

IDB WORKING PAPER SERIES N° IDB-WP-1299

Bridging the Gap:

Mobilization of Multilateral Development Banks in Infrastructure

Leopoldo Avellán
Arturo J. Galindo
Giulia Lotti
Juan Pablo Rodríguez

Inter-American Development Bank
Department of Research and Chief Economist

February 2022

Bridging the Gap:

Mobilization of Multilateral Development Banks in Infrastructure

Leopoldo Avellán*

Arturo J. Galindo*

Giulia Lotti*

Juan Pablo Rodríguez**

* Inter-American Development Bank

** Universidad de los Andes and Inter-American Development Bank

Cataloging-in-Publication data provided by the
Inter-American Development Bank
Felipe Herrera Library

Bridging the gap: mobilization of multilateral development banks in infrastructure /
Leopoldo Avellán, Arturo J. Galindo, Giulia Lotti, Juan Pablo Rodriguez.

p. cm. — (IDB Working Paper Series ; 1299)

Includes bibliographic references.

1. Infrastructure (Economics)-Capital investments. 2. Capital movements. 3.
Development banks. I. Avellán, Leopoldo. II. Galindo, Arturo J. III. Lotti, Giulia. IV.
Rodriguez, Juan Pablo. V. Inter-American Development Bank. Department of
Research and Chief Economist. VI. Series.
IDB-WP-1299

<http://www.iadb.org>

Copyright © 2022 Inter-American Development Bank. This work is licensed under a Creative Commons IGO 3.0 Attribution-NonCommercial-NoDerivatives (CC-IGO BY-NC-ND 3.0 IGO) license (<http://creativecommons.org/licenses/by-nc-nd/3.0/igo/legalcode>) and may be reproduced with attribution to the IDB and for any non-commercial purpose, as provided below. No derivative work is allowed.

Any dispute related to the use of the works of the IDB that cannot be settled amicably shall be submitted to arbitration pursuant to the UNCITRAL rules. The use of the IDB's name for any purpose other than for attribution, and the use of IDB's logo shall be subject to a separate written license agreement between the IDB and the user and is not authorized as part of this CC-IGO license.

Following a peer review process, and with previous written consent by the Inter-American Development Bank (IDB), a revised version of this work may also be reproduced in any academic journal, including those indexed by the American Economic Association's EconLit, provided that the IDB is credited and that the author(s) receive no income from the publication. Therefore, the restriction to receive income from such publication shall only extend to the publication's author(s). With regard to such restriction, in case of any inconsistency between the Creative Commons IGO 3.0 Attribution-NonCommercial-NoDerivatives license and these statements, the latter shall prevail.

Note that link provided above includes additional terms and conditions of the license.

The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the Inter-American Development Bank, its Board of Directors, or the countries they represent.



Abstract¹

We explore how Multilateral Development Banks (MDBs) can help to fill a large infrastructure financing gap in developing countries by indirectly mobilizing resources from other entities. The analysis focuses on more than 6,500 transactions in 2005-2020 to developing and emerging markets from the *Infrastructure Journal* database. Using granular data, we analyze the dynamics of flows from different actors to infrastructure at the country-subsector level, and control for a wide range of fixed effects. MDB lending significantly increases the inflows from other sources. Cross-border and domestic resources are mobilized from both the public and the private sectors. Effects exhibit country heterogeneity. Mobilization occurs in countries of all income levels, though it is stronger in low and lower-middle income countries. In countries that use capital controls frequently mobilization effects are undermined. When the global financial crisis of 2008 hit, no difference in mobilization effects was found, unlike the COVID-19 pandemic when mobilization effects were weakened. The findings survive a long battery of robustness checks, and no evidence of anticipation effects is found.

JEL classifications: F21, F34, G15, H81, O19

Keywords: Multilateral development banks, Capital flows, Infrastructure, Mobilization effects, Catalytic finance

¹ The authors thank participants at the Inter-American Development Bank SPD Open House, at the Applied Brownbag of the Economics department at Bristol, and at the IMF Western Hemisphere Department Seminar for their comments. The authors also thank Sonny Biswas, Kirill Borusyak, Emanuele Bracco, Christoph Koenig, Alessandro Iaria, Samuel Pienknagura, Andrew Powell, Andrea Presbitero and Christine Valente for their helpful suggestions. The opinions are exclusively the authors' and do not represent those of the Inter-American Development Bank or its Board of Directors. Contacts: Avellán: leopoldoa@iadb.org; Galindo: arturog@iadb.org; Lotti: glotti@iadb.org; and Rodríguez: jpablor@iadb.org.

1. Introduction

Investment needs in developing countries are large. Before the COVID-19 pandemic hit the planet, estimates suggested that developing countries would require between US\$5 trillion and US\$7 trillion of investments each year between 2015 and 2030 to close the development gaps implicit in the United Nations' Sustainable Development Goals (SDGs).² The financing gap, calculated as the difference between financial needs and government generated revenues, was estimated at US\$2.5 trillion³ for SDG needs in general and between US\$1 and \$1.5 trillion for specific needs in infrastructure.⁴ Due to changes in the allocation of public funds to attend the health crisis of COVID-19 and the negative impact of the crisis itself on various dimensions of human development, it is likely that following the pandemic the financing needs to reach the SDG targets may be even larger than what was previously estimated.⁵

Given these large needs, financing is required from all available sources: private as well as public, cross-border as well as domestic. However, saving rates are traditionally low in many emerging and developing economies, reducing the possibility of domestic financing. Accessing foreign sources of funds is then key for many developing and emerging markets.⁶ Despite efforts to increase tax revenues, financing gaps remain and require additional external funding. An important source of debt available to most developing countries, and that could support them in closing those gaps, is that provided by Multilateral Development Banks (MDBs).⁷ MDBs are institutions owned by various governments to provide financing mostly to middle and low-income countries for development related projects. In contrast to private financial institutions, MDBs are driven by the objectives of promoting sustainable and equitable growth and reducing poverty.⁸

² See UNCTAD (2014).

³ See UNCTAD (2020). US\$2.5 trillion is a sizable figure, close to 4 percent of world GDP excluding high-income countries.

⁴ See United Nations (2015).

⁵ See Sachs et al. (2021).

⁶ See, for example, Cavallo and Serebrisky (2016), who analyze savings in emerging markets with a specific focus on Latin America and the Caribbean.

⁷ MDBs include global organizations such as the World Bank; regional ones such as the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development and the Inter-American Development Bank; and sub-regional ones like the Caribbean Development Bank, the Development Bank of Latin America and the Islamic Development Bank, among others.

⁸ MDBs can provide loans to the public and to the private sector depending on the nature of their charters and their institutional objectives. They lend in a variety of areas ranging from pure infrastructure projects to the development of institutional capacities and the shaping of regulations.

MDB debt is attractive for various reasons. For most countries, MDB debt is usually less expensive than private sector debt. MDBs have strong credit ratings that allow them to issue low-interest bonds and absorb funds that are then lent at a small margin to their borrowing member countries. MDB lending is also counter-cyclical, meaning that it increases when other sources of financing are more constrained due to international liquidity shortages or other types of episodes of financial distress.⁹

An additional feature of MDB debt, specifically in the context of financing the large SDG gaps, is its capacity to mobilize additional resources, either official or private sources, towards the projects or sectors in which they participate. Though its amounts are relatively small with respect to total sovereign or public sector debt,¹⁰ estimates suggest that MDBs can mobilize about seven times the value of their loans in a short timeframe.¹¹

MDB mobilization can take two forms: direct or indirect. Direct mobilization takes place when, within a transaction, other financiers participate to complete the necessary amounts for investments to carry on. Direct mobilization involves the participation of MDBs and other financiers in the same project; in contrast, indirect mobilization happens when investments in similar projects to those funded by MDBs are made without the need for direct involvement of an MDB in the project itself.¹² In many cases, MDBs can provide a signal about the viability of an investment in a country or a sector, or they can provide a first step in a sequence of projects that opens a path for other financiers to follow. It is common for MDB loans to focus on supporting investor-friendly regulatory changes in countries or sectors that will later promote other actors to participate in financing projects in those areas.¹³ Our focus in this paper is on indirect mobilization.

⁹ For a general discussion of MDB lending see Humphrey and Michaelowa (2013), and for MDB lending counter-cyclicalities see Galindo and Panizza (2018) or Avellán et al. (2020 and 2021).

¹⁰ Debt from multilateral organizations adds up to nearly US\$100 billion per year.

¹¹ See Broccolini et al (2021).

¹² The specifics of how resources are mobilized depends on the type of the investment financed. If the investment is totally financed by the public sector, for example in the case of a tertiary road in a rural area where there may be little commercial value but a high social one, MDB mobilization may be in the form of crowding-in public sector money. Possibly, without MDB funding the investment would not take place. MDBs can finance part of a project, and sovereign resources the rest. In this case MDB mobilizes official or public sector funds. In other types of projects, mobilization can take the form of private sector resources. For example, in building a mass transportation system such as a subway where a commercial stake can be clearly identified, many types of financiers, both public and private, can appear and MDB lending can play a role in crowding-in all of them.

¹³ See Eichengreen and Mody (2000) or G20 IFA (2017) for a discussion.

Mobilization, particularly of private sector resources, can happen for several reasons. MDB participation in projects can contribute to reducing operational and political risks faced by financiers, and through this, increase their involvement not only in the project being directly financed, but also in other projects in the same subsector. The presence of MDBs can then act as a signal of a solid macroeconomic landscape and the institutional capacity needed for project execution. On the political front, MDBs' participation can play a critical role in mitigating the risk that political cycles alter project execution. This can be particularly relevant in long-term projects that require investments that may overlap with political changes in a country. The fact that MDBs are long-term partners that deal with multiple political counterparts eases the concern of private financiers that a project in which they have invested may come to a stall when changes in political leadership in a country occur.¹⁴ Regarding operational risks, MDBs through various actions can lower the probability of a project becoming distressed.¹⁵ Their country and sector-specific knowledge allows them to be thorough in identifying opportunities and designing projects that are sustainable and economically and financially viable. Their ex ante social and environmental reviews and the application of strict safeguards, as well as their use of procurement and contracting standards, improve country institutions for project management and reduce the risks that grievances may affect projects during their execution and that corruption practices may contaminate them.¹⁶ MDBs might also be more likely to finance the initial and riskier stages of an infrastructure project with higher expected social returns, and through this induce others to enter the market at later stages once the risk is mitigated. By entering a subsector before others, MDBs might also help initiate projects that have positive spillovers in the subsector and attract resources to finance complementary projects.¹⁷ In sum, by reducing country risks, subsector risks, and projects risks, MDBs contribute to eliminating aspects of project design and execution that could inhibit private sector involvement and become a signal for better investment opportunities.

¹⁴ See Jandhyala (2016) and Buiters and Fries (2002).

¹⁵ This would be a mechanism for direct mobilization, i.e., mobilization of resources of co-financiers for the same project. See Jandhyala (2016), Ika (2015) and Denizer et al. (2013) for evidence on MDB involvement in project performance.

¹⁶ See Kilby (2000) and Jandhyala (2016) for a discussion.

¹⁷ An example of the complementarities and spillovers that can be generated is the port in Posorja, Ecuador, financed in 2018 by IDB Invest, the private arm of the Inter-American Development Bank. Since then, a larger highway has been financed through a public-private partnership (PPP) to favor heavier traffic to the port.

In this study we analyze the role played by MDBs in indirectly mobilizing resources in a large sample of infrastructure projects in emerging market economies. As noted by Doumbia and Lauridsen (2019), financing needs to meet the SDGs are the highest in the infrastructure sector, both because of the size of the development gaps in the area and because of the high costs associated with building and maintaining adequate and sustainable infrastructure. To account for mobilization, we aggregate tranche-specific data at the country-subsector-year level in a sample of 145 emerging market countries and eight infrastructure subsectors between 2005 and 2020. For each observation in our panel, we identify if MDB financing has taken place, and we explore the association between the financial participation of MDBs in a country-subsector and financing provided by other lenders in the same country-sector but not in the same transaction, both simultaneously and up to two years after the year in which the MDB enters the sector. The fact that we exclude third-party financing in the same transactions in which MDBs participate allows us to focus on indirect mobilization. Using regression methods, we find a strong and significant correlation between MDB financing and financing provided by other parties at the time of the MDB intervention and up to two years after.

Our data allow us to identify if resources mobilized have the same origin of the country where the project takes place or if they come from abroad, and if the resources mobilized are from the private or the official sectors. Our results suggest that resources are mobilized from both the public and the private sector, mostly from the latter, and that the mobilization that takes place is mostly from cross-border sources, though there is also some mobilization of national resources. Moreover, the data allows us to separate, although not perfectly, multilateral transactions that are non-sovereign guaranteed (NSG), that is, not guaranteed by a State (mostly transactions where the private sector is the beneficiary), from sovereign-guaranteed transactions (SG). The results indicate that MDB financing of both SG and NSG operations mobilizes third-party resources. Finally, we shed more light on the role of official lending in infrastructure financing by exploring whether multilateral and bilateral institutions act as complementary or substitutes in mobilizing resources towards the sector. The results show that multilateral and bilateral institutions complement and reinforce each other, and that, even though the latter seems to have stronger mobilization effects, multilateral institutions tend to enter a market first and mobilize bilateral resources as well.

To address concerns about reverse causality and unobserved heterogeneity, we present evidence showing that there are no anticipation effects, and we control for country-year and subsector-year effects in all specifications. We also provide several robustness tests to confirm the baseline results and find that they remain after controlling for other sources of foreign official financing, considering other standard error clustering, using different definitions of the independent and dependent variables, controlling for specific country-subsector trends, and controlling for crisis episodes. In addition, we explore various sources of heterogeneity and find evidence that mobilization is hampered when capital controls are more stringent, is stronger in countries with lower financial development, increases in middle-income and low-income countries, and in countries where government effectiveness is perceived to be lower. However, in countries characterized by more political instability and higher levels of violence, the ability of multilateral financing to attract third-party resources is reduced.

Finally, and to provide a sense of the size of the indirect mobilization multiplier, we estimate regressions comparing the size of resources mobilized by third parties and the amount of MDB funding. We find that the MDB indirect infrastructure multiplier is close to 4.4. This analysis complements the previous one by showing the impacts not only of the mere presence of MDBs but also their impact on the size of the financial contribution.

This paper adds to the existing literature on the catalytic effect of MDB financing. Using aggregate macroeconomic data, Rodrik (1995) does not find a significant association between past multilateral lending and current private flows, while Dasgupta and Ratha (2000) and Ratha (2001) reach the opposite conclusion. Through a more micro-level approach, Broccolini et al. (2021) can control for all the constant and time-varying country- and sector- factors that can confound the analysis and find that MDB lending can mobilize cross-border syndicated lending from the private sector. Our approach is similar to that of Broccolini et al. (2021), but while their data allow them to focus on the overall mobilization effects of MDBs, our analysis can shed more light on mobilization within the infrastructure sector, where financing needs are the highest, and which can be a key driver for the recovery from the Covid-19 pandemic (Serebrisky et al., 2020). Moreover, to the best of our knowledge it is the first empirical study on MDBs that also explores mobilization of domestic resources as well as mobilization of resources from public entities, whose financing role is key in the infrastructure sector. Finally, the availability of the latest data allows us to explore whether the effects we find are different in times of crisis, such as in the Covid-19 pandemic.

2. Data

The main source of data for the analysis is the *Project Finance & Infrastructure Journal (IJ Global)*, which is the most comprehensive repository of deals in infrastructure. It provides granular information on 6,552 transactions to developing and emerging economies since 2005.¹⁸ Figure 1 (figures follow the text of this paper) shows the countries included in the analysis and reports the average transaction amounts (as percentage of trend GDP) that each receives in the sample period.¹⁹

The information is collected through proactive research by a large team of Financial Data Analysts, as well as through direct deal submissions by project counterparties (*IJ Global*, 2021). Transactions include those in project finance, corporate finance, and infrastructure finance.²⁰ The data is at the tranche level and covers a variety of dimensions: amounts, the country where the transaction takes place, the date of the financial close,²¹ the transaction subsector, the currency, the finance type (debt/equity), the name of the participants involved, their role in the transaction,²² and their country of origin.

An interesting feature of this dataset is that the total debt transaction value does not need to be divided into equal parts among participants to gauge the contribution of each, but the specific amount of each participant is specified. To contextualize the importance of the transaction amounts in each country's economy, we present them as a share of trend GDP. In line with some of the literature (Broner et al., 2013; Avellán, Galindo and Lotti, 2020 and 2021), we prefer trend GDP

¹⁸ To select emerging economies, we use the country classification in the IMF's World Economic Outlook (WEO). The countries in our sample are those classified in the WEO as Emerging and Developing Economies.

¹⁹ The list of countries is reported in Annex A.

²⁰ Project finance includes transactions financing greenfield projects, brownfield development, expansion of existing assets, refinancing, providing additional debt facilities and funding acquisitions of infrastructure assets. Transactions must have at least one private sponsor. Corporate finance includes transactions funding infrastructure through equity and/or debt, except for company acquisitions. Infrastructure finance combines Project finance, corporate finance, and public sector finance transactions (i.e., entirely driven by state-owned entities) (*IJ Global*, 2021).

²¹ The financial close is the stage at which all financing documentation has been signed, all conditions precedent have been satisfied or waived and initial drawdown is contractually possible. *IJ* does not consider the signing of financing documentation alone as financial close. In transactions that involve no debt financing, *IJ* considers the signing of project or transaction documentation as a proxy for financial close.

²² Not all the parties involved participate in the transaction by lending and/or investing, some participants only have an advisory or guarantor role. The different roles are mandated lead arrangers, bond arrangers, financial advisers, legal advisers, technical advisers, model auditors, sponsors, insurance adviser, and development finance institutions.

to GDP, as the former is a predetermined scaling factor and avoids potential endogeneity in the denominator.^{23,24}

Thanks to the information on the role of participants in the transaction, the analysis can distinguish between transactions provided by Multilateral Development Banks, Development Banks with global participation, National Development Banks, or others. As can be seen from Figure 2, total transaction amounts increased steadily across years, irrespective of the source. The dashed line with black diamonds represents the transaction amounts from all providers that are neither multilateral nor bilateral institutions, the dashed line with dots transactions from MDBs, the dashed line with empty squares transactions from bilateral institutions. Multilateral lending had a spike at the beginning of the Global Financial Crisis, but the same is true for transaction amounts from all other players.

