primary source of debt financing is the issuance of bonds. Yet, for those without such access, debt typically comes from interbank borrowing, state or public sector loans, institutional client deposits, credit lines from development banks or multilateral institutions, and reinvested operating surpluses [27].

For example, Farm Credit Canada (FCC) is a publicly owned financial institution that supports Canadian agriculture through loans and financial services, without direct access to capital markets. As of March 31, 2024, FCC reported total assets of CAD 53.5 billion, of which CAD 44.8 billion were liabilities. The vast majority of its debt—CAD 44.2 billion—came from borrowings, including CAD 8.3 billion in short-term debt and CAD 35.9 billion in long-term debt. Unlike commercial banks that issue bonds on capital markets, FCC secures its funding primarily through government-backed sources, providing stable and low-cost financing. Other liabilities included CAD 105 million in accounts payable, CAD 158 million in lease obligations, and CAD 91 million in post-employment benefit liabilities.

IV – Comparative Cost of Borrowing: Market Access vs. Direct Government Funding

Bloomberg data allowed us to collect the yield at issuance for a sample of national and subnational bonds, along with the corresponding sovereign yield at the time of each institution's issuance. However, sovereign yield data is not consistently available across all currencies: in most cases, only yields in the domestic currency are accessible. A detailed overview of the data availability by country, including the currencies of issuance covered, is provided in Table 4 (see Appendix).

The objective is to analyze the difference between the issuance yield of the development institution and the corresponding sovereign yield, in order to assess the relative cost of borrowing through a specialized institution rather than directly via the sovereign.

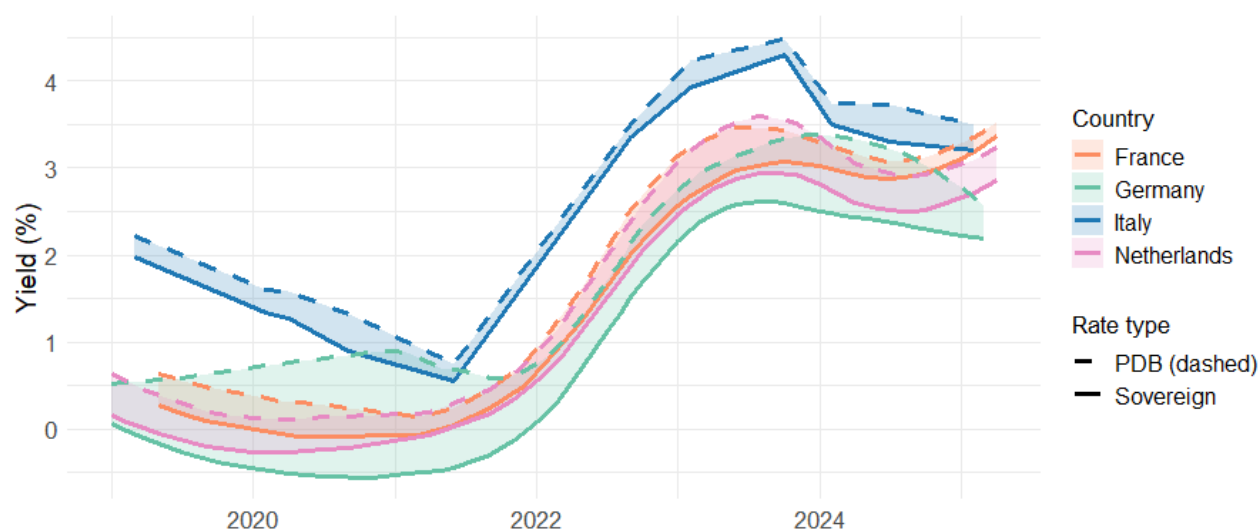


Figure 26: Average Yield Curves (EUR) – Sovereign vs PDB

Source: Bloomberg (March 2025)

Figure 26 compares the average yield curves of available PDBs with those of their corresponding sovereigns for four euro-area countries. As expected, PDB yields closely track sovereign yields, showing positive spreads whose magnitudes vary by country. The sharp rise in sovereign rates during 2022 was mirrored by higher PDB borrowing costs, confirming that development-bank pricing moves in line with national benchmarks. Cross-country differences are also evident: some countries display consistently wider spreads than others. These variations are further illustrated in Figure 27, which shows how spreads have evolved over time across the euro area.

Figure 27 shows that spreads between PDB and sovereign yields vary over time and follow country-specific trends –that are not yet explained at this stage. Despite operating within a monetary union and issuing debt in the same currency, development institutions across euro-area countries face differing borrowing conditions relatively to their respective sovereigns. This suggests that the observed differences in spreads are not driven by currency risk, but rather by institutional factors such as governance frameworks, legal structures, or implicit guarantees. For example, German development institutions tend to exhibit relatively higher spreads compared to their French or Finnish counterparts.