The role of the transaction recipient allows us to also distinguish between flows that go to the private sector and flows that go to the public sector.²⁵

The distinction between SG and NSG multilateral lending relies instead on the business model of the MDB that participates in the transaction: if an MDB only finances SG operations, then the transaction is considered SG; if an MDB only finances NSG operations, then the transaction is considered NSG; if an MDB can finance both SG and NSG operations, then the transaction is considered possibly NSG or SG.²⁶ The existence of this third category implies that SG and NSG transactions cannot be perfectly separated, but their analysis is still informative.

As can be seen from Table 1, the average transaction in infrastructure to developing and emerging economies is around 485 USD million. MDBs participate in almost 14 percent of total transactions, and the average amounts lent by MDBs in a transaction is around 119 USD million. Overall, the average transactions that see multilateral involvement are slightly smaller than transactions without it (423 million USD and 505 million USD, respectively). Once amounts are

²³ Trend GDP is calculated by applying the Hodrick-Prescott filter. Since the data is yearly, a smoothing parameter of 100 to the series of nominal GDP in USD from the World Development Indicators of the World Bank is used.

²⁴ For transactions to multiple countries (83 transactions out of 6,552) we divide the amounts by an average of GDP.

²⁵ We identify flows from the public sector as transactions from state lenders, public finance institutions, development banks, export credit agencies, guarantors, international financial institutions, or multilaterals. The data sometimes attribute to the same institutions a public role (such as the ones listed above) and a role different from the ones listed above, depending on the transaction; in these ambiguous cases we consider the organizations as public if they are defined as such in more than 2 percent of all transactions in which they are present. We also consider public entities those that include in their names “Government,” “Local authority,” “Public” or “Ministry” in different languages. The remaining institutions are considered as private.

²⁶ For the full list of MDBs in the sample by transaction beneficiaries (SG/NSG/both), please refer to Annex A.

scaled by trend GDP, the average amount lent/invested by MDBs in a transaction is still smaller than the amount lent/invested by others (0.24 percent and 0.35 percent of trend GDP, respectively) but the overall transaction amount with multilateral participation more than doubles the average transaction without it (0.71 percent and 0.33 percent of trend GDP, respectively), driven by the fact that deals with multilateral involvement tend to benefit countries with lower income levels. This can be clearly seen in Figure 3, where the trends of the shares of the transaction amounts by type of provider over the total are reported. Panel a depicts that the highest share of MDB lending (over all amounts received by recipient countries) is to low-income countries. The fact that the average transaction with multilateral participation is larger than the amount provided by MDBs alone is also a first indication that MDBs do not lend alone but join forces with other actors as their co-lenders/co-investors to benefit developing and emerging economies.

The number of transactions with bilateral participation (major development banks and the largest government-owned Chinese financial institutions) is remarkably close to the number of transactions with multilateral participation, but the average value of a transaction with bilateral participation more than doubles a transaction with multilateral participation, or any transaction without bilateral participation. On average, bilateral transactions represent 1 percent of trend GDP of recipient countries.

Most transactions in the sample have a cross-border component, and the amounts that are lent/invested cross-border are four times larger than amounts lent/invested within national border (on average 0.39 percent and 0.09 percent of trend GDP, respectively). Most transactions benefit private rather than public institutions. The former also receive larger amounts on average (0.28 percent of trend GDP rather than 0.19 percent of trend GDP). Finally, transactions that include a debt component are almost twice the number of transactions with an equity component, and the average debt component of a transaction (0.28 percent of trend GDP) is larger than the average equity component (0.22 percent of trend GDP).

Table 1. Summary Statistics at the Transaction Level

Variable	N	Mean	Standard Deviation	Min	Max
All others amount (USD)	6,348	485.688	803.603	0.000	5000.000
Multilateral amount (USD)	891	119.291	138.475	0.500	790.000
All others amount (% of trend GDP)	6,348	0.350	1.026	0.000	7.719
Multilateral amount (% of trend GDP)	891	0.236	0.554	0.000	3.872
Transactions with multilateral presence (USD)	891	423.765	745.628	1.000	4999.950
Transactions with multilateral presence (% of trend GDP)	891	0.713	1.937	0.000	14.292
Transactions without multilateral presence (USD)	5,661	504.978	812.690	0.500	5000.040
Transactions without multilateral presence (% of trend GDP)	5,661	0.329	0.939	0.000	6.835
Bilateral amount (USD)	873	244.486	513.870	1.000	3644.480
Bilateral amount (% of trend GDP)	873	0.286	0.752	0.000	5.311
Transactions with bilateral presence (USD)	873	888.500	1561.848	1.500	10000.000
Transactions with bilateral presence (% of trend GDP)	873	0.968	2.474	0.001	18.870
Transactions without bilateral presence (USD)	5,679	442.393	698.225	0.500	4495.040
Transactions without bilateral presence (% of trend GDP)	5,679	0.297	0.856	0.000	6.460
All others amount (cross border) (% of trend GDP)	4,886	0.391	1.128	0.000	8.376
All others amount (within) (% of trend GDP)	3,482	0.086	0.209	0.000	1.481
All others amount (public) (% of trend GDP)	3,167	0.195	0.589	0.000	4.395
All others amount (private) (% of trend GDP)	5,612	0.276	0.791	0.000	5.778
All others amount (debt) (% of trend GDP)	5,530	0.275	0.746	0.000	5.209
All others amount (equity) (% of trend GDP)	3,064	0.224	0.796	0.000	6.451

Notes: The table reports the summary statistics of the variables of interest at the transaction level.

Information is gathered for eight infrastructure subsectors: transport, social infrastructure, power, renewables, oil & gas, water & sewage, telecoms, and mining & metals. The study exploits this dimension to construct a dataset aggregated at the country-subsector-year level, where country is the recipient country of the transaction, subsector is the transaction subsector, and year is the year of the financial close date.²⁷ Overall, there are 635 country-subsectors that we observe for 16 years.²⁸ Summary statistics of the aggregated data are presented in Table 2.

We winsorize transactions at the top 1 percent level. The average amount that a country-subsector receives in a year in infrastructure is 0.2 percent of trend GDP. MDBs participate in transactions in 7 percent of country-subsector-years; a similar figure summarizes the presence of flows from bilateral institutions. Even when aggregating at the country-subsector-year level, the features that we observed at the transaction level data are preserved, with cross-border transactions being larger than within-country transactions, transactions to the private sector being larger than transactions to the public sector, and debt transactions being larger than equity transactions.

Table 2. Summary Statistics at the Country-Subsector-Year Level

Variable	N	Mean	Standard Deviation	Min	Max
All others amount (% of trend GDP)	10,055	0.214	0.798	0.000	6.059
All others amount (cross border) (% of trend GDP)	10,055	0.161	0.625	0.000	4.700
All others amount (within) (% of trend GDP)	10,055	0.025	0.104	0.000	0.788
All others amount (public) (% of trend GDP)	10,055	0.055	0.239	0.000	1.770
All others amount (private) (% of trend GDP)	10,055	0.135	0.520	0.000	3.843
All others amount (debt) (% of trend GDP)	10,055	0.137	0.510	0.000	3.761
All others amount (equity) (% of trend GDP)	10,055	0.045	0.214	0.000	1.738
Multilateral amount (% of trend GDP)	10,055	0.012	0.068	0.000	0.539
Value from SG MDBs (% of trend GDP)	10,055	0.004	0.077	0.000	3.000
Value from NSG MDBs (% of trend GDP)	10,055	0.006	0.131	0.000	11.000
Value from other MDBs (not exclusively SG or NSG) (% of trend GDP)	10,055	0.016	0.270	0.000	17.751
Dummy = 1 if MDB amount >0	10,055	0.070	0.256	0.000	1.000
Bilateral amount (% of trend GDP)	10,055	0.013	0.073	0.000	0.598
Dummy = 1 if Bilateral amount >0	10,055	0.067	0.250	0.000	1.000
Dummy = 1 if MDB amount >0 but Bilateral amount =0	10,055	0.044	0.204	0.000	1.000
Dummy = 1 if MDB amount =0 but Bilateral amount >0	10,055	0.041	0.198	0.000	1.000
Dummy = 1 if MDB amount >0 and Bilateral amount >0	10,055	0.027	0.161	0.000	1.000

Notes: The table reports the summary statistics of the variables of interest aggregated at the country-subsector-year level.

²⁷ When a transaction refers to multiple countries or sectors, we divide the transaction amount in equal parts to countries and sectors. This happens in 207 cases.

²⁸ The panel of country/subsectors is not perfectly balanced since sometimes we have missing data in the GDP series.

Restrictions on capital flows could modify any multilateral mobilization effect by dampening cross-border effects (Alfaro et al., 2017). To inspect how the findings change depending on changes in the capital restrictions of recipient countries, we use the overall restriction index recently updated by Fernández et al. (2016), which ranges in the [0,1] interval, and where larger index values represent more restrictions on capital account transactions.²⁹ When the data are merged, we are left with 98 countries observed up to 2019.

Finally, to examine if there are heterogeneities by country characteristics, we use the worldwide governance indicators (Kaufmann, Kraay and Mastruzzi, 2010), which summarize the views on the quality of governance by enterprise, citizen and expert survey respondents, focusing on six dimensions: voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law and control of corruption. The six indicators range from -2.5 to 2.5, with higher values reflecting better outcomes. We calculate the average indicator for each country across years, and group countries in three terciles, where countries in the bottom tercile are the countries performing worse, and countries in the top tercile are the countries that fare better. Countries grouped by terciles per indicator are depicted in Figure A1.

3. Empirical Approach

We estimate fixed-effect models with transaction level data aggregated at the country-subsector level as in Broccolini et al. (2021), which we follow closely for the estimation of MDB mobilization effects. The advantage of this approach is that it allows us to capture mobilization in sectors in which MDBs have financed interventions, while controlling for critical observed and unobserved effects that can vary in time at the country and subsector levels. In our baseline specification, mobilized resources are modeled as:

$$m_{c,s,t} = \sum_{i=0}^2 \beta_i MDB_{c,s,t-i} + \alpha_{c,s} + \delta_{c,t} + \gamma_{s,t} + \varepsilon_{c,s,t} \quad (1)$$

²⁹ The overall index is the average of the inflow and outflow indicators aggregated on all asset categories (money market instruments, bonds or other debt securities, equity, collective investment securities, financial credits, derivatives, commercial credits, guarantees & sureties & financial back-up facilities, real estate transactions, direct investment accounts).

where $m_{c,s,t}$ are third-party resources indirectly mobilized in country c , subsector s at time t as a percentage of trend GDP of country c at time t ;³⁰ $MDB_{c,s,i}$ is dummy variable indicating if subsector s in country c has received MDB funding at time $t-I$,³¹ and a , d , and g are country-subsector, country-year, and subsector-year fixed effects intended to capture a wide range of unobservable factors varying in these dimensions.

We allow for the MDB financed interventions to have an effect that is spread in time to explore potential medium-term indirect mobilization effects that can materialize years after an MDB has contributed to finance projects in each country-subsector. We assume that MDB interventions are assigned at the country-sector level and hence cluster the standard errors at this level, though we explore alternative clusters as robustness exercises.

Data availability allows the empirical model to be extended in several dimensions. Two key dimensions are the nature of resources mobilized (either private or official sector resources) and their geographical origin (domestic or foreign). In that sense our extended empirical model takes the form:

$$m_{c,s,t}^{o,j} = \sum_{i=0}^2 \beta_i MDB_{c,s,t-i} + \alpha_{c,s} + \delta_{c,t} + \gamma_{s,t} + \varepsilon_{c,s,t}^{o,j} \quad (2)$$

where o = private or official, and j = domestic or foreign.

The main coefficients of interest in our study are the b s that capture the correlation between MDB funding and resources mobilized in a country-subsector. Initially we define MDB interventions as a dummy variable that takes the value of 1 when there is at least one operation funded in the country-subsector with MDB resources. This allows us to interpret the b coefficients as a measure of correlation between the presence of an MDB in the financing structure of a project either contemporaneously or with one or two lags, and the dollar amount of resources that flow into that subsector, normalized by trend GDP. Note that the b coefficients capture only indirect mobilization since the aggregation of the dependent variable includes only operations in which the MDB s are not present.

³⁰ We normalize by GDP to allow cross-country sector comparability in the dependent variable of our study given to large differences in the sizes of subsectors and countries across our sample. However, given the highly expected correlation between GDP and financing to a given country that would confound if the effects estimated alter the numerator or the denominator of the ratio, we normalize by trend GDP computed using the Hodrick-Prescott filter, a variable less prone to the cyclical dynamics of credit, and hence less endogenous to yearly fluctuations in financing.

³¹ We explore a variety of lag structures and use the Akaike information criterium to select the optimal lag structure. Following this approach, we estimate the empirical models considering up to lag 2.

To mitigate concerns of potential reverse causality that could undermine the interpretation of results as findings of mobilization, we explore specifications with leads of MDB financed interventions that allow us to test for the presence of anticipation effects of country-subsector MDB interventions. Findings of anticipation would suggest that MDBs follow rather than lead other resources, raising doubts on the interpretation of results as evidence of mobilization.

To assess whether multilateral and bilateral institutions act as substitutes or are complementary in the mobilization of third-party resources, we also estimate:

$$y_{c,s,t} = \sum_{i=0}^2 \beta_i MDB_{c,s,t-i} + \sum_{i=0}^2 \vartheta_i Bilateral_{c,s,t-i} + \sum_{i=0}^2 \zeta_i MDB_{c,s,t-i} \#Bilateral_{c,s,t-i} + \alpha_{c,s} + \delta_{c,t} + \gamma_{s,t} + \varepsilon_{c,s,t} \quad (3)$$

where $y_{c,s,t}$ is the amount of third-party financing (excluding both multilateral and bilateral financing) flows to a country-subsector cs at time t normalized by country's GDP, $MDB_{c,s,t}$ is dummy variable indicating if country-subsector cs has received *MDB* funding at time t , $Bilateral_{c,s,t}$ is a dummy variable indicating whether country-subsector cs has received bilateral funding at time t , and the interaction $MDB_{c,s,t} \#Bilateral_{c,s,t}$ indicates the contemporaneous funding of both multilateral and bilateral institutions to a country-subsector cs at time t .

Our empirical exercises capture the effect of resource mobilization when MDBs are present, regardless of their lending volumes that in way capture their degree of engagement. To study how the volume of MDB financing has a catalytic effect on other financiers, in Section 7 we compute something like a multiplier, as in Broccolini et al. (2021), to be able to compare the different magnitudes of the effects. We estimate our baseline model replacing the MDB dummy, by a measure of the size of the intervention normalized by trend GDP.

4. Baseline Results

Table 3 reports our baseline results. The table is divided into three panels, each one with a different dependent variable. Panel A reports the results using as the dependent variable the sum of all values reported in the financing of operations in each country-subsector-year, excluding the financing provided by an MDB and the financing of projects in which an MDB participates. Panel B reports results using only the values of transactions carried out by private sector actors, and panel C uses only transactions from the official sector. Each panel reports regressions for the total amount of resources mobilized under the category of the panel in the first column and breaks them down as those of domestic origin and those of foreign origin in the second and third columns, respectively.

Our results suggest that there is a strong association between the participation of MDBs in financing projects in a country-subsector and the total volume of additional third-party resources invested in other projects there. Column (1), for example, suggests that over a three-year span the cumulative additional third-party financing resources account for nearly 0.5 percent of trend GDP more where MDBs are present in comparison to where they are not. Columns (2) and (3) suggest that most of that comes from cross-border resources. The association of MDB funding and domestic resources indirectly mobilized remains statistically significant, though notably smaller than cross-border mobilization (0.05 percent of trend GDP vs 0.32 percent). In all cases the contemporaneous effect is larger than the lags, but there is evidence suggesting that there is a longer-term effect given the significance of the second lag in various specifications. The numbers estimated are not only statistically significant but are also economically relevant when compared to the average of 0.17 percent of trend GDP for the data in the sample. Assuming that causality can be inferred as shown below, these numbers signal high mobilization by MDBs.

Panels B and C show similar results to those of panel A with some differences worth noting. First, the coefficients in panel B are systematically larger than those of panel C, suggesting that private sector mobilization tends to be a third larger than the mobilization of official resources. In both cases cross-border mobilization is stronger than domestic mobilization, and in the case of official mobilization there is a medium-term effect of MDB participation that can be seen in the significance of the lags, and that is not present in private mobilization.

Untangling causality in this exercise is challenging, since MDB participation can be driven by previous activity in the country-sector. Moreover, in a world in which MDBs follow the money rather than provide mechanisms to open markets or mitigate risks to encourage other financiers, results like those reported in Table 3 could also be registered. To mitigate concerns of reverse causality we estimate equation (2) adding two leads of the MDB dummy.

Table 4 reports the results of estimating equation (2) with leads following the organization of Table 3. In none of the specifications are the leads individually or jointly significant, reducing potential concerns of reverse-causality.³² The main results reported in Table 3 hold, reinforcing our previous interpretation of evidence of resource mobilization.

³² The finding is confirmed when testing jointly for parallel trends and no anticipatory effects using the untreated observations only as in Borusyak, Jaravel and Spiess (2021).