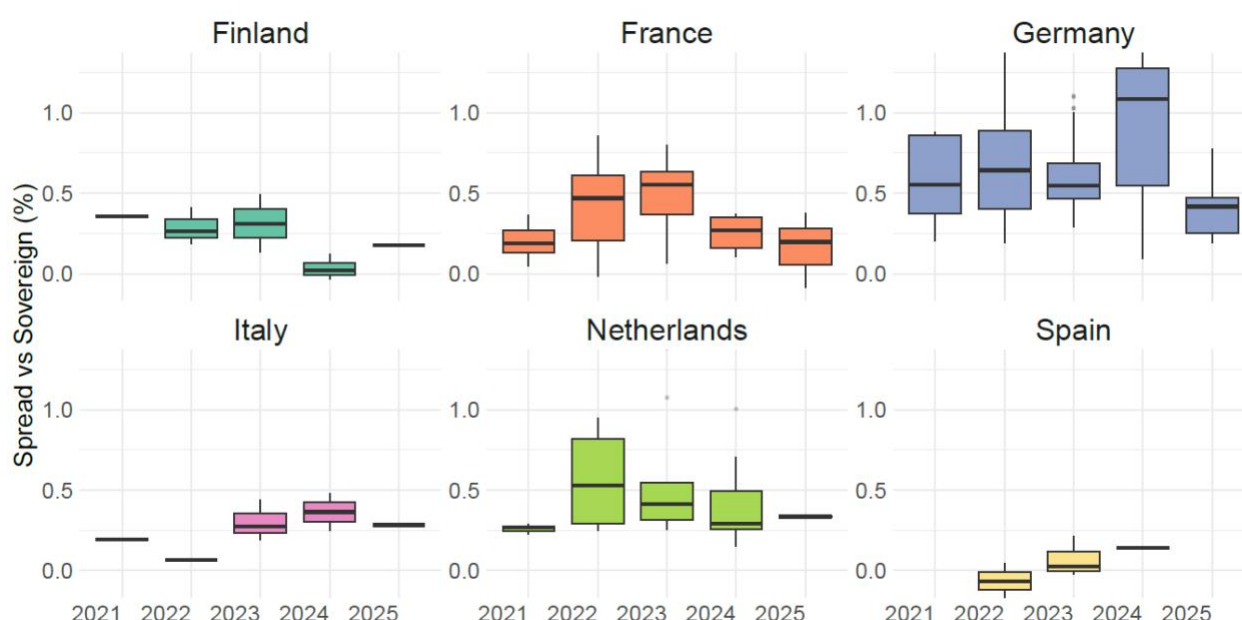


Figure 27: Average Spreads PDB vs Sovereign in the Euro Area

Source: Bloomberg (March 2025)

Figure 28 presents spread dynamics in Asia, a region marked by significant economic and financial diversity. PDBs from the region's more advanced economies tend to exhibit structurally lower spreads relative to their sovereigns. Although these spreads are not all calculated in the same currency, exchange rate effects alone cannot explain the observed differences. Japanese institutions, in particular, stand out with some of the lowest spreads observed across all regions. In contrast, PDBs from emerging Asian economies generally face higher spreads, which also tend to display greater volatility over time. These results point to substantial heterogeneity in borrowing conditions within the region.

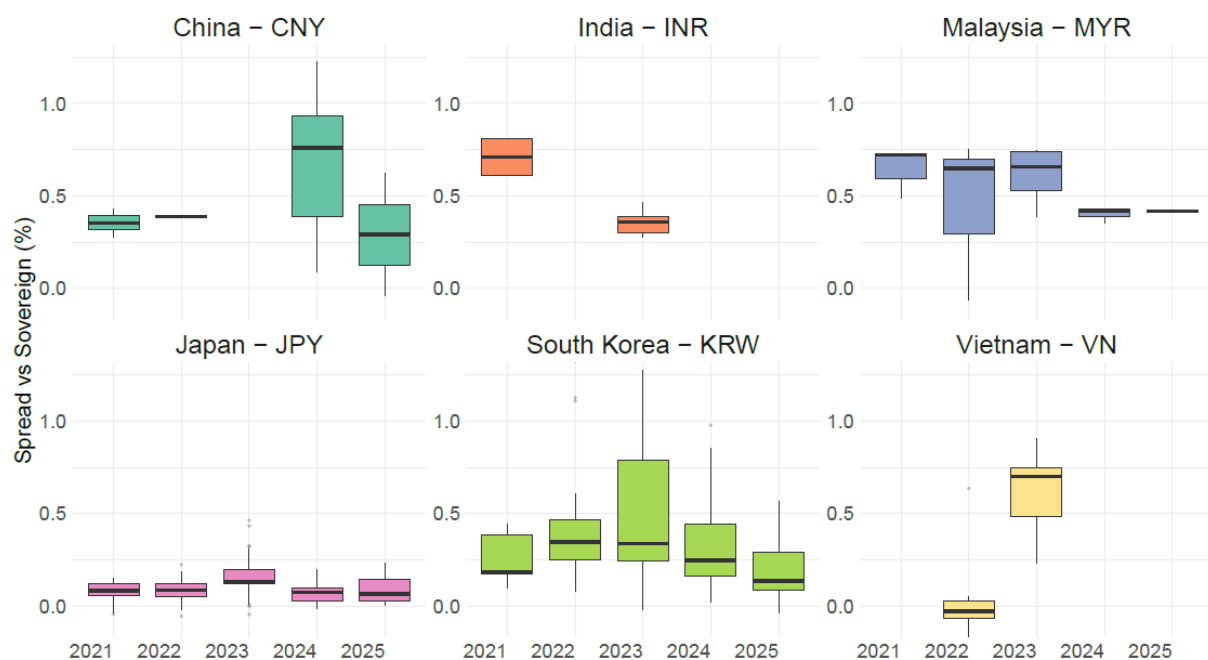


Figure 28: Average Spreads PDB vs Sovereign in Asia

Source: Bloomberg (March 2025)