Table 3. Baseline Results

Dependent Variable	Panel A: All Mobilization			Panel B: Private Mobilization			Panel C: Official Mobilization		
	Total (1)	Domestic (2)	Cross-Border (3)	Total (4)	Domestic (5)	Cross-Border (6)	Total (7)	Domestic (8)	Cross-Border (9)
MDB _{c,s,t}	0.402*** (0.0375)	0.0434*** (0.00523)	0.275*** (0.0297)	0.208*** (0.0249)	0.0257*** (0.00394)	0.164*** (0.0209)	0.155*** (0.0135)	0.00732*** (0.00105)	0.0820*** (0.00820)
MDB _{c,s,t-1}	-0.000172 (0.0267)	0.00337 (0.00375)	-0.00338 (0.0214)	-0.00476 (0.0176)	0.00247 (0.00293)	-0.00406 (0.0150)	0.0178* (0.00956)	0.000794 (0.000808)	0.0116** (0.00558)
MDB _{c,s,t-2}	0.0701** (0.0316)	0.00511 (0.00358)	0.0477* (0.0260)	0.0297 (0.0214)	0.00281 (0.00282)	0.0218 (0.0187)	0.0232** (0.0110)	0.00168** (0.000791)	0.0107 (0.00707)
Σ _i MDB _{c,s,t-i}	0.472***	0.052***	0.319***	0.233***	0.031***	0.182***	0.196***	0.010***	0.104***
P-Value F-test	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Observations	9,743	9,743	9,743	9,743	9,743	9,743	9,743	9,743	9,743
R-squared	0.441	0.442	0.433	0.455	0.433	0.449	0.405	0.462	0.388
Year*Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year*Subsector FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country*Subsector FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean Dependent Var.	0.173	0.020	0.131	0.112	0.014	0.091	0.042	0.003	0.024
Mean Independent Var.	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=0}^2 b_i MDB_{c,s,t-i} + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$. The dependent variable is normalized by the country's trend GDP at time t. The independent variable is a dummy variable equal to 1 when MDBs have financed at least one operation in a country-subsector at time t and 0 otherwise. Country-subsector clustered standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 4. Anticipation Effects

Dependent Variable	Panel A: All Mobilization			Panel B: Private Mobilization			Panel C: Official Mobilization		
	Total (1)	Domestic (2)	Cross-Border (3)	Total (4)	Domestic (5)	Cross-Border (6)	Total (7)	Domestic (8)	Cross-Border (9)
$MDB_{c,s,t+2}$	-0.000184 (0.0219)	-0.00330 (0.00409)	0.0105 (0.0180)	0.00681 (0.0149)	-0.00263 (0.00318)	0.0103 (0.0127)	-0.00316 (0.00764)	-0.000497 (0.000794)	0.00130 (0.00489)
$MDB_{c,s,t+1}$	-0.0136 (0.0297)	-0.00263 (0.00398)	-0.00998 (0.0239)	-0.00764 (0.0191)	-0.000902 (0.00311)	-0.00838 (0.0161)	-0.00746 (0.0100)	-0.000388 (0.000796)	-0.00332 (0.00649)
$MDB_{c,s,t}$	0.438*** (0.0433)	0.0478*** (0.00621)	0.302*** (0.0347)	0.233*** (0.0299)	0.0297*** (0.00479)	0.183*** (0.0251)	0.165*** (0.0148)	0.00722*** (0.00121)	0.0877*** (0.00900)
$MDB_{c,s,t-1}$	0.0185 (0.0306)	0.00482 (0.00433)	0.0119 (0.0242)	0.00233 (0.0205)	0.00395 (0.00347)	0.000774 (0.0174)	0.0251** (0.0110)	0.000635 (0.000927)	0.0165*** (0.00634)
$MDB_{c,s,t-2}$	0.0836** (0.0392)	0.00632 (0.00410)	0.0577* (0.0324)	0.0390 (0.0274)	0.00400 (0.00318)	0.0294 (0.0239)	0.0276** (0.0131)	0.00174* (0.000887)	0.0129 (0.00826)
$\sum_{i=0}^2 MDB_{c,s,t-i}$	0.540***	0.059***	0.372***	0.274***	0.038***	0.213***	0.218***	0.010***	0.117***
P-Value F-test	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
$\sum_{i=1}^2 MDB_{c,s,t+i}$	-0.014	-0.006	0.001	-0.001	-0.004	0.002	-0.011	-0.001	-0.002
P-Value F-test	0.721	0.321	0.986	0.974	0.455	0.930	0.434	0.490	0.817
Observations	8,513	8,513	8,513	8,513	8,513	8,513	8,513	8,513	8,513
R-squared	0.443	0.455	0.435	0.458	0.446	0.451	0.412	0.470	0.395
Year*Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year*Subsector FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country*Subsector FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean Dependent Var.	0.173	0.020	0.131	0.112	0.014	0.091	0.042	0.003	0.024
Mean Independent Var.	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=-2}^2 b_i MDB_{c,s,t-i} + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$. The dependent variable is normalized by the country's trend GDP at time t. The independent variable is a dummy variable equal to 1 when MDBs have financed at least one operation in a country-subsector at time t and 0 otherwise. Country-subsector clustered standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Overall, our baseline results suggest that MDBs play a role mobilizing resources both private and public. Our results indicate that MDBs can contribute to mitigate risks for participants in infrastructure financing and can contribute to signal the soundness and profitability of investments in particular country-subsectors. These effects tend to be larger on foreign financiers, who probably face larger information asymmetries than domestic ones. The effects are also larger mobilizing private resources compared to official ones. Most likely, official financiers have more information than private ones, but their objectives are also different than those of private players and may require less of the externalities provided by MDBs to participate in funding operations in a country-subsector. As opposed to private financiers, official lenders do not search for yield, and hence the fact that risks are not adequately priced in, may be less binding for them. Nonetheless, we find significant evidence of MDB financing on the mobilization of cross-border official resources. This may be due to foreign bilateral official institutions taking advantage of the thoroughness of the processes and procedures and the due diligence followed by MDBs in the operations that they finance, or of strategic complementarities of official lending.

5. Robustness³³

In this section we report a battery of robustness exercises to test the strength of the results reported in our baseline exercise. To ease the reading of the following tables, we report only results for the aggregate resources mobilized, and for the disaggregation between private and public ones. Results for the cross-border and domestic disaggregation are available upon request.

While in every specification we have controlled for country-year and subsector-year fixed effects, capturing trends common to all countries or to all subsectors, there might still be some variation over time at the country-subsector level driving both the total volume of additional third-party resources in infrastructure, and multilateral lending, which would be spuriously attributed to our coefficient of interest. Therefore, we include in our baseline specification country-subsector linear trends or quadratic trends, which are reported in Table 5, Panel A and Panel B, respectively. As can be seen, once country-subsector (linear or quadratic) trends are controlled for, the R-squared in both specification increases as more of the variation in the dependent variable is

³³ Additional robustness exercises are presented in Appendix 1. Namely, we explore if results are robust to dropping any country or subsector. Additionally, we estimate the baseline regression for a moving window of 15 years throughout the complete sample to test for coefficient instability. In all cases the baseline results remain robust.

accounted for, but none of the estimated coefficients of interest is significantly different from our baseline model in Table 3.

Table 5. Country-Sector Trends

Dependent Variable	Panel A			Panel B		
	Total (1)	Private (2)	Official (3)	Total (4)	Private (5)	Official (6)
MDB _{c,s,t}	0.411*** (0.0401)	0.213*** (0.0271)	0.159*** (0.0141)	0.420*** (0.0412)	0.216*** (0.0282)	0.163*** (0.0142)
MDB _{c,s,t-1}	0.00514 (0.0278)	-0.00187 (0.0181)	0.0198** (0.00999)	0.0114 (0.0287)	0.000719 (0.0191)	0.0227** (0.0101)
MDB _{c,s,t-2}	0.0708** (0.0330)	0.0287 (0.0226)	0.0236* (0.0121)	0.0774** (0.0344)	0.0317 (0.0238)	0.0263** (0.0123)
$\sum_{i=0}^2$ MDB _{c,s,t-i}	0.487***	0.240***	0.202***	0.508***	0.248***	0.212***
P-Value F-test	0.000	0.000	0.000	0.000	0.000	0.000
Observations	9,743	9,743	9,743	9,743	9,743	9,743
R-squared	0.490	0.508	0.451	0.491	0.507	0.456
Year*Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year*Subsector FE	Yes	Yes	Yes	Yes	Yes	Yes
Country*Subsector trend	Yes	Yes	Yes	No	No	No
Country*Subsector quadratic trend	No	No	No	Yes	Yes	Yes
Mean Dependent Var.	0.173	0.112	0.042	0.173	0.112	0.042
Mean Independent Var.	0.070	0.070	0.070	0.070	0.070	0.070

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=-2}^2 b_i MDB_{c,s,t-i} + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$, controlling for linear and quadratic sector-trends. The dependent variable is normalized by the country's trend GDP at time t. The independent variable is a dummy variable equal to 1 when MDBs have financed at least one operation in a country-subsector at time t and 0 otherwise. Country-subsector clustered standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1

A second set of robustness exercises explores alternative definitions of the dependent and independent variables. Panel A of Table 6 reports results when considering only debt in the independent variable. It is worth noting that MDBs carry out mostly debt operations but are allowed to a certain extent to participate with equity in some cases. Equity operations are rather small in our sample and account for only 2.8 percent of MDBs' total financing. Nonetheless, we explore if results are changed when considering only debt in the definition of MDB participation. The results remain and are largely unchanged.

In a similar spirit, panels B and C of Table 6 explore mobilization of debt (panel B) and equity (panel C) separately. We find relevant differences between the mobilization of debt and equity, most of them stemming, naturally, from the official sector side since official sector operations seldom involve equity. We concentrate on the third column of both panels B and C, and we see that the contemporaneous effect of equity mobilization, though significant, are smaller than that of debt. While playing a role in mobilizing private sector equity, most of the effect of MDBs is on overall debt mobilization.

Table 6. Alternative Definitions of Dependent and Independent Variables

Dependent Variable	Panel A: Only MDB debt in the independent variable			Panel B: Only debt in the dependent variable			Panel C: Only equity in the dependent variable		
	Total (1)	Private (2)	Official (3)	Total (4)	Private (5)	Official (6)	Total (7)	Private (8)	Official (9)
MDB _{c,s,t}	0.422*** (0.0390)	0.221*** (0.0262)	0.161*** (0.0139)	0.211*** (0.0246)	0.0924*** (0.0148)	0.0874*** (0.00842)	0.105*** (0.00890)	0.0816*** (0.00816)	0.00522*** (0.000629)
MDB _{c,s,t-1}	0.00269 (0.0275)	-0.00554 (0.0184)	0.0196** (0.00975)	0.00429 (0.0194)	-0.00428 (0.0119)	0.0146** (0.00630)	0.00193 (0.00550)	0.00365 (0.00497)	0.000150 (0.000416)
MDB _{c,s,t-2}	0.0761** (0.0327)	0.0349 (0.0224)	0.0241** (0.0113)	0.0314 (0.0224)	0.00866 (0.0142)	0.00827 (0.00706)	0.00648 (0.00662)	0.00483 (0.00585)	0.000632 (0.000444)
$\sum_{i=0}^2$ MDB _{c,s,t-i}	0.501***	0.251***	0.204***	0.246***	0.097***	0.110***	0.113***	0.090***	0.006***
P-Value F-test	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Observations	9,743	9,743	9,743	9,743	9,743	9,743	9,743	9,743	9,743
R-squared	0.442	0.456	0.406	0.435	0.452	0.394	0.387	0.379	0.333
Year*Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year*Subsector FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country*Subsector FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean Dependent Var.	0.173	0.112	0.042	0.115	0.071	0.027	0.030	0.025	0.001
Mean Independent Var.	0.067	0.067	0.067	0.070	0.070	0.070	0.070	0.070	0.070

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=0}^2 b_i \text{MDB}_{c,s,t-i} + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$. The dependent variable is normalized by the country's trend GDP at time t. The independent variable is a dummy variable equal to 1 when MDBs have financed at least one operation in a country-subsector at time t and 0 otherwise. The precise definitions of the independent and dependent variables are in the titles of the panels. Country-subsector clustered standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1

In Table 7 we report the impact of changes in the econometric strategy particularly in the clustering of standard errors. The decision of how to cluster the standard errors depends on the view of the researchers of how the interventions are assigned. In our baseline exercise we assume that MDB resources are assigned at the country-subsector level, based on the way that MDBs tend to be organized. However, since aggregate lending envelopes are assigned at the country level, this could also be considered an adequate level of clustering. We test this, and we also test a two-dimensional clustering approach where we cluster at the country and subsector levels rather than

at the country-subsector one. With slight changes in the significance of the coefficients, particularly of the lags, the baseline results hold.

Table 7. Alternative Clustering Approaches

Dependent Variable	Panel A: Standard errors clustered at country level			Panel B: Standard errors clustered at country and subsector (two-dimensional)		
	Total (1)	Private (2)	Official (3)	Total (4)	Private (5)	Official (6)
MDB _{c,s,t}	0.402*** (0.0490)	0.208*** (0.0316)	0.155*** (0.0184)	0.402*** (0.0623)	0.208*** (0.0406)	0.155*** (0.0212)
MDB _{c,s,t-1}	-0.000172 (0.0299)	-0.00476 (0.0187)	0.0178* (0.0108)	-0.000172 (0.0337)	-0.00476 (0.0196)	0.0178 (0.0120)
MDB _{c,s,t-2}	0.0701** (0.0336)	0.0297 (0.0228)	0.0232** (0.0112)	0.0701** (0.0265)	0.0297 (0.0225)	0.0232* (0.0119)
\sum_i MDB _{c,s,t-i}	0.472***	0.233***	0.196***	0.472***	0.233***	0.196***
P-Value F-test	0.000	0.000	0.000	0.000	0.003	0.000
Observations	9,743	9,743	9,743	9,743	9,743	9,743
R-squared	0.441	0.455	0.405	0.441	0.455	0.405
Year*Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year*Subsector FE	Yes	Yes	Yes	Yes	Yes	Yes
Country*Subsector FE	Yes	Yes	Yes	Yes	Yes	Yes
Mean Dependent Var.	0.173	0.112	0.042	0.173	0.112	0.042
Mean Independent Var.	0.070	0.070	0.070	0.070	0.070	0.070

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=0}^2 b_i MDB_{c,s,t-i} + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$. The dependent variable is normalized by the country's trend GDP at time t. The independent variable is a dummy variable equal to 1 when MDBs have financed at least one operation in a country-subsector at time t and 0 otherwise. Clustered standard errors defined in the title of each panel are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

A key omitted variable in our study could be the presence of global crises. During a crisis, many sources of uncertainty increase, and capital flows retrench, negatively impacting the potential of MDBs to mobilize resources. In other words, during a global crisis there may be a smaller supply of available resources to mobilize towards infrastructure investment projects in emerging market economies.

We test this by including dummies for the two largest global crises witnessed during our sample: the global financial crisis of 2008-2009 and the COVID-19 pandemic of 2020. In each case we create a dummy that takes the value of 1 during the global crisis period and interact it with the MDB dummy. Results are reported in Table 8. As noted in the table, the main effects remain statistically significant, and the size of the coefficients are hardly unchanged. We do not see any marginal impact of mobilization of private resources during the global financial crisis, though we

see a significant lower effect of the medium-term mobilization of official sector resources. The fiscal constraints faced by countries during the crisis possibly inhibited the signals provided by MDBs in the past to mobilize resources into a given country-subsector. We also see a considerable and significant reduction of the contemporary effect during the COVID pandemic in 2020. Presumably, the results are capturing the strong retrenchment of financing observed during the initial phases of the pandemic.

Table 8. Controlling for Global Crises

Dependent Variable	Total (1)	Private (2)	Official (3)
MDB _{c,s,t}	0.420*** (0.0406)	0.215*** (0.0274)	0.164*** (0.0149)
MDB _{c,s,t-1}	0.0106 (0.0307)	0.000438 (0.0204)	0.0193* (0.0109)
MDB _{c,s,t-2}	0.0723** (0.0351)	0.0244 (0.0238)	0.0304** (0.0126)
MDB _{c,s,t} * GFC _t	0.0875 (0.100)	0.0603 (0.0657)	-0.00512 (0.0345)
MDB _{c,s,t-1} * GFC _t	-0.0177 (0.0686)	-0.0559 (0.0495)	0.0301 (0.0282)
MDB _{c,s,t-2} * GFC _t	0.0171 (0.104)	0.0717 (0.0763)	-0.0380 (0.0278)
MDB _{c,s,t} * COVID-19 _t	-0.317*** (0.0788)	-0.156*** (0.0528)	-0.0998*** (0.0283)
MDB _{c,s,t-1} * COVID-19 _t	-0.0536 (0.0765)	0.0279 (0.0532)	-0.0368 (0.0284)
MDB _{c,s,t-2} * COVID-19 _t	0.0278 (0.0692)	0.0181 (0.0405)	-0.0190 (0.0260)
Observations	9,743	9,743	9,743
R-squared	0.442	0.456	0.407
Year*Country FE	Yes	Yes	Yes
Year*Subsector FE	Yes	Yes	Yes
Country*Subsector FE	Yes	Yes	Yes
P- value MDB _{c,s,t} + MDB _{c,s,t} * GFC _t = 0	0.000	0.000	0.000
P- value MDB _{c,s,t-1} + MDB _{c,s,t-1} * GFC _t = 0	0.908	0.220	0.056
P- value MDB _{c,s,t-2} + MDB _{c,s,t-2} * GFC _t = 0	0.376	0.192	0.777
P- value MDB _{c,s,t} + MDB _{c,s,t} * COVID-19 _t = 0	0.142	0.188	0.012
P- value MDB _{c,s,t-1} + MDB _{c,s,t-1} * COVID-19 _t = 0	0.551	0.563	0.509
P- value MDB _{c,s,t-2} + MDB _{c,s,t-2} * COVID-19 _t = 0	0.113	0.250	0.616
Mean Dependent Var.	0.173	0.112	0.042
Mean Independent Var.	0.070	0.070	0.070

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=0}^2 (b_i MDB_{c,s,t-i} + q_i MDB_{c,s,t-i} * GFC_t + r_i MDB_{c,s,t-i} * COVID-19_t) + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$. GFC is a dummy variable that equals 1 in 2008 and 2009 during the global financial crisis, and COVID-19 is a dummy that equals 1 in 2020. The dependent variable is normalized by the country's trend GDP at time t. The independent variable is a dummy variable equal to 1 when MDBs have financed at least one operation in a country-subsector at time t and 0 otherwise. Country-subsector clustered standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Another potential omitted variable might be the presence of other financiers. Official bilateral lenders can also be critical players that may contribute to resource mobilization in an analogous way as MDBs. The list of official bilateral financiers can be extensive, so we focus on the largest global bilateral players in emerging markets. Our list of bilateral financiers includes the major development financial institutions of OECD countries³⁴ and the largest government-owned Chinese institutions that participate in financing projects in emerging markets.³⁵ To capture bilateral participation in each country-subsector, we follow the same procedure as above when constructing the MDB dummy: i.e., we create a dummy for bilateral participation taking the value 1 when there is at least one transaction carried out by an institution in the list of bilateral institutions in a country and a subsector in each year. We include this dummy as an additional variable in our regression. Note that this exercise requires redefining the official sector mobilization dependent variable. In our previous specifications, official bilateral flows were included in the dependent variable itself; here we exclude them, and now the dependent variable accounts for all sources of official funds except the official bilateral ones.

Table 9 reports these results for total, private, and official resource mobilization. Our results show that when controlling for bilateral lending the coefficient attached to MDB mobilization is smaller compared to the baseline, and the coefficient of bilateral mobilization is significant and larger than the one of MDBs. Another notable result is that any previously significant coefficient on lagged MDB participation dummy is now statistically equal to zero. This happens in the models for each of the three dependent variables.

³⁴ The list of development financial institutions from OECD countries include: OeEB (Austria), BIO and BMI-SBI (Belgium), FinDev Canada (Canada), IFU (Denmark), Finnfund (Finland), Agence Francaise de Developpement and Proparco (France), KfW and DEG (Germany), CDP and SIMEST (Italy), Japan International Cooperation Agency (Japan), Korean Development Bank (Korea), FMO (Netherlands), Norfund (Norway), SOFID (Portugal), COFIDES (Spain), Swedfund (Sweden), SIFEM (Switzerland), CDC Group (United Kingdom) and OPIC (United States).

³⁵ See Horn, Reinhart and Trebesch (2021).

Table 9. Controlling for Official Bilateral Lenders

Dependent Variable	Total (1)	Private (2)	Official (3)
$MDB_{c,s,t}$	0.202*** (0.0323)	0.126*** (0.0246)	0.0674*** (0.0113)
$MDB_{c,s,t-1}$	-0.0189 (0.0229)	-0.0179 (0.0173)	0.0114 (0.00839)
$MDB_{c,s,t-2}$	0.0239 (0.0273)	0.0161 (0.0222)	0.00826 (0.00951)
$Bilateral_{c,s,t}$	0.533*** (0.0419)	0.306*** (0.0309)	0.324*** (0.0180)
$Bilateral_{c,s,t-1}$	0.0201 (0.0246)	0.0238 (0.0190)	-0.000766 (0.00914)
$Bilateral_{c,s,t-2}$	-0.00492 (0.0264)	-0.00152 (0.0209)	0.00254 (0.00865)
$\Sigma_i MDB_{c,s,t-i}$	0.207***	0.124***	0.087***
P-Value F-test	0.000	0.002	0.000
$\Sigma_i Bilateral_{c,s,t-i}$	0.548***	0.328***	0.326***
P-Value F-test	0.000	0.000	0.000
Observations	9,743	9,743	9,743
R-squared	0.492	0.480	0.567
Year*Country FE	Yes	Yes	Yes
Year*Subsector FE	Yes	Yes	Yes
Country*Subsector FE	Yes	Yes	Yes
Mean Dependent Var.	0.155	0.112	0.042
Mean MDB	0.070	0.070	0.070
Mean Bilateral	0.067	0.067	0.067

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=0}^2 (b_i MDB_{c,s,t-i} + q_i Bilateral_{c,s,t-i}) + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$. The dependent variable is normalized by the country's trend GDP at time t. The independent variables are dummy variables equal to 1 when MDBs have financed at least one operation in a country-subsector at time t and 0 otherwise, and dummy variables equal to 1 when official bilateral partners have financed at least one operation in a country-subsector at time t and 0 otherwise. Country-Subsector clustered standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1

To analyze these findings in more depth, we explore the dynamics of MDB and official bilateral participation. We do this by estimating linear probability models for MDB participation and official bilateral participation. We model the probability of MDBs and official bilateral lenders of participating in a country-subsector in a given year, as a function of its own history in the country-subsector and the contemporaneous and historic participation of the other lender in the same country-subsector. We control for the same structure of fixed effects as before. Table 10 reports the findings from these linear probability models. Column (1) reports result for the participation of MDBs and (2) for that of official bilateral lenders. Results suggest that there is a strong correlation between the contemporaneous effects of both. The probability of MDBs and of official bilateral lenders participating simultaneously, and possibly in a coordinated way, in a

country-subsector in any year is high.³⁶ In the MDB model we find no significant effect of its participation being influenced by previous participation of official bilateral lenders. On the other hand, column (2) shows that the opposite is not true. We find that the official lenders' participation is positively and significantly influenced by past participation (2-year lag) of MDBs in a country-subsector.

Table 10. Linear Probability Models for MDB and Official Bilateral Lenders

Dependent Variable	MDB (1)	Bilateral (2)
MDB _{c,s,t}		0.271*** (0.0208)
MDB _{c,s,t-1}	0.00928 (0.0216)	0.0228 (0.0178)
MDB _{c,s,t-2}	-0.0512*** (0.0186)	0.0423** (0.0208)
Bilateral _{c,s,t}	0.279*** (0.0223)	
Bilateral _{c,s,t-1}	-0.0202 (0.0174)	-0.00637 (0.0186)
Bilateral _{c,s,t-2}	-0.00731 (0.0184)	0.00631 (0.0202)
Observations	9,743	9,743
R-squared	0.408	0.404
Year*Country FE	Yes	Yes
Year*Subsector FE	Yes	Yes
Country*Subsector FE	Yes	Yes
Mean MDB	0.070	0.070
Mean Bilateral	0.067	0.067

Notes: The equation estimated is: $X_{c,s,t} = \sum_{i=1}^2 b_i X_{c,s,t-i} + \sum_{i=0}^2 q_i Y_{c,s,t-i} + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$. Where X and Y are dummy variables equal to 1 when MDBs have financed at least one operation in a country-subsector at time t and 0 otherwise, and dummy variables equal to 1 when official bilateral partners have financed at least one operation in a country-subsector at time t and 0 otherwise. In column 1 X=MDB and Y=Bilateral and the opposite in column 2. Country-Subsector clustered standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Tables 9 and 10 together suggest that part of the mobilization effect previously identified operates through the MDB's ability to mobilize other sources of official funds, that in turn are relevant mobilizers. The fact that the two-year lag of the mobilization dummy loses significance in Table 9—but that there is also a significant two-year lag of MDB participation affecting official

³⁶ This reflects the fact that in almost 30 percent of multilateral transactions, bilateral institutions participate, and in almost 30 percent of bilateral transaction, multilateral institutions participate.

bilateral lending—suggests that the mechanism previously identified could be operating through this indirect channel.

To explore further how the multilateral and bilateral institutions interact, and whether they are substitutes or complements to each other in the mobilization of third-party resources, we report the estimated coefficients from equation (3) in Table 11.

Table 11. Mobilization of MDBs and Official Bilateral Lenders

Dependent Variable	Total (1)	Private (2)	Official (3)
Only MDB $c_{s,t}$	0.465*** (0.0267)	0.344*** (0.0280)	0.318*** (0.0268)
Only MDB $c_{s,t-1}$	0.0184 (0.0235)	0.00204 (0.0222)	0.0218 (0.0215)
Only MDB $c_{s,t-2}$	0.0309 (0.0242)	0.0103 (0.0249)	0.00441 (0.0228)
Only Bilateral $c_{s,t}$	0.539*** (0.0292)	0.395*** (0.0279)	0.761*** (0.0245)
Only Bilateral $c_{s,t-1}$	-0.0141 (0.0249)	-0.00856 (0.0246)	0.00342 (0.0229)
Only Bilateral $c_{s,t-2}$	0.0515* (0.0269)	0.0468* (0.0257)	0.0162 (0.0235)
Both Official Creditors $c_{s,t}$	0.588*** (0.0323)	0.450*** (0.0324)	0.779*** (0.0250)
Both Official Creditors $c_{s,t-1}$	-0.0107 (0.0285)	-0.00134 (0.0286)	0.0295 (0.0245)
Both Official Creditors $c_{s,t-2}$	0.0297 (0.0270)	0.0421 (0.0290)	0.0198 (0.0255)
S_i Official Creditors $c_{s,t}$	1.591***	1.189***	1.859***
P-Value F-test	0.000	0.000	0.000
S_i Official Creditors $c_{s,t-1}$	-0.006	-0.008	0.055
P-Value F-test	0.902	0.876	0.224
S_i Official Creditors $c_{s,t-2}$	0.112**	0.099*	0.040
P-Value F-test	0.029	0.058	0.397
Observations	9,743	9,743	9,743
R-squared	0.600	0.580	0.662
Year*Country FE	Yes	Yes	Yes
Year*Subsector FE	Yes	Yes	Yes
Country*Subsector FE	Yes	Yes	Yes

Notes: The estimated equation is:

$$m_{c,s,t} = \sum_{i=0}^2 \beta_i MDB_{c,s,t-i} + \sum_{i=0}^2 \vartheta_i Bilateral_{c,s,t-i} + \sum_{i=0}^2 \zeta_i MDB_{c,s,t-i} \# Bilateral_{c,s,t-i} + \alpha_{c,s} + \delta_{c,t} + \gamma_{s,t} + \varepsilon_{c,s,t}$$

where $m_{c,s,t}$ is the amount of third-party financing (excluding both multilateral and bilateral financing) flows normalized by trend GDP to a country-subsector cs at time t , $MDB_{c,s,t}$ is dummy variable indicating if country-subsector cs has received MDB funding at time t , $Bilateral_{c,s,t}$ is a dummy variable indicating whether country-subsector cs has received bilateral funding at time t , and the interaction $MDB_{c,s,t} \# Bilateral_{c,s,t}$ indicates the contemporaneous funding of both multilateral and bilateral institutions to a country-subsector cs at time t .

As can be seen, financing from multilateral institutions only and transactions from bilateral institutions only increase third-party financing to a country-subsector at time t , with the mobilization from bilateral institutions being significantly larger. Moreover, the presence of financing from both institutions at the same time is associated with an even larger increase of third-party financing, as indicated by the positive and significant coefficient of the interaction. This is true for overall financing, as for private financing and official financing. In sum, bilateral and multilateral institutions seem to behave as complements to each other in mobilizing resources towards infrastructure.

Finally, once we control for bilateral institutions' financing, we no longer observe a positive and significant MDB mobilization in the two subsequent years. It is bilateral institutions instead that seem to have a positive and significant mobilization effect. However, as shown in Table 10, MDB financing seems to precede bilateral financing.

6. Heterogeneity

Resource mobilization by MDBs may depend on several country specific characteristics that affect the supply of available funds that can be mobilized or that may introduce more noise to the signals provided by MDBs about the soundness and profitability of investments. Among them, we explore the presence of capital controls, the level of financial development and the income level of the receiving country.

Capital controls are mechanisms used by authorities to reduce potential negative impacts of international capital flow volatility on macroeconomic or financial stability. Capital controls can take various forms including taxes charged on inflows or outflows, limits on, or prohibition of certain types of flows (normally short-term ones), and restrictions of transactions such as real estate purchases, among others. Fernández et al. (2016) provide a broad description of diverse types of controls applied to different assets and construct various measures of capital controls at a country level. Here we explore if greater capital controls following an aggregated index constructed by Fernández et al., affect MDB resource mobilization. If capital controls are higher, we expect participants (especially foreign financiers) to be less willing to get involved in transactions. Higher capital controls can not only limit the supply of funds by imposing explicit restrictions on inflows but can also discourage them if there are restrictions on outflows that can affect the possibility of foreign investors claiming their future returns.

To test this hypothesis, we interact the capital control index with the MDB presence variable. Higher values of the index that is normalized between 0 and 1, represent more capital controls. A negative sign of the interaction term implies that when capital controls are higher, the mobilization potential of MDBs diminishes. Columns (1)-(3) in panel A of Table 12 report the results of this exercise for total, private and official resource mobilization. Our results suggest that capital controls reduce the mobilization of private resources. In column (2) we see that the impact of capital controls is significant. An increase in capital controls reduces the mobilization potential of MDBs of private sector resources. In economic terms, this effect is sizable. A subsector in a country moving one standard deviation (0.34) away from the average in our sample (0.47) in the capital controls index sees a reduction in mobilized private resources at the time of the investment of 0.09 percentage points of trend GDP.

Table 12. Controlling for Capital Controls and Financial Development

Dependent Variable	Panel A			Panel B		
	Total (1)	Private (2)	Official (3)	Total (4)	Private (5)	Official (6)
MDB _{c,s,t}	0.420*** (0.0729)	0.295*** (0.0572)	0.116*** (0.0225)	0.484*** (0.0524)	0.245*** (0.0351)	0.193*** (0.0184)
MDB _{c,s,t-1}	-0.0114 (0.0541)	-0.0319 (0.0406)	0.0201 (0.0164)	-0.0253 (0.0349)	-0.0212 (0.0231)	0.0147 (0.0117)
MDB _{c,s,t-2}	0.0418 (0.0642)	0.0531 (0.0468)	-0.00949 (0.0198)	0.0665 (0.0482)	0.0221 (0.0323)	0.0173 (0.0164)
MDB _{c,s,t} * Capital Controls _t	-0.183 (0.112)	-0.205** (0.0813)	-0.000682 (0.0412)			
MDB _{c,s,t-1} * Capital Controls _t	0.0597 (0.0784)	0.0615 (0.0567)	0.00431 (0.0310)			
MDB _{c,s,t-2} * Capital Controls _t	0.0441 (0.0904)	-0.0364 (0.0638)	0.0591* (0.0332)			
MDB _{c,s,t} * Credit/GDP _t				-0.00189*** (0.000557)	-0.000852** (0.000364)	-0.000883*** (0.000217)
MDB _{c,s,t-1} * Credit/GDP _t				0.000561 (0.000440)	0.000370 (0.000279)	6.82e-05 (0.000146)
MDB _{c,s,t-2} * Credit/GDP _t				0.000119 (0.000513)	0.000187 (0.000355)	0.000153 (0.000176)
Observations	6,046	6,046	6,046	9,743	9,743	9,743
R-squared	0.428	0.446	0.377	0.442	0.455	0.407
Year*Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year*Subsector FE	Yes	Yes	Yes	Yes	Yes	Yes
Country*Subsector FE	Yes	Yes	Yes	Yes	Yes	Yes
Mean Dependent Var.	0.173	0.112	0.042	0.173	0.112	0.042

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=0}^2 (b_i MDB_{c,s,t-i} + q_i MDB_{c,s,t-i} * X_t) + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$. X is either the capital controls measure computed by Fernández et al. (2016) described in the text, or Credit/GDP as reported by the World Development Indicators of the World Bank. The dependent variable is normalized by the country's trend GDP at time t. The independent variable is a dummy variable equal to 1 when MDBs have financed at least one operation in a country-subsector at time t and 0 otherwise. Country-subsector clustered standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1

The extent to which financial markets are developed can also be expected to impact MDB mobilization. One mechanism through which MDBs contribute to mobilization is by providing signals that allow potential financiers facing information asymmetries about profitable projects in specific country-subsectors. Larger Information asymmetries are often associated with shallower financial markets.³⁷ We test if lower financial development, as measured by the ratio of credit supplied to the private sector as a share of GDP affects MDB mobilization, by interacting the share of credit to GDP with the MDB participation dummy variable. The results, reported in columns (4)-(6) of panel B in Table 12, suggest that there is a significant reduction of the mobilization effect of MDBs for both private and official funding sources when financial markets are larger. In column (4), when measuring total resources mobilized, we see that an increase of one standard deviation (29) away from the sample mean (30) reduces mobilization in 0.055 percentage points of trend GDP.³⁸

The previous results suggest that MDB mobilization is larger in countries where development is lower. Financial development is usually associated with overall economic development. To test if overall development matters in determining the impact of mobilization, we formally test if income levels matter for MDB mobilization. We do this in Table 13 by interacting the MDB mobilization variable with dummies reflecting the income level of the countries in our sample using the World Bank's four-bracket classification. According to this classification, countries can be low-income, lower-middle-income, higher-middle-income, or high-income.³⁹

Our excluded interaction term is for lower-middle-income countries, meaning that the coefficient attached to the non-interacted MDB variable measures the average impact for this group and the sum of the coefficient of the non-interacted variable and each interacted one measures the total effect for each group. We report an F-test under the null hypothesis that the overall effect for the group is zero and report that in the bottom panel of each table. We focus on this test to guide the reader through the table.

³⁷ See Beck et al. (2000).

³⁸ We replicate this exercise replacing Credit/GDP by Gross National Savings/GDP and obtain virtually the same results. They are available upon request.

³⁹ We report the classification for the countries in our sample in Annex A. See IMF World Economic Outlook 2021 classification, available at: <https://www.imf.org/external/pubs/ft/weo/2021/02/weodata/groups.htm#oem>.

Table 13. Controlling for Income Levels

Dependent Variable	Total (1)	Private (2)	Official (3)
MDB _{c,s,t}	0.521*** (0.0648)	0.247*** (0.0449)	0.208*** (0.0221)
MDB _{c,s,t-1}	0.0517 (0.0434)	0.0267 (0.0290)	0.0340** (0.0151)
MDB _{c,s,t-2}	0.0236 (0.0628)	-0.00901 (0.0428)	0.0247 (0.0228)
MDB _{c,s,t} * High-income _{c,t}	-0.108 (0.134)	0.0417 (0.0952)	-0.0993** (0.0424)
MDB _{c,s,t-1} * High-income _{c,t}	-0.148 (0.105)	-0.105 (0.0768)	-0.0464 (0.0314)
MDB _{c,s,t-2} * High-income _{c,t}	0.113 (0.106)	0.117 (0.0772)	-0.00269 (0.0303)
MDB _{c,s,t} * Upper-middle-income _{c,t}	-0.252*** (0.0805)	-0.106** (0.0529)	-0.103*** (0.0295)
MDB _{c,s,t-1} * Upper-middle-income _{c,t}	-0.0411 (0.0564)	-0.0302 (0.0374)	-0.00960 (0.0203)
MDB _{c,s,t-2} * Upper-middle-income _{c,t}	0.0123 (0.0694)	0.0355 (0.0477)	-0.0143 (0.0256)
MDB _{c,s,t} * Low-income _{c,t}	0.00686 (0.159)	0.00721 (0.101)	0.0339 (0.0531)
MDB _{c,s,t-1} * Low-income _{c,t}	-0.145 (0.0946)	-0.0562 (0.0535)	-0.0527 (0.0401)
MDB _{c,s,t-2} * Low-income _{c,t}	0.343** (0.159)	0.0978 (0.0850)	0.0649 (0.0637)
Observations	9,743	9,743	9,743
R-squared	0.444	0.456	0.411
Year*Country FE	Yes	Yes	Yes
Year*Subsector FE	Yes	Yes	Yes
Country*Subsector FE	Yes	Yes	Yes
P- value MDB _{c,s,t} + MDB _{c,s,t} * High-income _{c,t} = 0	0.000	0.001	0.003
P- value MDB _{c,s,t-1} + MDB _{c,s,t-1} * High-income _{c,t} = 0	0.312	0.273	0.654
P- value MDB _{c,s,t-2} + MDB _{c,s,t-2} * High-income _{c,t} = 0	0.112	0.096	0.271
P- value MDB _{c,s,t} + MDB _{c,s,t} * Upper-middle-income _{c,t} = 0	0.000	0.000	0.000
P- value MDB _{c,s,t-1} + MDB _{c,s,t-1} * Upper-middle-income _{c,t} = 0	0.775	0.886	0.072
P- value MDB _{c,s,t-2} + MDB _{c,s,t-2} * Upper-middle-income _{c,t} = 0	0.237	0.221	0.380
P- value MDB _{c,s,t} + MDB _{c,s,t} * Low-income _{c,t} = 0	0.000	0.005	0.000
P- value MDB _{c,s,t-1} + MDB _{c,s,t-1} * Low-income _{c,t} = 0	0.274	0.518	0.620
P- value MDB _{c,s,t-2} + MDB _{c,s,t-2} * Low-income _{c,t} = 0	0.012	0.227	0.132
Mean Dependent Var.	0.173	0.112	0.042

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=0}^2 (b_i MDB_{c,s,t-i} + q_i MDB_{c,s,t-i} * High-Income_{c,t} + r_i MDB_{c,s,t-i} * Higher-middle-Income_{c,t} + f_i MDB_{c,s,t-i} * Low-Income_{c,t}) + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$. The dependent variable is normalized by the country's trend GDP at time t. The independent variables are a dummy variable equal to 1 when MDBs have financed at least one operation in a country-subsector at time t and 0 otherwise, and its interaction with dummy variables equal to 1 when countries are classified by the World Bank as High-income, Higher-middle-income or Low-income at time t and 0 otherwise. Country-subsector clustered standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Our results suggest that the mobilization effect is consistently significant for the contemporaneous effect for the lower-middle-income group. For high-income countries the contemporaneous effect of official mobilization is lower compared to lower-middle-income

countries but remains positive and significant. For lags 1 and 2 the results are statistically equal to zero for high-income countries.