While the previous figures highlighted inter-country variation in structural spreads, Figure 29 reveals intra-country differences as well. In the case of the United States, development institutions excluding California display moderate positive spreads relative to the U.S. sovereign curve. In contrast, California-based institutions show significantly negative spreads, meaning they borrow at lower rates than the federal government. This likely reflects California's strong credit standing, large economy and deep municipal bond market, which can provide local institutions with favorable financing conditions compared to the federal benchmark. Such intra-country differences underline the importance of subnational factors —such as fiscal autonomy, investor familiarity, and local policy frameworks— in shaping PDB market access.

Figure 30 also displays average spreads by currency. Unsurprisingly, the most widely used currencies —USD, EUR, and CNY— exhibit the greatest variance in spreads. This can be attributed to several factors: the wide range of institutions issuing in these currencies, the diversity of countries involved, or the large volumes of debt issued by PDBs in these markets. These currencies serve as primary issuance vehicles across both advanced and emerging economies, which contributes to the observed heterogeneity in borrowing conditions.

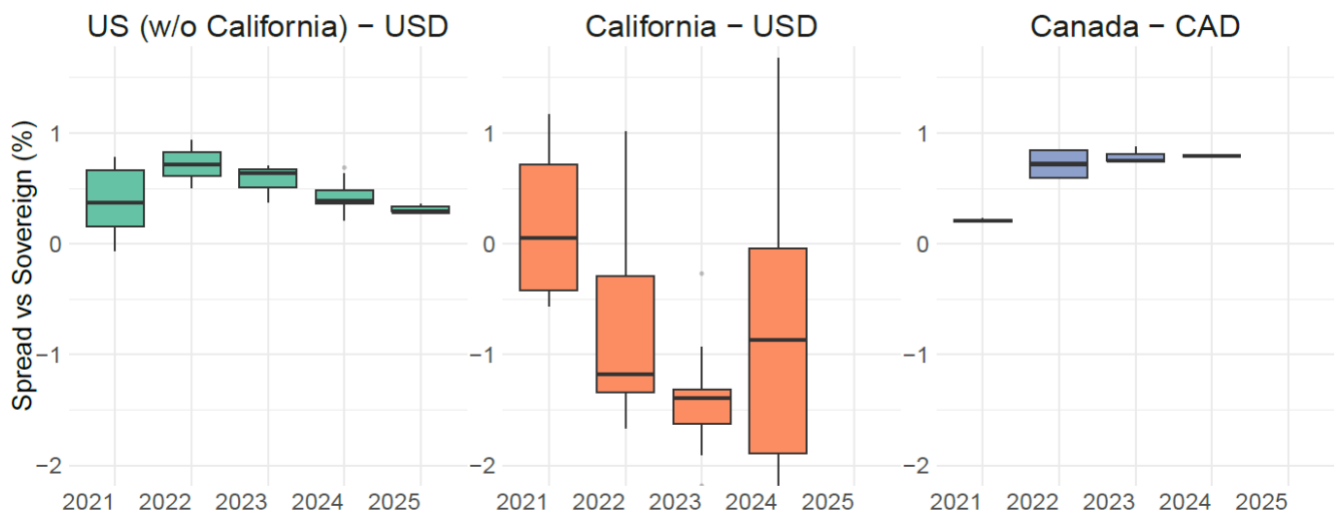


Figure 29: Average Spreads PDB vs Sovereign in North America

Source: Bloomberg (March 2025)

Overall, these results show that, in the vast majority of cases, borrowing through a development institution is more expensive than issuing directly via the sovereign, as indicated by the predominantly positive spreads observed across countries. However, the magnitude of this cost differential varies significantly across countries and within regions. The case of Germany is particularly illustrative: despite benefiting from one of the lowest sovereign borrowing costs globally, its development institutions record some of the highest spreads relative to the sovereign within the euro area. The evidence suggests that these differences are driven less by market structure and more by institutional features, such as the nature of sovereign support or legal status.