Regarding upper-middle-income countries, our results suggest that only the contemporaneous effect remains positive, though the sign of the interactive term is consistently negative, suggesting that mobilization effects are present, but lower for this group compared with less developed middle-income economies. Finally, we find that mobilization effects are statistically equivalent for low-income countries as for lower-middle-income countries for contemporaneous total mobilization but are significantly larger for lag 2. We interpret this as evidence that the signaling role played by MDBs in mitigating information asymmetries is potentially higher in less developed markets.

We then investigate how the perceived quality of governance affects mobilization effects. As shown in Table 14, columns (1)-(3), MDB mobilization effects are positive and significantly different from zero in countries with different levels of political stability and absence of violence/terrorism. However, in countries in the second and third terciles, where perceptions of the likelihood that the government will be destabilized or overthrown with violence are lower, the third-party resources that MDBs can mobilize are significantly larger. This indicates that in countries which suffer the most from political instability in the sample period, the difficulties to attract third-party financing are stronger.

Columns (4)-(6) show that MDB mobilization effects are also positive and significantly different from zero in countries with different levels of perceived government effectiveness. However, when the perceptions about the quality of public services, the quality of the civil service and the level of independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies are lower, multilateral financing is significantly associated to larger increases of third-party financing toward country subsectors. Interestingly, the stronger results in countries characterized by lower perceived government effectiveness are driven by an increase in the mobilization of official resources. The result sheds some light on the potential mechanisms through which multilateral lending can mobilize, pointing towards a reduction of information asymmetries regarding government effectiveness and a positive signal of which governments have the capacity to implement projects despite their perceived lower effectiveness.

Finally, Appendix Tables A4-A5 report the results by voice accountability, regulatory quality, rule of law, and control of corruption. Overall, in countries where freedom of expression is perceived to be higher, and where citizens can partake in the selection of their governments, the mobilization of third-party financing seems to be even larger, mostly driven by private financiers (Appendix Table A4, columns 1-3). When dividing countries in terciles by regulatory quality, capturing disparities in the perceptions of the ability of the government to have sound policies and regulations that enable private sector development, we do not observe significant differences in total mobilization, even though there are some differences in private financing mobilized, but in opposite directions depending on the time period considered (Appendix Table A4, columns 4-6). For countries in which the rule of law is perceived to be lower, MDB mobilization effects can be smaller, but this is not reflected in total mobilization either (Appendix Table A5, columns 1-3). Finally, there are not significant differences in MDB mobilization effects across countries with different scores in the average control of corruption indicator (Appendix Table A5, columns 4-6).

7. An Exercise in Quantification of the Multiplier

A frequently asked question when discussing resource mobilization is the size of the mobilization multiplier, i.e., how many dollars are mobilized by each dollar lent by an MDB? Our empirical exercises in the previous sections focus on assessing how many resources are mobilized when MDBs are present regardless of the size of their financial contribution. To address the multiplier question, we re-estimate equation (2) replacing the MDB dummy by a continuous variable similar in construction to the dependent variable. Namely, we measure the dollar amount of MDB operations in each country-subsector in each year and normalize it by trend-GDP. As in Table 3, we report this for all mobilization, disaggregating between domestic and cross-border, and we separate also between private and official sector resources. Table 15 reports these findings. On the bottom of the list of coefficients we report the sum of the coefficients which we interpret as a proxy of a two-year multiplier.

In line with the previous exercises, we find that most of the indirect mobilization effect happens within the same year of the MDB intervention in the country-subsector. The contemporaneous multiplier for total resources (column (1)) is close to 3.7, while the two-year one is about 4.4. Our estimated multipliers for private and official resources suggest that private mobilization is larger than official mobilization and that official mobilization is longer-lived in

terms of being significant at the second lag. Once again, we see that mobilization of cross-border resources is orders of magnitude larger than domestic mobilization.

The most appropriate multiplier to be compared with the multiplier estimated in Broccolini et al. (2021) is reported in column (6), where the focus is on cross-border mobilization of private resources. Broccolini et al. (2021) estimate the multiplier for cross-border private mobilization to be on the order of 7, whereas according to our results is on the order of 1.7. However, it is to be noted that Broccolini et al. (2021) analyze all sectors of the economy and include estimations on direct mobilization (i.e., they include the amounts lent by co-lenders of MDBs), whereas our focus is on indirect mobilization in infrastructure only, and it is reasonable to think that there would be a difference, even though both multipliers indicate a positive and significant MDB mobilization.

Table 14. Controlling for Quality of Governance

Dependent Variable	Total (1)	Private (2)	Public (3)	Total (4)	Private (5)	Public (6)
$MDB_{c,s,t}$	0.253*** (0.0435)	0.119*** (0.0249)	0.117*** (0.0184)	0.551*** (0.0872)	0.233*** (0.0531)	0.254*** (0.0323)
$MDB_{c,s,t-1}$	0.0252 (0.0319)	0.0147 (0.0215)	0.0289** (0.0140)	-0.0423 (0.0585)	-0.00531 (0.0347)	0.00243 (0.0228)
$MDB_{c,s,t-2}$	0.0465 (0.0420)	0.00680 (0.0260)	0.0189 (0.0165)	0.139 (0.115)	0.00368 (0.0744)	0.0536 (0.0369)
PVE: Political Stability & Absence of Violence/Terrorism						
$MDB_{c,s,t} \# PVE T2$	0.248*** (0.0796)	0.139*** (0.0514)	0.0803*** (0.0296)			
$MDB_{c,s,t} \# PVE T3$	0.272** (0.106)	0.182** (0.0704)	0.0331 (0.0370)			
$MDB_{c,s,t-1} \# PVE T2$	-0.0470 (0.0596)	-0.0464 (0.0379)	-0.0141 (0.0218)			
$MDB_{c,s,t-1} \# PVE T3$	-0.0352 (0.0592)	-0.00216 (0.0468)	-0.0283 (0.0176)			
$MDB_{c,s,t-2} \# PVE T2$	0.0454 (0.0656)	0.0143 (0.0405)	0.0271 (0.0252)			
$MDB_{c,s,t-2} \# PVE T3$	0.00405 (0.0982)	0.0510 (0.0736)	-0.0311 (0.0275)			
GEE: Government Effectiveness						
$MDB_{c,s,t} \# GEE T2$				-0.190* (0.104)	-0.0786 (0.0639)	-0.0900** (0.0392)
$MDB_{c,s,t} \# GEE T3$				-0.177* (0.105)	0.00987 (0.0671)	-0.148*** (0.0368)
$MDB_{c,s,t-1} \# GEE T2$				0.000945 (0.0675)	-0.0257 (0.0426)	0.0111 (0.0260)
$MDB_{c,s,t-1} \# GEE T3$				0.102 (0.0748)	0.0251 (0.0462)	0.0297 (0.0277)
$MDB_{c,s,t-2} \# GEE T2$				-0.0875 (0.123)	0.0195 (0.0803)	-0.0258 (0.0404)
$MDB_{c,s,t-2} \# GEE T3$				-0.0785 (0.122)	0.0278 (0.0787)	-0.0386 (0.0401)
Observations	9,743	9,743	9,743	9,743	9,743	9,743
R-squared	0.443	0.457	0.407	0.442	0.456	0.409
Year*Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year*Sector FE	Yes	Yes	Yes	Yes	Yes	Yes
Country*Sector FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=0}^2 (b_i MDB_{c,s,t-i} + q_i MDB_{c,s,t-i} * T2_{c,t} + r_i MDB_{c,s,t-i} * T3_{c,t}) + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$. The dependent variable is normalized by the country's trend GDP at time t. The independent variables are a dummy variable equal to 1 when MDBs have financed at least one operation in a country-subsector at time t and 0 otherwise, and its interaction with dummy variables equal to 1 when countries are in the second tercile by worldwide governance indicator (PVE = political stability and absence of violence terrorism, or GEE = government effectiveness), or in the third tercile at time t and 0 otherwise. Countries grouped by tercile and governance indicator are shown in Figure A1. Country-subsector clustered standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 15. Estimation of Multipliers

Dependent Variable	Panel A: All Mobilization			Panel B: Private Mobilization			Panel C: Official Mobilization		
	Total (1)	Domestic (2)	Cross-Border (3)	Total (4)	Domestic (5)	Cross-Border (6)	Total (7)	Domestic (8)	Cross-Border (9)
$MDB_{c,s,t}$	3.704*** (0.273)	0.328*** (0.0378)	2.640*** (0.233)	1.841*** (0.204)	0.180*** (0.0260)	1.532*** (0.178)	1.423*** (0.0956)	0.0536*** (0.00821)	0.779*** (0.0605)
$MDB_{c,s,t-1}$	0.144 (0.204)	0.00407 (0.0239)	0.141 (0.174)	0.0411 (0.129)	0.0119 (0.0206)	0.0542 (0.115)	0.197*** (0.0744)	-5.55e-05 (0.00444)	0.155*** (0.0494)
$MDB_{c,s,t-2}$	0.516** (0.252)	0.00896 (0.0208)	0.382* (0.217)	0.199 (0.173)	0.00301 (0.0157)	0.172 (0.157)	0.160* (0.0909)	0.00424 (0.00400)	0.0722 (0.0578)
$\sum_i MDB_{c,s,t-i}$	4.365***	0.341***	3.164***	2.081***	0.195***	1.758***	1.78***	0.058***	1.006***
P-Value F-test	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Observations	9,743	9,743	9,743	9,743	9,743	9,743	9,743	9,743	9,743
R-squared	0.458	0.444	0.448	0.462	0.433	0.457	0.434	0.462	0.414
Year*Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year*Subsector FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country*Subsector FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean Dependent Var.	0.173	0.020	0.131	0.112	0.014	0.091	0.042	0.003	0.024
Mean Independent Var.	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=0}^2 b_i MDB_{c,s,t-i} + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$. The dependent variable is normalized by the country's trend GDP at time t. The independent variable is the sum of the dollar value of MDB financing in a country-subsector at time t normalized by the country's trend GDP. Country-subsector clustered standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1

8. Non-Sovereign and Sovereign Guaranteed Financing

We then analyze whether the MDB mobilization happens through financing SG or NSG operations. As pointed out in section 2, multilateral operations can be sovereign guaranteed, when they are guaranteed by a State, and non-sovereign guaranteed, when they are not backed by a State. The latter category refers mostly to private sector transactions, but also non-sovereign guaranteed financing of eligible state-owned firms, financial institutions, and sub-sovereign entities (such as a political or administrative sub-division of a country).

To explore whether mobilization effects are driven by MDB SG financing or MDB NSG financing, we first estimate the relationship between third-party financing and dummies with unit value indicating multilateral SG financing, multilateral NSG financing, and multilateral financing that could not be separated into SG or NSG. The results presented in panel A of Table 16 show that both SG and NSG multilateral transactions can mobilize total or private third-party resources at time t , as total or private third-party financing in a country-subsector significantly increase in all cases. Moreover, official resources are also mobilized in subsequent periods by both SG and NSG lending.

Panel B reports the results of estimating the SG and NSG multilateral multipliers. As can be seen in column (1), for each multilateral dollar invested in SG transactions, at least 2 dollars are mobilized in a three-year span, whereas for each dollar invested in NSG transactions, at least 3.6 dollars are mobilized. 3.6 extra dollars are instead mobilized by multilateral transactions that we were unable to classify as NSG or SG. It is also interesting to note that, while the multipliers for the mobilization of official resources are very similar in magnitude for each type of multilateral transaction, private resources seem to be mostly mobilized by NSG multilateral financing.

Table 16. Estimation of MDB SG and NSG Mobilization

Dependent Variable	Panel A: Response to MDB Presence			Panel B: Multiplier			
	Total (1)	Private (2)	Official (3)	Total (4)	Private (5)	Official (6)	
SG MDB _{c,s,t}	0.228** (0.0984)	0.110* (0.0653)	0.120*** (0.0316)	SG MDB _{c,s,t}	1.730*** (0.656)	0.604 (0.427)	0.906*** (0.234)
SG MDB _{c,s,t-1}	-0.0472 (0.0757)	-0.0735 (0.0495)	0.0126 (0.0275)	SG MDB _{c,s,t-1}	-0.0605 (0.444)	-0.426 (0.300)	0.209 (0.184)
SG MDB _{c,s,t-2}	0.0565 (0.0670)	-0.0122 (0.0406)	0.0428* (0.0237)	SG MDB _{c,s,t-2}	0.494 (0.573)	-0.126 (0.292)	0.368* (0.188)
NSG MDB _{c,s,t}	0.319** (0.0508)	0.197*** (0.0366)	0.0966*** (0.0170)	NSG MDB _{c,s,t}	3.624*** (0.532)	2.174*** (0.420)	1.115*** (0.165)
NSG MDB _{c,s,t-1}	0.0160 (0.0394)	-0.0156 (0.0257)	0.0275** (0.0136)	NSG MDB _{c,s,t-1}	0.0856 (0.456)	-0.235 (0.294)	0.263* (0.137)
NSG MDB _{c,s,t-2}	-0.0103 (0.0381)	-0.00936 (0.0240)	0.00674 (0.0174)	NSG MDB _{c,s,t-2}	-0.0522 (0.369)	-0.0180 (0.248)	0.0182 (0.181)
Both MDB _{c,s,t}	0.287** (0.0403)	0.124*** (0.0256)	0.132*** (0.0162)	Both MDB _{c,s,t}	3.028*** (0.330)	1.338*** (0.237)	1.295*** (0.126)
Both MDB _{c,s,t-1}	0.0223 (0.0305)	0.0314 (0.0210)	0.0117 (0.0104)	Both MDB _{c,s,t-1}	0.214 (0.255)	0.358** (0.162)	0.0878 (0.0970)
Both MDB _{c,s,t-2}	0.0388 (0.0401)	0.0144 (0.0279)	0.00523 (0.0129)	Both MDB _{c,s,t-2}	0.443 (0.333)	0.103 (0.229)	0.143 (0.111)
Σ SG _{c,s,t-i}	0.237	0.024	0.175	Σ SG _{c,s,t-i}	2.164	0.051	1.482
P-Value F-test	0.026	0.750	0.000	P-Value F-test	0.007	0.933	0.000
Σ NSG _{c,s,t-i}	0.334	0.172	0.131	Σ NSG _{c,s,t-i}	3.657	1.920	1.396
P-Value F-test	0.000	0.005	0.000	P-Value F-test	0.000	0.004	0.000
Σ Both _{c,s,t-i}	0.348	0.170	0.149	Σ Both _{c,s,t-i}	3.685	1.799	1.526
P-Value F-test	0.000	0.000	0.000	P-Value F-test	0.000	0.000	0.000
Observations	9,743	9,743	9,743	Observations	9,743	9,743	9,743
R-squared	0.439	0.454	0.407	R-squared	0.459	0.465	0.437
Year*Country FE	Yes	Yes	Yes	Year*Country FE	Yes	Yes	Yes
Year*Subsector FE	Yes	Yes	Yes	Year*Subsector FE	Yes	Yes	Yes
Country*Subsector	Yes	Yes	Yes	Country*Subsector FE	Yes	Yes	Yes

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=0}^2 \beta_i MDB SG_{c,s,t-i} + \sum_{i=0}^2 \vartheta_i MDB NSG_{c,s,t-i} + \sum_{i=0}^2 \zeta_i MDB SG/NSG_{c,s,t-i} + \alpha_{c,s} + \delta_{c,t} + \gamma_{s,t} + \varepsilon_{c,s,t}$ where in Panel A $m_{c,s,t}$ is the amount of third-party financing (excluding multilateral financing) flows normalized by trend GDP to a country-subsector cs at time t , $MDB SG_{c,s,t}$ is dummy variable indicating if country-subsector cs has received $MDB SG$ funding at time t , $MDB NSG_{c,s,t}$ is a dummy variable indicating whether country-subsector cs has received $MDB NSG$ funding at time t , and $MDB SG/NSG_{c,s,t}$ indicates multilateral lending to a country-subsector cs at time t that could be SG or NSG. In panel B the dependent variable and the explanatory variables of interest are all amounts in dollar value normalized by the country's trend GDP.

9. Concluding Remarks

As the world returns to its new normal, governments in developing and emerging economies will face severe financial constraints on increasing increase their public investment to close their infrastructure gap, which is estimated to be \$1-1.5 trillion in developing countries (United Nations,

2015). Multilateral Development Banks can play an important role in closing this gap, not only by increasing their lending but also by eliminating bottlenecks, clearing obstacles, reducing information asymmetries, and mitigating risks to other financiers to foster indirect third-party resource mobilization into these countries as they get involved in infrastructure financing.

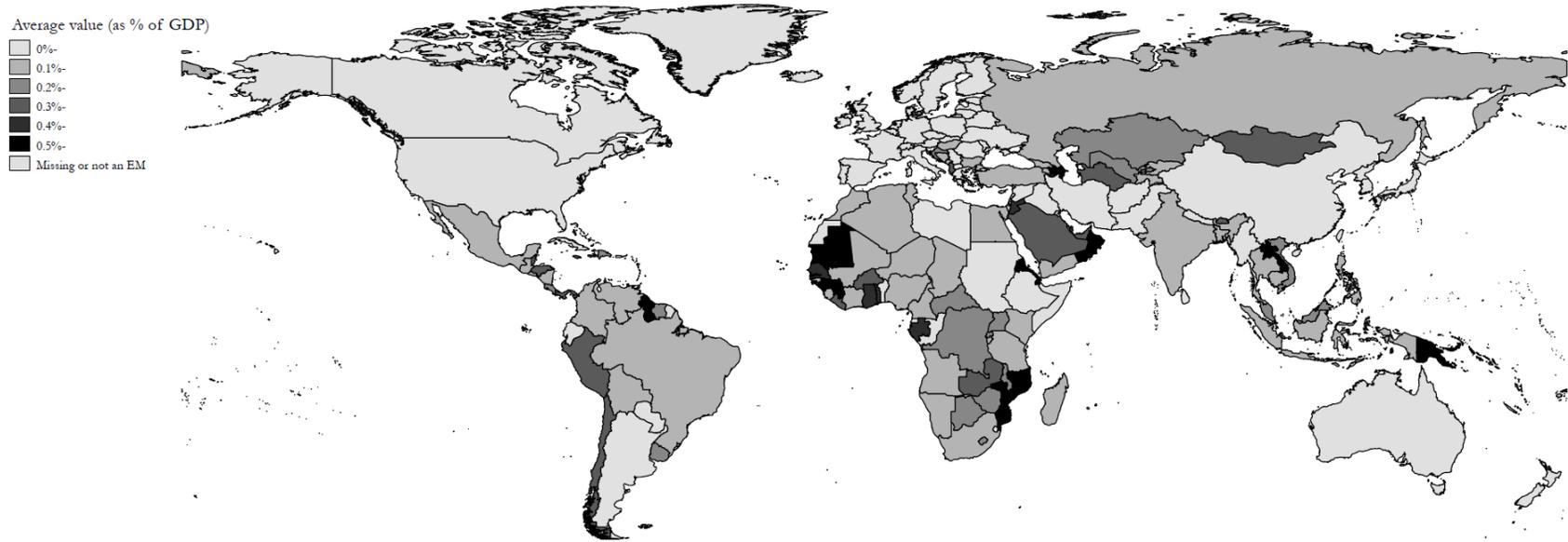
Using a rich database of more than 6,500 transactions in 2005-2020 to developing and emerging markets from the Infrastructure Journal database, this paper finds that over a three-year span, the cumulative additional third-party financing resources add up to nearly 0.5 percent of trend GDP in country-subsectors where MDBs are present in comparison to where they are not. Mobilizing cross-border resources accounts for two-thirds of this mobilization effect, whereas private sector resources mobilization is a third larger than official resource mobilization. Moreover, when analyzing whether these results are robust to the presence of official bilateral lenders, we find that part of the mobilization effect previously identified operates through the MDB's ability to mobilize other sources of official funds, that in turn are relevant mobilizers.

Country-specific characteristics are also important in determining the size of the mobilization effects in infrastructure. In countries with more capital controls mobilization effects are weaker. Mobilization effects are larger in low income and lower-middle-income countries, and in countries where government effectiveness is perceived to be lower. However, in countries characterized by higher political instability, the ability to attract third-party financing is constrained.

Finally, we find that the ability of MDBs to help closing infrastructure gaps not only depends on whether they engage or not in project financing, but also in their lending volumes. We find that the MDB mobilization multiplier in a three-year span is equal to 4.4, suggesting that the potential resources MDB may channel to developing countries is large if MDBs allocate enough resources to infrastructure projects.

Figures

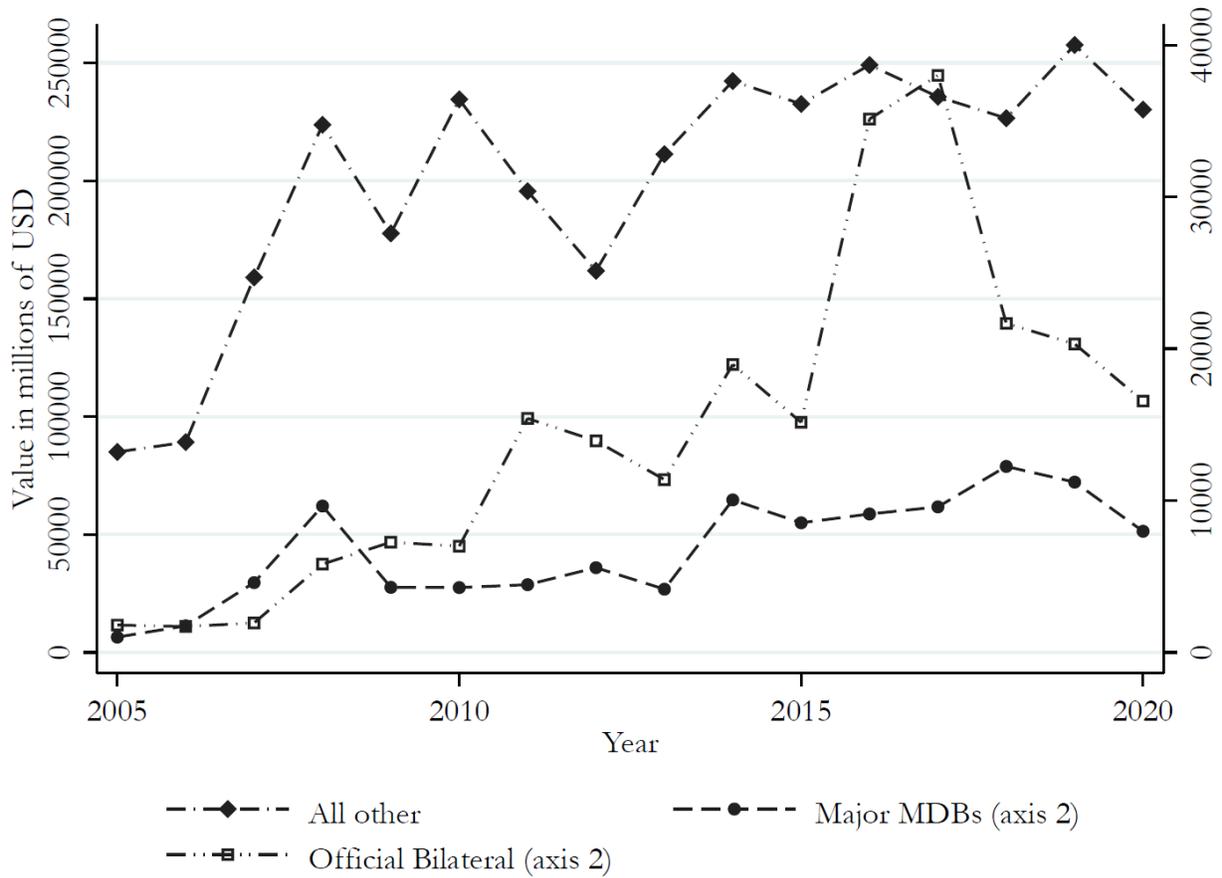
Figure 1. Average Transaction Amounts to Developing and Emerging Economies



Notes: The figure reports the average amounts lent/invested by country as a percentage of trend GDP in 2005-2020.

Source: Infrastructure Journal Database.

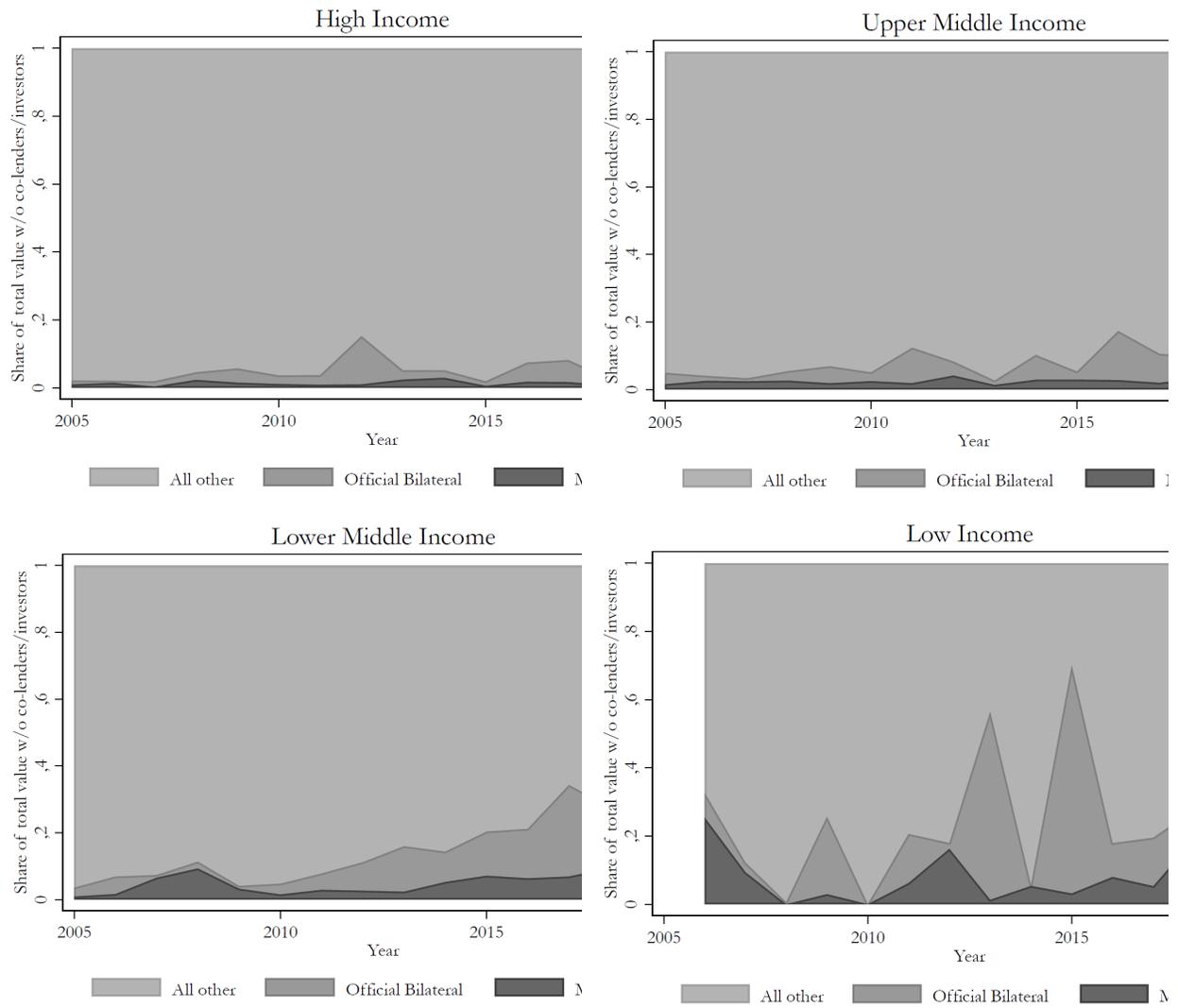
Figure 2. Trends in Infrastructure Transactions by Financier Type



Notes: The figure reports the trends in infrastructure lending/investing to all developing and emerging economies by third-party financiers, major Multilateral Development Banks and official bilateral financiers reported in Annex A.

Source: Infrastructure Journal Database.

Figure 3. Share of Lending by Financier Type and Country Income Level



Notes: The figure reports the evolution of shares in infrastructure lending/investing to all developing and emerging economies by financier type (third-party, major Multilateral Development Banks and official bilateral) and income level of the recipient country.

Source: *Infrastructure Journal Database.*

References

- Alfaro, L., A. Chari and F. Kanczuk. 2017. “The Real Effects of Capital Controls: Firm-Level Evidence from a Policy Experiment.” *Journal of International Economics* 108(C): 191-210.
- Avellán, L., A. Galindo and G. Lotti. 2020. “Following Public Finances: The Mirage of MDBs Countercyclicality.” *Quarterly Review of Economics and Finance*. Available at: <https://doi.org/10.1016/j.qref.2020.08.001>.
- Avellán, L., A. Galindo and G. Lotti. 2021. “Sovereign External Borrowing and Multilateral Lending in Crises.” *International Review of Economics and Finance* 74: 206–238.
- Beck, T., R. Levine and N. Loayza. 2000. “Finance and the Sources of Growth.” *Journal of Financial Economics* 58(1-2): 261-300.
- Borusyak, K., X. Jaravel and J. Spiess. 2021. “Revisiting Event Study Designs: Robust and Efficient Estimation.” Ithaca, United States: Cornell University. Available at: <https://arxiv.org/pdf/2108.12419.pdf>
- Broccolini, C. et al. 2021. “Mobilization Effects of Multilateral Development Banks.” *World Bank Economic Review* 35(2): 521-543.
- Buiter, W., and S. Fries. 2002. “What Should the Multilateral Development Bank Do?” Working Paper 74. London, United Kingdom: European Bank of Reconstruction and Development.
- Cavallo, E., and T. Serebrisky, editors. 2016. *Saving for Development: How Latin America and the Caribbean Can Save More and Better*. Development in the Americas report. New York and Washington, DC, United States: Palgrave Macmillan and Inter-American Development Bank.
- Chelsky, J., C. Morel and M. Kabir. 2013. “Investment Financing in the Wake of the Crisis: The Role of Multilateral Development Banks.” World Bank Economic Premise 121. Washington, DC, United States: World Bank. Available at: <https://openknowledge.worldbank.org/handle/10986/22619>
- Dasgupta, D., and D. Ratha. 2000. “What Factors Appear to Drive Private Capital Flows to Developing Countries? And How Does Official Lending Respond?” Policy Research Working Paper 2392. Available at: <https://openknowledge.worldbank.org/handle/10986/19821>

- Denizer, C., D. Kaufmann and A. Kraay. 2013. “Good Countries or Good Projects? Macro and Micro Correlates of World Bank Project Performance.” *Journal of Development Economics* 105: 288-302.
- Doumbia, D., and M.L. Lauridsen. 2019. “Closing the SDG Financing Gap—Trends and Data.” EM Compass. Note 73. Washington, DC, United States: International Finance Corporation. <https://www.rfilc.org/wp-content/uploads/2020/08/EMCompass-Note-73-Closing-SDGs-Fund-Gap.pdf>
- Eichengreen, B., and A. Mody. 2000. “What Explains Changing Spreads on Emerging Market Debt?” In: S. Edwards, editor. *Capital Flows and the Emerging Economies: Theory, Evidence, and Controversies*. Chicago, United States: University of Chicago Press.
- Fernández, A. et al. 2016. “Capital Control Measures: A New Dataset.” *IMF Economic Review* 64(3): 548-574.
- G20-IFA. 2017. “Principles of MDBs’ Strategy for Crowding-In Private Sector Finance for Growth and Sustainable Development.” G20 – IFA WG Report, G20 International Financial Architecture Working Group, Group of Twenty. Available at: <https://library.pppknowledgelab.org/documents/4700/download>
- Galindo, A., and U. Panizza. 2018. “The Cyclicity of International Public Sector Borrowing in Developing Countries: Does the Lender Matter?” *World Development* 112: 119–135
- Gurría, J.A., P.A. Volcker and N. Birdsall. 2001. “The Role of the Multilateral Development Banks in Emerging Market Economies: Findings of the Commission on the Role of the MDBs in Emerging Markets.” Report of the Commission on the Role of the MDBs in the EMEs, April 26, Carnegie Endowment for International Peace, Washington, DC.
- Horn, S., C.M. Reinhart and C. Trebesch. 2021. “China’s Overseas Lending.” *Journal of International Economics* 133: 103539. At: <https://doi.org/10.1016/j.jinteco.2021.103539>.
- Humphrey, C., and K. Michaelowa. 2013. “Shopping for Development: Multilateral Lending, Shareholder Composition and Borrower Preferences.” *World Development* 44: 142–55.
- Ika, L.A. 2015. “Opening the Black Box of Project Management: Does World Bank Project Supervision Influence Project Impact?” *International Journal of Project Management* 33: 1111-1123.
- Jandahyala, S. 2016. “International Organizations and Political Risk. The Case of Multilateral Development Banks in Infrastructure Projects.” Singapore: ESSEC Business School.

https://ppi.worldbank.org/content/dam/PPI/resources/ppi_publication/theme/The-case-of-multilateral-development-banks-by-Jandhyala2016.pdf

- Kaufmann, D., A. Kraay and M. Mastruzzi. 2010. “The Worldwide Governance Indicators: Methodology and Analytical Issues”. Policy Research Working Paper 5430. Washington, DC, United States: World Bank.
- Kilby, C. 2000. “Supervision and Performance: The Case of World Bank Projects.” *Journal of Development Economics* 62: 233-259.
- Ratha, D. 2001. “Complementary Between Multilateral Lending and Private Flows to Developing Countries: Some Empirical Results.” Policy Research Working Paper 2746. Washington, DC, United States: World Bank.
- Rodrik, D. 1995. “Why Is There Multilateral Lending?” NBER Working Paper 5160. Cambridge, United States: National Bureau of Economic Research.
- Serebrisky, T. et al. 2020. “Sustainable and Digital Infrastructure for the Post-COVID-19 Economic Recovery of Latin America and the Caribbean: A Roadmap to More Jobs, Integration and Growth.”
- Sachs, J. et al., editors. 2021. *Sustainable Development Report 2021. The Decade of Action for the Sustainable Development Goals*. Cambridge, United Kingdom: Cambridge University Press.
- UNCTAD. 2014. *World Investment Report. Investing in the SDGs: An Action Plan*. New York, United States and Geneva, Switzerland: United Nations.
- UNCTAD. 2020. *World Investment Report: International Production Beyond the Pandemic*. New York, United States and Geneva, Switzerland: United Nations.
- United Nations. 2015. *Addis Ababa Action Agenda of the Third International Conference on Financing for Development*. New York, United States: United Nations.

Annex A.