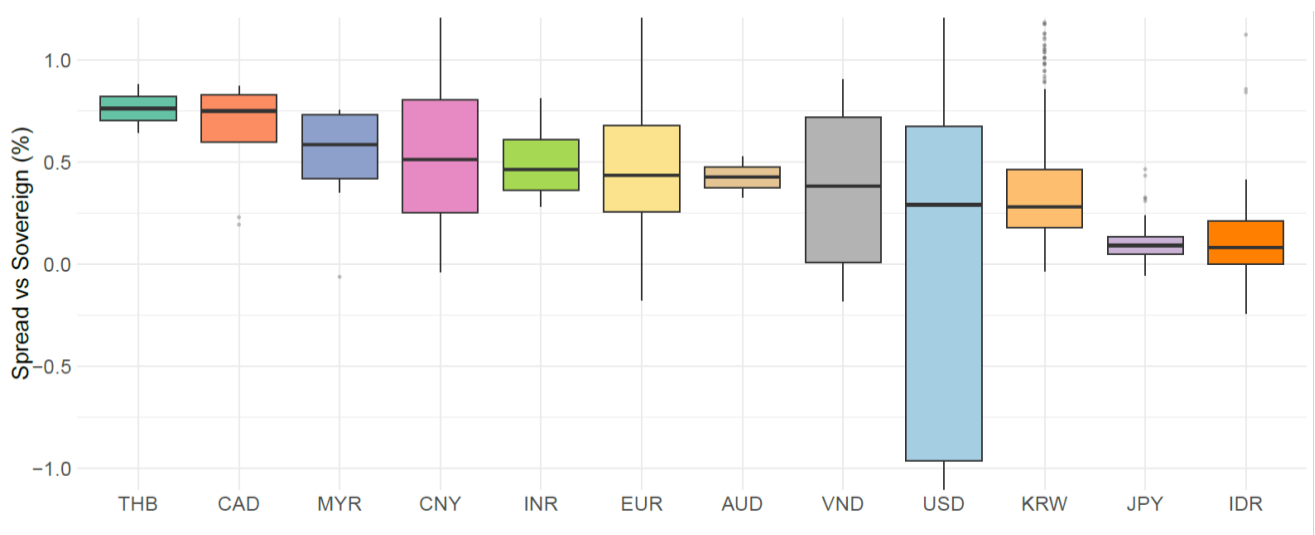


Figure 30: Average Spreads PDB vs Sovereign by Currency

Source: Bloomberg (March 2025)

V – Policy Recommendations

The findings of our study lead to three key policy recommendations to increase the volume of capital available for development by leveraging financial markets more effectively. Each recommendation is grounded in evidence from our analysis.

First, broaden PDB presence in capital markets, especially across emerging and frontier economies. There is significant untapped potential for PDBs to leverage capital markets to scale up their resources. Currently, only about one-quarter of the 522 institutions analyzed (approximately 26%) have direct market access, yet this minority accounts for a disproportionate share of PDB assets (88%). This asymmetry indicates that broader PDB market access could mobilize vastly more funding for development.

Crucially, by issuing bonds, PDBs can attract private investors and share the responsibility for development financing, acting as a catalyst rather than bearing the full burden of development themselves. Strategically, redefining PDBs as bridges to both public and private capital will enhance the sustainability and scale of development finance.

Furthermore, any PDBs in lower-income countries face shallow domestic capital markets and high borrowing costs, which severely limit their ability to raise funds. It is imperative to accelerate capital market development in these contexts. PDBs themselves can help catalyze local markets by issuing standardized, secure bond instruments – for example, bonds backed by strong collateral or guarantees – to attract institutional investors. Such standardization and perceived safety would broaden investor interest and improve liquidity, allowing even smaller institutions to tap affordable funding in the medium term.

Second, create a capital-market-dedicated supranational entity. While improving access to capital markets is often a medium- to long-term process for most development institutions in lower-income economies, the creation of a new capital-market-dedicated supranational entity could serve as a more immediate and efficient reform. Such an entity would help address current market shortcomings while institutions strengthen and investor perceptions gradually evolve.

This new supranational could be designed to attain an investment-grade rating, supported by guarantees from stronger PDBs –multilateral institutions such as the World Bank, or major bilateral development agencies. As a member of the SSA asset class, it would benefit from lower borrowing costs and greater investor confidence. By pooling their resources, participating PDBs would gain both the scale and market visibility needed to tap international capital markets more effectively.

Importantly, this entity should be institutionally independent from existing supranational or multilateral institutions to preserve strategic neutrality and avoid political interference. Beyond facilitating access to finance for its members, it could play a broader

role in strengthening financial markets across lower-income countries and enhancing the credibility of southern institutions in global markets.

Third, optimize leverage among PDBs that are already active in capital markets by prudently increasing their debt-to-equity ratios. This is the most straightforward and immediately actionable recommendation of all. Our analysis indicates that even among PDBs which issue bonds, leverage ratios remain relatively modest. Most market-active institutions follow cautious policies –a prudent stance to safeguard high credit ratings and financial stability, yet this practice leaves significant borrowing capacity underutilized. This is particularly true for major supranational institutions, which often maintain low leverage ratios despite having strong capital bases and ample room to expand their borrowing.

To address this, policymakers and PDB leaders should consider gradually increasing leverage, while staying within established risk management frameworks. For example, a development bank with strong capitalization and stable revenues could safely expand its lending by borrowing slightly more –provided it remains within regulatory limits and maintains its credit rating. If done carefully, this approach would allow PDBs to finance more development projects and free up additional resources for infrastructure, social programs, or climate investments. Gradual and well-supervised increases in leverage would help strengthen development impact without undermining financial stability or investor confidence.

To give a sense of scale: the current outstanding debt of Public Development Banks (PDBs) amounts to \$7.4 trillion, issued by only around 26% of institutions. Over the past two years, annual issuance has averaged \$1.2 trillion. Assuming capital markets can absorb additional volumes and that higher leverage would not substantially affect credit ratings, expanding both the number of issuing institutions and their leverage ratios could significantly increase total issuance capacity.

First, there is considerable untapped potential among institutions that are not currently active on capital markets. Although only 26% of institutions issue on markets, they represent 88% of total assets. The remaining 74% of institutions hold approximately \$1.7 trillion in assets, broadly corresponding to \$1.7 trillion in equity. If just 30% of these non-issuing institutions –starting with the largest– were to gain market access, this could unlock roughly \$0.5 trillion in additional equity. Given the median maturity of five years observed in our dataset, this would translate into approximately \$0.1 trillion in additional annual issuance. Furthermore, if these new issuers were to adopt an Asset-to-Equity ratio of 7, annual issuance could further increase by \$0.7 trillion.

Secondly, for institutions already active on capital markets: if their current median Asset-to-Equity ratio of 3.3 were raised to 7, annual issuance would increase from \$1.2 trillion to approximately \$2.54 trillion (based on a proportional rule of thumb: $\$1.2T \times 7 / 3.3$).

Taken together, expanding both the number of issuing institutions and their leverage ratios could raise total annual issuance to around \$3.24 trillion –more than

double the current level–, mobilizing an additional \$2 trillion per year. This would cover about half of the estimated \$4 trillion annual development financing gap. Of this \$2 trillion per year, approximately one-quarter can be attributed to supranational institutions –using the leverage channel alone–, a figure consistent with findings in the existing literature [28].

These are, of course, simplified and indicative estimates. They rely on key assumptions, most notably, the capacity of global capital markets to absorb increased volumes, and the preservation of institutional creditworthiness as leverage rises. Nonetheless, this analysis highlights the realistic potential of broadening market participation and increasing leverage to help close the financing gap [4], while also providing a buffer in years when investment volumes fall short.

Conclusion

This study's findings reveal a strong asymmetry in how PDBs leverage capital for development. Only about one-quarter of the 522 institutions analyzed (139 entities, ~27%) have direct access to capital markets, yet this minority controls over half of all PDB assets and roughly \$7.5 trillion in outstanding debt. In contrast, the vast majority of smaller and domestically focused institutions remain funded primarily by government support, underscoring a highly concentrated distribution of financial capacity.

Geographic disparities in market access are particularly pronounced. Institutions in Europe and Asia dominate bond issuance – led by major issuers in countries like China and Germany – benefiting from mature financial systems and investor bases. Meanwhile, many public banks from lower-income regions face structural barriers that severely limit their borrowing capacity. These barriers include shallow domestic capital markets, higher perceived credit risk (leading to elevated borrowing costs), and limited investor appetite for their debt. As a result, PDBs from developing countries remain disproportionately under-leveraged relative to their development needs, leaving significant potential resources untapped in those regions.

Institutional size emerges as a critical determinant of capital market engagement. Larger multilateral and national development banks are far more likely to tap international and domestic bond markets, and they typically operate with higher Asset-to-Equity ratios (greater leverage) than their smaller counterparts. In practice, big institutions can borrow at scale and thus amplify their lending capacity, whereas smaller banks often lack the institutions or investor confidence to do so and must rely on limited capital. Notably, even among the debt-issuing cohort, most institutions remain conservatively leveraged – particularly supranationals, which follow overly cautious financial strategies. These patterns highlight the untapped potential of capital markets to amplify development impact. Institutions without access remain structurally resource-constrained, while those that do have access often underutilize it. As a result, the burden of global development financing

falls disproportionately on a small group of capital-market-active banks. Expanding access and optimizing the use of market instruments could substantially increase the collective financing capacity of the development finance ecosystem.

Our analysis of borrowing costs confirms that PDB bonds typically trade at a premium over their sovereign benchmarks. Investors still perceive these issuers as riskier than their government owners. But the spread is not uniform: some advanced-economy agencies fund at, or even below, sovereign rates, while others —like German development banks— pay some of the highest margins in Europe. This dispersion reflects not just macro conditions, but differences in legal guarantees and capital structures, underlining the importance of institutional design.

To address these disparities, we propose the creation of a “super-supranational”: a capital-markets-dedicated platform jointly owned by emerging-market PDBs, and backed by stronger multilaterals or national PDBs. By issuing in the SSA segment, it could target an investment-grade rating and channel the funds to smaller institutions. This would offer a faster alternative to expanding individual market access —particularly in countries where capital markets remain underdeveloped. In doing so, the super supra would offer indirect access to capital markets, compress borrowing costs, and standardize disclosure, accelerating the integration of southern development banks into global sustainable finance markets. This could significantly support efforts to narrow the global development financing gap.