Countries in the Sample and Income Level in Sample

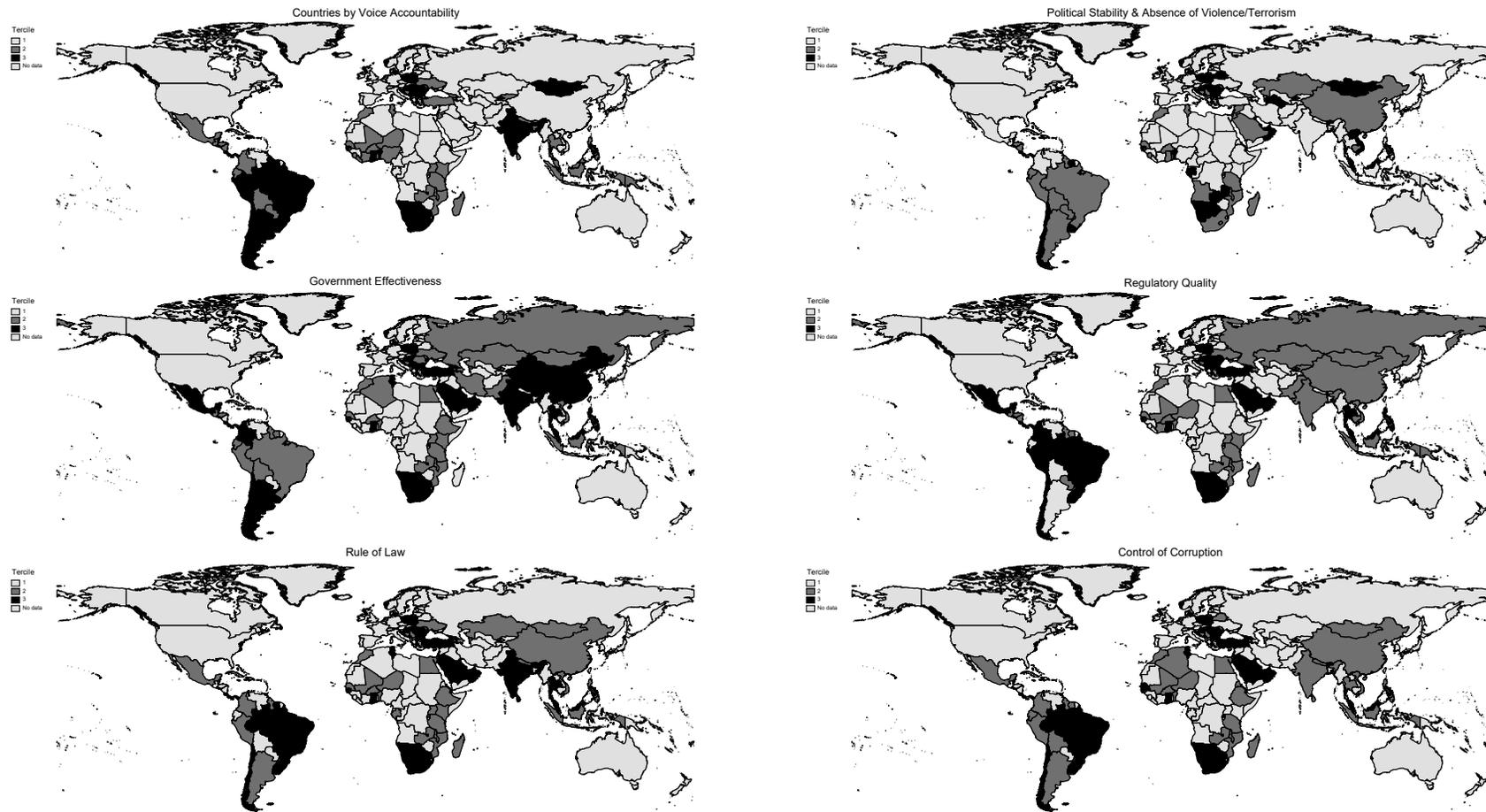
High Income		Low Income	
Antigua and Barbuda	Oman	Afghanistan	Malawi
Aruba	Palau	Burkina Faso	Mali
Bahamas	Panama	Burundi	Mozambique
Bahrain	Poland	Central African Republic	Niger
Barbados	Qatar	Chad	Rwanda
Brunei	Romania	Democratic Republic of Congo	Sierra Leone
Chile	Saint Kitts and Nevis	Eritrea	South Sudan
Croatia	Saudi Arabia	Ethiopia	Sudan
Hungary	Trinidad and Tobago	Gambia	Syria
Kuwait	United Arab Emirates	Guinea	Tajikistan
Mauritius	Uruguay	Guinea-Bissau	Togo
Nauru		Haiti	Uganda
		Liberia	Yemen
		Madagascar	
Upper-Middle Income		Lower-Middle Income	
Albania	Jordan	Algeria	Mongolia
Argentina	Kazakhstan	Angola	Morocco
Armenia	Libya	Bangladesh	Myanmar (Burma)
Azerbaijan	Macedonia	Benin	Nepal
Belarus	Malaysia	Bhutan	Nicaragua
Belize	Maldives	Bolivia	Nigeria
Bosnia and Herzegovina	Marshall Islands	Cambodia	Pakistan
Botswana	Mexico	Cameroon	Papua New Guinea
Brazil	Montenegro	Cape Verde	Philippines
Bulgaria	Namibia	Comoros	Sao Tome and Principe
China	Paraguay	Cote d'Ivoire	Senegal
Colombia	Peru	Djibouti	Solomon Islands
Costa Rica	Russia	Egypt	Sri Lanka
Dominican Republic	Saint Lucia	El Salvador	Tanzania
Ecuador	Saint Vincent and the Grenadines	Ghana	Timor-Leste (East Timor)
Equatorial Guinea	Samoa	Honduras	Tunisia
Fiji	Serbia	India	Ukraine
Gabon	South Africa	Kenya	Uzbekistan
Georgia	Suriname	Kyrgyzstan	Vanuatu
Guatemala	Thailand	Laos	Vietnam
Guyana	Tonga	Lesotho	Zambia
Indonesia	Turkey	Mauritania	Zimbabwe
Iran	Turkmenistan	Moldova	
Iraq	Tuvalu		
Jamaica	Venezuela		

List of MDBs in Sample by Type of Operations

SG	NSG	Both
FONPLATA Development Bank	IDB Invest	African Development Bank
Inter-American Development Bank	Inter-American Investment Corporation	African Development Fund
International Bank for Reconstruction and Development	International Finance Corporation	Asian Development Bank
International Development Association	Islamic Corporation for the Development of the Private Sector (ICD)	Asian Development Fund
Islamic Development Bank (since 2016)	Islamic Corporation for the Insurance of Investment and the Export Credit (ICIEC)	Asian Infrastructure Investment Bank
		Corporacion Andina de Fomento (CAF)
		European Bank for Reconstruction and Development
		Inter-American Development Bank (before 2016)
		New Development Bank

Notes: The first column groups the MDBs that finance only operations that are sovereign-guaranteed; the second column lists the MDBs that finance operations that are not guaranteed by a State (mostly private sector transactions, but also non-sovereign guaranteed financing of eligible public sector enterprises; the third column lists the MDBs that finance both SG and NSG operations.

Figure A1. Countries by Worldwide Governance Indicators



Notes: The figure reports the countries by tertiles based on country average indicator scores across time. Countries in tertile 1 exhibit the lowest average scores (per indicator); countries in tertile 3 exhibit the highest average scores (per indicator).

Source: Authors' calculations based on Worldwide Governance Indicators.

Appendix 1. Additional Robustness Exercises

Appendix Table A1. Dropping a Country at a Time

Panel A: Total Mobilization									
Excluded Country	MDR _{1,t}	MDR _{1,t-1}	MDR _{1,t-2}	Σ MDR _{1,t-1}	Excluded Country	MDR _{1,t}	MDR _{1,t-1}	MDR _{1,t-2}	Σ MDR _{1,t-1}
High-Income Countries									
Antigua and Barbuda	0.402***	0.000	0.070**	0.472***	Oman	0.403***	-0.001	0.070**	0.472***
Aruba	0.401***	0.000	0.070**	0.470***	Palau	0.402***	0.000	0.070**	0.472***
Bahamas	0.401***	0.001	0.071**	0.472***	Panama	0.397***	0.000	0.076**	0.473***
Bahrain	0.401***	0.000	0.070**	0.471***	Poland	0.408***	0.004	0.073**	0.485***
Barbados	0.402***	0.000	0.070**	0.472***	Qatar	0.399***	0.003	0.071**	0.473***
Brunei	0.402***	0.000	0.070**	0.472***	Romania	0.405***	-0.001	0.070**	0.478***
Chile	0.407***	-0.002	0.072**	0.477***	Saint Kitts and Nevis	0.402***	0.000	0.070**	0.472***
Croatia	0.406***	-0.001	0.072**	0.477***	Saudi Arabia	0.392***	0.011	0.065**	0.468***
Hungary	0.398***	0.001	0.066*	0.460**	Trinidad and Tobago	0.402***	0.001	0.071**	0.474***
Kuwait	0.401***	0.000	0.071**	0.472***	United Arab Emirates	0.402***	0.000	0.066**	0.468***
Mauritius	0.398***	0.000	0.070**	0.468***	Uruguay	0.401***	-0.002	0.067**	0.466***
Nauru	0.402***	0.000	0.070**	0.472***					
Upper-Middle Income									
Albania	0.390***	0.003	0.073**	0.466***	Jordan	0.397***	-0.012	0.076**	0.461***
Argentina	0.416***	0.001	0.070**	0.487***	Kazakhstan	0.411***	0.004	0.067**	0.482***
Armenia	0.397***	0.000	0.071**	0.468***	Libya	0.402***	0.000	0.070**	0.472***
Azerbaijan	0.398***	0.000	0.067**	0.461***	Macedonia	0.402***	0.000	0.070**	0.471***
Belarus	0.402***	0.000	0.070**	0.472***	Malaysia	0.401***	-0.001	0.070**	0.470***
Belize	0.402***	0.000	0.070**	0.472***	Maldives	0.402***	0.000	0.070**	0.472***
Bosnia and Herzegovina	0.403***	0.000	0.070**	0.473***	Marshall Islands	0.402***	0.000	0.070**	0.472***
Botswana	0.401***	0.000	0.070**	0.471***	Mexico	0.408***	0.003	0.073**	0.484***
Brazil	0.415***	0.000	0.075**	0.490***	Montenegro	0.401***	0.000	0.070**	0.471***
Bulgaria	0.398***	-0.003	0.071**	0.465***	Namibia	0.402***	0.000	0.070**	0.472***
China	0.410***	-0.002	0.070**	0.479***	Paraguay	0.401***	0.000	0.070**	0.471***
Colombia	0.406***	-0.005	0.072**	0.472***	Peru	0.404***	0.005	0.070**	0.479***
Costa Rica	0.400***	-0.001	0.070**	0.469***	Russia	0.408***	0.001	0.068**	0.477***
Democratic Republic of the Congo	0.401***	0.002	0.070**	0.473***	Saint Lucia	0.402***	0.000	0.070**	0.472***
Ecuador	0.404***	-0.001	0.070**	0.473***	Saint Vincent and the Grenadines	0.402***	0.000	0.070**	0.472***
Equatorial Guinea	0.402***	0.000	0.070**	0.472***	Samoa	0.402***	0.000	0.070**	0.472***
Fiji	0.402***	0.000	0.070**	0.472***	Serbia	0.403***	0.000	0.070**	0.473***
Gabon	0.401***	0.003	0.070**	0.474***	South Africa	0.403***	-0.005	0.072**	0.470***
Georgia	0.400***	0.001	0.070**	0.471***	Switzerland	0.401***	-0.001	0.070**	0.471***
Guatemala	0.402***	-0.001	0.070**	0.472***	Thailand	0.408***	-0.002	0.069**	0.475***
Guyana	0.398***	0.000	0.068**	0.466***	Tonga	0.402***	0.000	0.070**	0.472***
Indonesia	0.410***	-0.002	0.069**	0.476***	Turkey	0.412***	-0.002	0.076**	0.486***
Iran	0.402***	0.000	0.070**	0.472***	Turkmenistan	0.402***	0.000	0.070**	0.472***
Iraq	0.405***	-0.001	0.070**	0.478***	Tuvalu	0.402***	0.000	0.070**	0.472***
Jamaica	0.399***	0.006	0.070**	0.475***	Venezuela	0.402***	-0.002	0.071**	0.471***
Lower-Middle Income									
Algeria	0.401***	0.000	0.070**	0.471***	Mongolia	0.395***	0.000	0.070**	0.465***
Angola	0.402***	0.000	0.071**	0.473***	Morocco	0.399***	-0.001	0.071**	0.470***
Bangladesh	0.406***	-0.005	0.064**	0.464***	Myanmar (Burma)	0.401***	-0.003	0.069**	0.470***
Benin	0.402***	0.000	0.070**	0.472***	Nepal	0.402***	0.000	0.070**	0.472***
Bhutan	0.402***	0.000	0.070**	0.472***	Nicaragua	0.403***	0.001	0.069**	0.473***
Bolivia	0.401***	-0.002	0.072**	0.472***	Nigeria	0.400***	-0.004	0.070**	0.467***
Cambodia	0.404***	0.002	0.058*	0.464***	Pakistan	0.410***	-0.001	0.073**	0.481***
Cameroon	0.398***	-0.002	0.072**	0.468***	Papua New Guinea	0.404***	0.003	0.074**	0.480***
Cape Verde	0.398***	0.000	0.069**	0.467***	Philippines	0.400***	-0.002	0.069**	0.467***
Comoros	0.402***	0.000	0.070**	0.472***	Sao Tome and Principe	0.402***	0.000	0.070**	0.472***
Cote d'Ivoire	0.397***	0.000	0.071**	0.468***	Senegal	0.394***	0.005	0.067**	0.467***
Djibouti	0.396***	0.004	0.074**	0.474***	Solomon Islands	0.399***	0.000	0.070**	0.470***
Egypt	0.413***	0.005	0.081***	0.499***	Sri Lanka	0.404***	0.000	0.069**	0.473***
El Salvador	0.401***	-0.003	0.071**	0.469***	Tanzania	0.403***	0.001	0.071**	0.474***
Ghana	0.383***	-0.013	0.078**	0.448***	Timor-Leste (East Timor)	0.402***	0.000	0.071**	0.472***
Honduras	0.398***	-0.002	0.066**	0.462***	Tunisia	0.401***	0.000	0.071**	0.472***
India	0.410***	-0.006	0.067**	0.471***	Ukraine	0.404***	-0.002	0.070**	0.472***
Kenya	0.405***	0.000	0.074**	0.478***	Uzbekistan	0.399***	-0.002	0.072**	0.470***
Kyrgyzstan	0.402***	0.000	0.066**	0.468***	Vanuatu	0.402***	0.000	0.070**	0.472***
Laos	0.397***	-0.001	0.083***	0.480***	Vietnam	0.401***	-0.002	0.070**	0.469***
Lesotho	0.398***	0.001	0.070**	0.469***	Zambia	0.393***	0.001	0.068**	0.462***
Mauritania	0.399***	0.001	0.070**	0.470***	Zimbabwe	0.402***	0.000	0.070**	0.472***
Moldova	0.402***	0.000	0.070**	0.472***					
Low Income									
Afghanistan	0.404***	0.000	0.070**	0.474***	Malawi	0.399***	-0.003	0.070**	0.467***
Burkina Faso	0.402***	0.000	0.070**	0.472***	Mali	0.401***	0.001	0.071**	0.473***
Burundi	0.402***	0.000	0.070**	0.472***	Mozambique	0.399***	-0.001	0.067**	0.466***
Central African Republic	0.399***	0.000	0.070**	0.469***	Niger	0.401***	-0.001	0.070**	0.471***
Chad	0.402***	0.000	0.070**	0.472***	Rwanda	0.405***	-0.002	0.062**	0.465***
Democratic Republic of Congo	0.396***	-0.002	0.068**	0.463***	Sierra Leone	0.403***	0.000	0.071**	0.473***
Eritrea	0.402***	0.000	0.070**	0.472***	South Sudan	0.402***	0.000	0.070**	0.472***
Ethiopia	0.404***	0.001	0.070**	0.474***	Sudan	0.402***	0.000	0.070**	0.472***
Gambia	0.402***	0.000	0.070**	0.472***	Syria	0.402***	0.000	0.070**	0.472***
Guinea	0.400***	0.004	0.068**	0.472***	Tajikistan	0.401***	0.002	0.065**	0.467***
Guinea-Bissau	0.401***	0.001	0.071**	0.472***	Togo	0.402***	0.000	0.070**	0.472***
Haiti	0.402***	0.000	0.070**	0.472***	Uganda	0.402***	0.003	0.072**	0.477***
Liberia	0.401***	-0.001	0.070**	0.470***	Yemen	0.403***	0.000	0.071**	0.473***
Madagascar	0.396***	0.002	0.064**	0.462***					