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Appendix

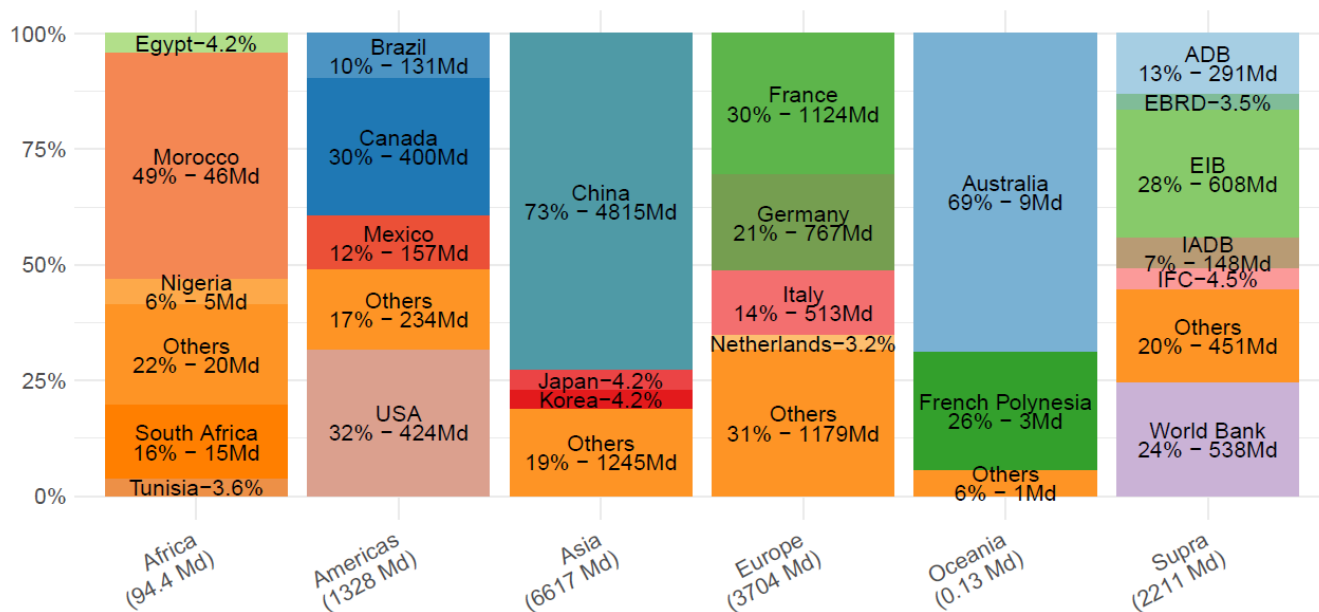


Figure 31: Intracontinental Distribution of PDB Assets, by Country

Source: PDBDatabase (2025)

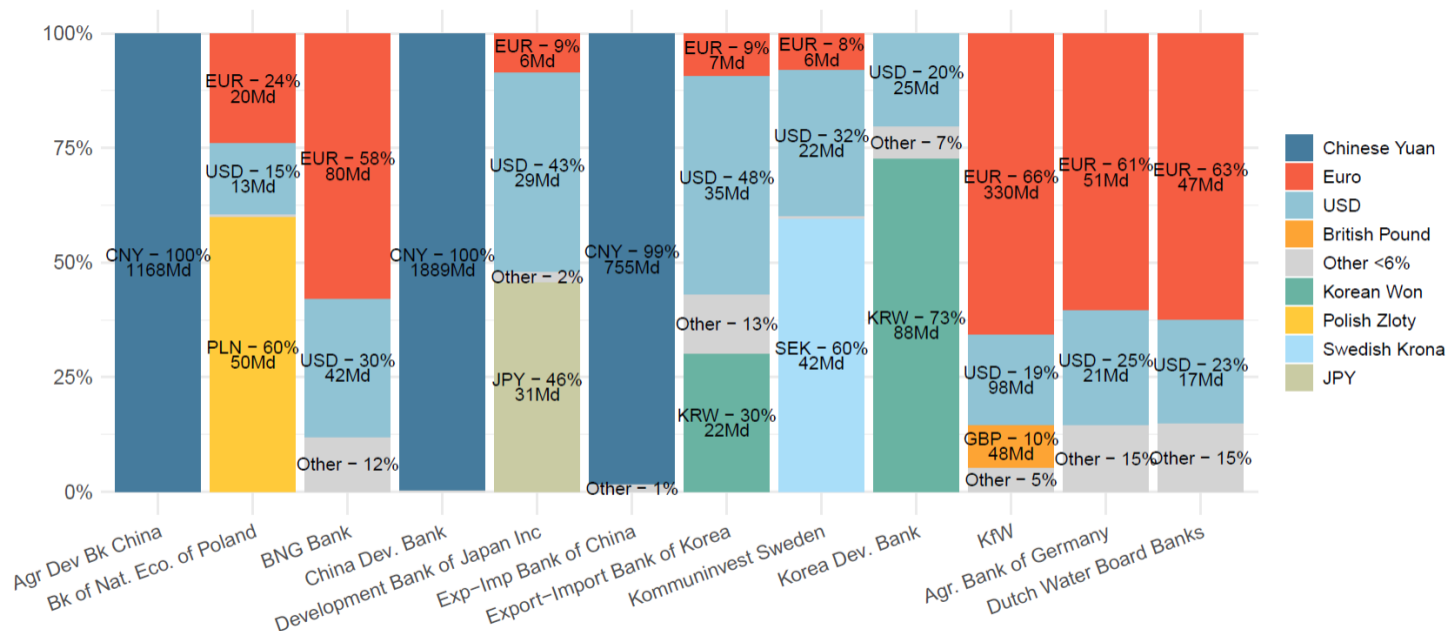


Figure 32: Distribution of Currencies in the Outstanding Amount (Top12 Gov)

Source: Bloomberg (March 2025)

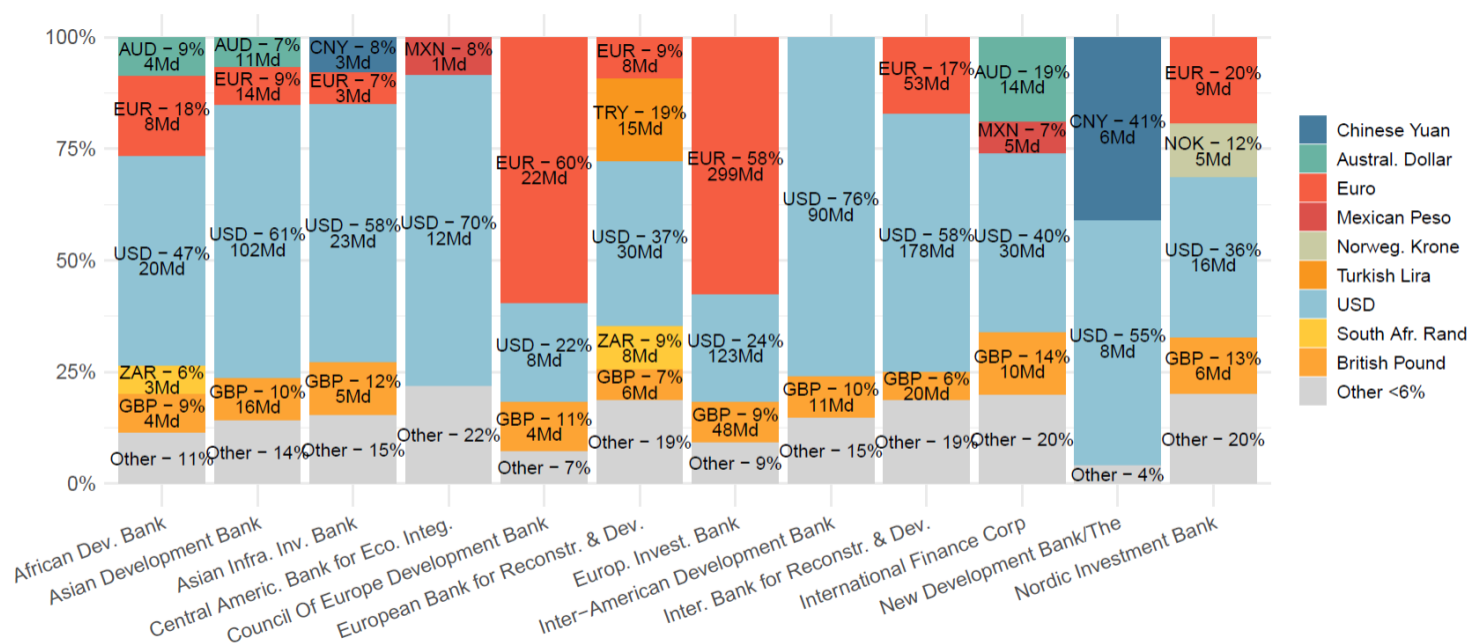


Figure 33: Distribution of Currencies in the Outstanding Amount (Top12 Supra)

Source: Bloomberg (March 2025)

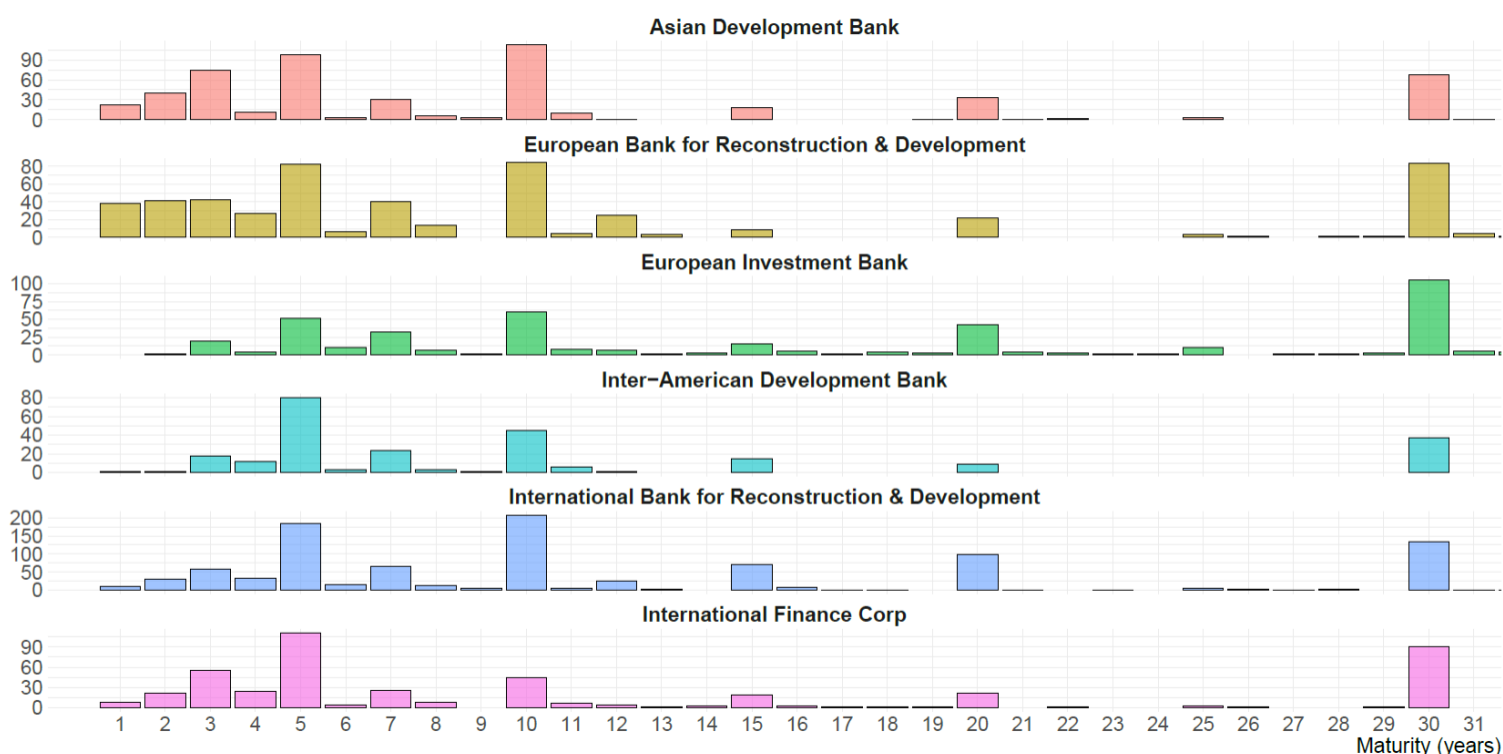


Figure 34: Maturity Distribution of the Six Largest Supra Entities (Number of Issuance)



Figure 35: Maturity Distribution per Mandate (Number of Issuances)

Source: Bloomberg (March 2025)

Institutions in the INTL category (international financing of private sector development): International Finance Corporation, European Bank for Reconstruction and Development, Inter-American Investment Corporation, International Investment Bank, Black Sea Trade and Development Bank, Eurasian Development Bank, Eastern and Southern African Trade and Development Bank, United States International Development Finance Corporation, and Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V.

Table 1: PDBs & DFIs Excluded from the PDBDatabase (2025)

Institution	Country/Region
Caisse de Garantie du Logement Locatif Social	France
Canada Mortgage and Housing Corporation	Canada
Fannie Mae	United States
Freddie Mac	United States
Government Development Bank for Puerto Rico	Puerto Rico (inactive)
Hong Kong Mortgage Corporation	Hong Kong
Housing Finance Agency Ireland	Ireland
Japan Housing Finance Agency	Japan
Korea Housing Finance Corporation	South Korea
Nationale Hypotheek Garantie	Netherlands
Oman Housing Bank	Oman
Real Estate Development Fund	Saudi Arabia

Table 2: Institutions for which the Reporting Scale was modified from the PDBDatabase (2025)

Previous Entry (PDBDatabase)	Our Study
Al Amanah Islamic Investment Bank of the Philippines	Development Bank of the Philippines (assets adjusted accordingly, as Al Amanah is a subsidiary)
Development and Investment Corporation of Armenia	Armenian Economy Development Bank
Dutch Entrepreneurial Development Bank	Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden NV (ticker: NEDFIN)
Export Finance Australia	Export Finance & Insurance Corporation
IDB Invest	Inter-American Investment Corporation (subsidiary of IADB; consistent with Bloomberg ticker)
Industrial Finance Corporation of India	IFCI Limited
UK Infrastructure Bank	National Wealth Fund (updated name)

Table 3: Share of Missing Values for the 2022 Asset/Equity Ratio

	Total PDBs	Number of NA	Pct of NA
Continent			
Africa	100	45	45%
Americas	123	41	33%
Asia	150	60	40%
Europe	129	31	24%
Oceania	20	9	45%
Level of Ownership			
Multi	55	11	20%
National	349	127	36%
Subnational	118	48	40%

Table 4: Number of Available Observations and Currencies by Country

Country	Count	Currency	Country	Count	Currency
South Korea	521	KRW	China	16	CNY
Japan	249	JPY	Italy	13	EUR
US	189	USD	Poland	13	EUR, PLN
Germany	136	EUR	Canada	10	CAD
France	75	EUR	Spain	6	EUR
Netherlands	64	EUR	Peru	5	PEN, USD
Indonesia	48	IDR	Sweden	4	SEK
Vietnam	33	VND	Australia	3	AUD
India	32	INR	Hong Kong	3	HKD
Malaysia	30	MYR	Slovakia	3	EUR
Turkey	22	USD	Hungary	2	HUF, USD
Finland	20	EUR	Thailand	2	THB

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