Appendix Table A1., Dropping a Country at a Time, continued

Panel B. Private Mobilization									
Excluded Country	MDR _{t,S,t}	MDR _{t,S,t-1}	MDR _{t,S,t-2}	Σ _t MDR _{t,S,t}	Excluded Country	MDR _{t,S,t}	MDR _{t,S,t-1}	MDR _{t,S,t-2}	Σ _t MDR _{t,S,t}
High-Income Countries									
Antigua and Barbuda	0,208***	-0.005	0.030	0,233***	Oman	0,209***	-0.005	0.030	0,234***
Aruba	0,208***	-0.005	0.029	0,232***	Palau	0,208***	-0.005	0.030	0,233***
Bahamas	0,208***	-0.004	0.030	0,234***	Panama	0,203***	-0.002	0.034	0,235***
Bahrain	0,207***	-0.005	0.030	0,232***	Poland	0,211***	-0.001	0.031	0,240***
Barbados	0,208***	-0.005	0.030	0,233***	Qatar	0,207***	-0.002	0.030	0,235***
Brunei	0,208***	-0.005	0.030	0,233***	Romania	0,212***	-0.005	0.029	0,236***
Chile	0,211***	-0.007	0.030	0,234***	Saint Kitts and Nevis	0,208***	-0.005	0.030	0,233***
Croatia	0,210***	-0.007	0.031	0,234***	Saudi Arabia	0,200***	0.003	0.026	0,229***
Hungary	0,205***	-0.003	0.022	0,223***	Trinidad and Tobago	0,209***	-0.004	0.030	0,235***
Kuwait	0,208***	-0.005	0.030	0,234***	United Arab Emirates	0,209***	-0.005	0.027	0,231***
Mauritius	0,205***	-0.005	0.030	0,230***	Uruguay	0,207***	-0.007	0.027	0,227***
Nauru	0,208***	-0.005	0.030	0,233***					
Upper-Middle Income									
Albania	0,205***	-0.004	0.031	0,232***	Jordan	0,205***	-0.010	0.033	0,228***
Argentina	0,215***	-0.005	0.031	0,241***	Kazakhstan	0,214***	-0.002	0.027	0,240***
Armenia	0,207***	-0.005	0.030	0,232***	Libya	0,208***	-0.005	0.030	0,233***
Azerbaijan	0,206***	-0.003	0.027	0,229***	Macedonia	0,208***	-0.005	0.030	0,233***
Belarus	0,208***	-0.005	0.030	0,233***	Malaysia	0,208***	-0.005	0.029	0,232***
Belize	0,208***	-0.005	0.030	0,233***	Maldives	0,208***	-0.005	0.030	0,233***
Bosnia and Herzegovina	0,208***	-0.005	0.030	0,233***	Marshall Islands	0,208***	-0.005	0.030	0,233***
Botswana	0,208***	-0.005	0.029	0,232***	Mexico	0,212***	-0.003	0.032	0,240***
Brazil	0,215***	-0.005	0.033	0,242***	Montenegro	0,207***	-0.005	0.030	0,232***
Bulgaria	0,204***	-0.009	0.029	0,224***	Namibia	0,208***	-0.005	0.030	0,233***
China	0,213***	-0.006	0.030	0,236***	Paraguay	0,207***	-0.004	0.030	0,232***
Colombia	0,210***	-0.008	0.031	0,232***	Peru	0,209***	0.000	0.031	0,239***
Costa Rica	0,205***	-0.004	0.030	0,231***	Russia	0,212***	-0.004	0.027	0,235***
Dominican Republic	0,207***	-0.003	0.030	0,234***	Saint Lucia	0,208***	-0.005	0.030	0,233***
Ecuador	0,210***	-0.006	0.030	0,235***	Saint Vincent and the Grenadines	0,208***	-0.005	0.030	0,233***
Equatorial Guinea	0,208***	-0.005	0.030	0,233***	Samoa	0,208***	-0.005	0.030	0,233***
Fiji	0,208***	-0.005	0.030	0,233***	Serbia	0,209***	-0.005	0.029	0,234***
Gabon	0,210***	-0.003	0.028	0,235***	South Africa	0,208***	-0.008	0.030	0,231***
Georgia	0,206***	-0.004	0.03	0,232***	Suriname	0,208***	-0.005	0.030	0,233***
Guatemala	0,208***	-0.005	0.030	0,233***	Thailand	0,212***	-0.007	0.029	0,234***
Guyana	0,206***	-0.005	0.028	0,229***	Tonga	0,208***	-0.005	0.030	0,233***
Indonesia	0,212***	-0.005	0.029	0,237***	Turkey	0,212***	-0.006	0.032	0,238***
Iran	0,208***	-0.005	0.030	0,233***	Turkmenistan	0,208***	-0.004	0.030	0,233***
Iraq	0,210***	-0.006	0.029	0,234***	Tuvalu	0,208***	-0.005	0.030	0,233***
Jamaica	0,209***	0.000	0.028	0,238***	Venezuela	0,208***	-0.006	0.030	0,233***
Lower-Middle Income									
Algeria	0,208***	-0.005	0.030	0,233***	Mongolia	0,203***	-0.007	0.029	0,225***
Angola	0,208***	-0.005	0.030	0,234***	Morocco	0,207***	-0.006	0.030	0,231***
Bangladesh	0,213***	-0.005	0.031	0,239***	Myanmar (Burma)	0,209***	-0.005	0.029	0,233***
Benin	0,208***	-0.005	0.030	0,233***	Nepal	0,209***	-0.005	0.030	0,234***
Bhutan	0,208***	-0.005	0.030	0,233***	Nicaragua	0,208***	-0.005	0.029	0,232***
Bolivia	0,206***	-0.007	0.031	0,230***	Nigeria	0,205***	-0.007	0.032	0,230***
Cambodia	0,209***	-0.003	0.020	0,226***	Pakistan	0,213***	-0.005	0.031	0,239***
Cameroon	0,208***	-0.005	0.030	0,233***	Papua New Guinea	0,209***	-0.002	0.032	0,239***
Cape Verde	0,208***	-0.005	0.030	0,232***	Philippines	0,206***	-0.007	0.029	0,228***
Comoros	0,208***	-0.005	0.030	0,233***	Sao Tome and Principe	0,208***	-0.005	0.030	0,233***
Cote d'Ivoire	0,208***	-0.004	0.030	0,234***	Senegal	0,206***	-0.003	0.030	0,233***
Djibouti	0,209***	-0.003	0.032	0,238***	Solomon Islands	0,208***	-0.005	0.030	0,233***
Egypt	0,217***	0.000	0,037*	0,254***	Sri Lanka	0,209***	-0.005	0.029	0,233***
El Salvador	0,209***	-0.005	0.030	0,234***	Tanzania	0,209***	-0.005	0.030	0,234***
Ghana	0,192***	-0.010	0.033	0,214***	Timor-Leste (East Timor)	0,208***	-0.005	0.030	0,233***
Honduras	0,207***	-0.006	0.028	0,229***	Tunisia	0,207***	-0.004	0.031	0,233***
India	0,213***	-0.007	0.028	0,234***	Ukraine	0,209***	-0.006	0.029	0,232***
Kenya	0,210***	-0.004	0.030	0,236***	Uzbekistan	0,207***	-0.008	0.030	0,229***
Kyrgyzstan	0,209***	-0.005	0.026	0,230***	Vanuatu	0,208***	-0.005	0.030	0,233***
Laos	0,204***	-0.005	0,039**	0,239***	Vietnam	0,210***	-0.006	0.030	0,234***
Lesotho	0,209***	-0.005	0.030	0,233***	Zambia	0,202***	-0.004	0.027	0,225***
Mauritania	0,206***	-0.004	0.030	0,232***	Zimbabwe	0,208***	-0.004	0.030	0,233***
Moldova	0,209***	-0.005	0.030	0,234***					
Low Income									
Afghanistan	0,210***	-0.005	0.030	0,234***	Malawi	0,206***	-0.005	0.030	0,231***
Burkina Faso	0,208***	-0.005	0.030	0,233***	Mali	0,207***	-0.004	0.030	0,233***
Burundi	0,208***	-0.005	0.030	0,233***	Mozambique	0,210***	-0.003	0.029	0,236***
Central African Republic	0,206***	-0.005	0.030	0,231***	Niger	0,208***	-0.005	0.029	0,232***
Chad	0,208***	-0.005	0.030	0,233***	Rwanda	0,210***	-0.005	0.030	0,236***
Democratic Republic of Congo	0,207***	-0.007	0.027	0,228***	Sierra Leone	0,209***	-0.005	0.030	0,234***
Eritrea	0,208***	-0.005	0.030	0,233***	South Sudan	0,208***	-0.005	0.030	0,233***
Ethiopia	0,209***	-0.004	0.030	0,234***	Sudan	0,208***	-0.005	0.030	0,233***
Gambia	0,208***	-0.005	0.030	0,233***	Syria	0,208***	-0.005	0.030	0,233***
Guinea	0,204***	-0.005	0.031	0,231***	Tajikistan	0,209***	-0.005	0.030	0,233***
Guinea-Bissau	0,209***	-0.005	0.030	0,233***	Togo	0,208***	-0.005	0.030	0,233***
Haiti	0,208***	-0.005	0.030	0,233***	Uganda	0,208***	-0.004	0.030	0,233***
Liberia	0,208***	-0.005	0.029	0,232***	Yemen	0,209***	-0.005	0.030	0,234***
Madagascar	0,204***	-0.003	0.025	0,226***					

Appendix Table A1. Dropping a Country at a Time, continued

Panel C: Official Mobilization									
Excluded Country	MDB _{c,t}	MDB _{c,t-1}	MDB _{c,t-2}	Σ _i MDB _{c,t-i}	Excluded Country	MDB _{c,t}	MDB _{c,t-1}	MDB _{c,t-2}	Σ _i MDB _{c,t-i}
High-Income Countries									
Antigua and Barbuda	0,155***	0,018*	0,023**	0,196***	Oman	0,155***	0,018*	0,023**	0,196***
Aruba	0,155***	0,018*	0,023**	0,196***	Palau	0,155***	0,018*	0,023**	0,196***
Bahamas	0,154***	0,018*	0,023**	0,196***	Panama	0,155***	0,016*	0,024**	0,195***
Bahrain	0,155***	0,018*	0,023**	0,196***	Poland	0,158***	0,019*	0,024**	0,202***
Barbados	0,155***	0,018*	0,023**	0,196***	Qatar	0,154***	0,018*	0,023**	0,196***
Brunei	0,155***	0,018*	0,023**	0,196***	Romania	0,158***	0,018*	0,023**	0,199***
Chile	0,157***	0,018*	0,025**	0,200***	Saint Kitts and Nevis	0,155***	0,018*	0,023**	0,196***
Croatia	0,157***	0,019*	0,024**	0,200***	Saudi Arabia	0,152***	0,021**	0,022**	0,195***
Hungary	0,155***	0,018*	0,023**	0,196***	Trinidad and Tobago	0,155***	0,018*	0,023**	0,196***
Kuwait	0,155***	0,018*	0,023**	0,196***	United Arab Emirates	0,155***	0,018*	0,022**	0,195***
Mauritius	0,155***	0,018*	0,023**	0,196***	Uruguay	0,155***	0,018*	0,023**	0,196***
Nauru	0,155***	0,018*	0,023**	0,196***					
Upper-Middle Income									
Albania	0,149***	0,019**	0,023**	0,190***	Jordan	0,152***	0,014	0,024**	0,190***
Argentina	0,160***	0,019*	0,022*	0,202***	Kazakhstan	0,157***	0,018*	0,024**	0,198***
Armenia	0,152***	0,018*	0,024**	0,194***	Libya	0,155***	0,018*	0,023**	0,196***
Azerbaijan	0,154***	0,015	0,024**	0,194***	Macedonia	0,155***	0,018*	0,023**	0,196***
Belarus	0,155***	0,018*	0,023**	0,196***	Malaysia	0,155***	0,018*	0,023**	0,196***
Belize	0,155***	0,018*	0,023**	0,196***	Maldives	0,155***	0,018*	0,023**	0,196***
Bosnia and Herzegovina	0,156***	0,018*	0,023**	0,197***	Marshall Islands	0,155***	0,018*	0,023**	0,196***
Botswana	0,155***	0,018*	0,023**	0,196***	Mexico	0,158***	0,019**	0,024**	0,201***
Brazil	0,160***	0,019*	0,024**	0,204***	Montenegro	0,155***	0,018*	0,023**	0,196***
Bulgaria	0,156***	0,018*	0,024**	0,199***	Namibia	0,155***	0,018*	0,023**	0,196***
China	0,158***	0,018*	0,023**	0,199***	Paraguay	0,155***	0,018*	0,023**	0,196***
Colombia	0,157***	0,016*	0,023**	0,197***	Peru	0,155***	0,019*	0,022*	0,196***
Costa Rica	0,156***	0,017*	0,023**	0,196***	Russia	0,157***	0,018*	0,023**	0,199***
Dominican Republic	0,155***	0,018*	0,023**	0,196***	Saint Lucia	0,155***	0,018*	0,023**	0,196***
Ecuador	0,155***	0,018*	0,023**	0,196***	Saint Vincent and the Grenadines	0,155***	0,018*	0,023**	0,196***
Equatorial Guinea	0,155***	0,018*	0,023**	0,196***	Samoa	0,155***	0,018*	0,023**	0,196***
Fiji	0,155***	0,018*	0,023**	0,196***	Serbia	0,156***	0,018*	0,023**	0,197***
Gabon	0,153***	0,018*	0,024**	0,195***	South Africa	0,156***	0,016*	0,024**	0,196***
Georgia	0,155***	0,018*	0,023**	0,197***	Suriname	0,155***	0,018*	0,023**	0,196***
Guatemala	0,156***	0,018*	0,023**	0,197***	Thailand	0,157***	0,018*	0,023**	0,199***
Guyana	0,155***	0,018*	0,023**	0,196***	Tonga	0,155***	0,018*	0,023**	0,196***
Indonesia	0,158***	0,016*	0,022**	0,196***	Turkey	0,160***	0,018*	0,025**	0,203***
Iran	0,155***	0,018*	0,023**	0,196***	Turkmenistan	0,155***	0,018*	0,023**	0,196***
Iraq	0,156***	0,018*	0,023**	0,197***	Tuvalu	0,155***	0,018*	0,023**	0,196***
Jamaica	0,152***	0,019*	0,025**	0,196***	Venezuela	0,155***	0,017*	0,024**	0,196***
Lower-Middle Income									
Algeria	0,155***	0,018*	0,023**	0,196***	Mongolia	0,153***	0,019**	0,024**	0,196***
Angola	0,155***	0,018*	0,023**	0,197***	Morocco	0,154***	0,019*	0,023**	0,196***
Bangladesh	0,153***	0,015	0,019*	0,188***	Myanmar (Burma)	0,154***	0,018*	0,023**	0,194***
Benin	0,155***	0,018*	0,023**	0,196***	Nepal	0,154***	0,018*	0,023**	0,195***
Bhutan	0,155***	0,018*	0,023**	0,196***	Nicaragua	0,155***	0,019*	0,023**	0,197***
Bolivia	0,156***	0,018*	0,024**	0,199***	Nigeria	0,156***	0,017*	0,022**	0,195***
Cambodia	0,156***	0,019*	0,020*	0,194***	Pakistan	0,158***	0,017*	0,024**	0,199***
Cameroon	0,153***	0,017*	0,024**	0,194***	Papua New Guinea	0,155***	0,018*	0,024**	0,198***
Cape Verde	0,154***	0,018*	0,023**	0,195***	Philippines	0,154***	0,018*	0,022**	0,195***
Comoros	0,155***	0,018*	0,023**	0,196***	Sao Tome and Principe	0,155***	0,018*	0,023**	0,196***
Cote d'Ivoire	0,151***	0,018*	0,024**	0,193***	Senegal	0,151***	0,020**	0,021*	0,192***
Djibouti	0,153***	0,019**	0,023**	0,196***	Solomon Islands	0,154***	0,018*	0,023**	0,196***
Egypt	0,156***	0,018*	0,026**	0,200***	Sri Lanka	0,156***	0,018*	0,022**	0,197***
El Salvador	0,153***	0,017*	0,023**	0,192***	Tanzania	0,156***	0,018*	0,023**	0,197***
Ghana	0,156***	0,014	0,027**	0,197***	Timor-Leste (East Timor)	0,155***	0,018*	0,023**	0,196***
Honduras	0,154***	0,017*	0,021*	0,191***	Tunisia	0,155***	0,018*	0,023**	0,196***
India	0,158***	0,015	0,022*	0,195***	Ukraine	0,156***	0,018*	0,024**	0,197***
Kenya	0,156***	0,017*	0,025**	0,198***	Uzbekistan	0,153***	0,018*	0,024**	0,195***
Kyrgyzstan	0,155***	0,018*	0,023**	0,196***	Yamalo	0,155***	0,018*	0,023**	0,196***
Laos	0,154***	0,018*	0,026**	0,198***	Vietnam	0,154***	0,017*	0,022**	0,194***
Lesotho	0,154***	0,019*	0,023**	0,195***	Zambia	0,153***	0,018*	0,024**	0,194***
Mauritania	0,154***	0,018*	0,023**	0,196***	Zimbabwe	0,155***	0,018*	0,023**	0,196***
Moldova	0,155***	0,018*	0,023**	0,196***					
Low Income									
Afghanistan	0,156***	0,018*	0,023**	0,197***	Malawi	0,154***	0,017*	0,023**	0,194***
Burkina Faso	0,155***	0,018*	0,023**	0,196***	Mali	0,155***	0,018*	0,023**	0,196***
Burundi	0,155***	0,018*	0,023**	0,196***	Mozambique	0,152***	0,016*	0,023**	0,191***
Central African Republic	0,155***	0,018*	0,023**	0,196***	Niger	0,155***	0,018*	0,023**	0,196***
Chad	0,155***	0,018*	0,023**	0,196***	Rwanda	0,154***	0,016*	0,020*	0,190***
Democratic Republic of Congo	0,154***	0,018*	0,024**	0,197***	Sierra Leone	0,155***	0,018*	0,023**	0,197***
Eritrea	0,155***	0,018*	0,023**	0,196***	South Sudan	0,155***	0,018*	0,023**	0,196***
Ethiopia	0,156***	0,018*	0,023**	0,197***	Sudan	0,155***	0,018*	0,023**	0,196***
Gambia	0,155***	0,018*	0,023**	0,196***	Syria	0,155***	0,018*	0,023**	0,196***
Guinea	0,154***	0,019**	0,022**	0,196***	Tajikistan	0,154***	0,019**	0,022**	0,195***
Guinea-Bissau	0,154***	0,019*	0,023**	0,196***	Togo	0,155***	0,018*	0,023**	0,196***
Haiti	0,155***	0,018*	0,023**	0,196***	Uganda	0,156***	0,020**	0,023**	0,199***
Liberia	0,154***	0,018*	0,023**	0,196***	Yemen	0,155***	0,018*	0,023**	0,197***
Madagascar	0,153***	0,018*	0,023**	0,195***					

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=0}^2 b_i MDB_{c,s,t-i} + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$. The dependent variable is normalized by the country's trend GDP at time t . The independent variable is a dummy variable equal to 1 when MDBs have financed at least one operation in a country-subsector at time t and 0 otherwise. Significance is computed based on country-subsector clustered standard errors. We report the results for

the main coefficients and their sum, eliminating one country at a time from the sample. Panel A reports for all resources mobilized, panel B for private resources, and panel C for official or public resources. *** p<0.01, ** p<0.05, * p<0.1

Appendix Table A2. Dropping a Subsector at a Time

Excluded Sector	MDB _{c,s,t}	MDB _{c,s,t-1}	MDB _{c,s,t-2}	Σ _i MDB _{c,s,t-i}
Panel A: All Mobilization				
Mining	0.440***	0.021	0.079**	0.212***
Oil Gas	0.445***	0.024	0.098***	0.211***
Power	0.457***	-0.008	0.105***	0.187***
Renewables	0.519***	0.005	0.104***	0.219***
Social Infrastructure	0.499***	0.024	0.098***	0.221***
Telecoms	0.490***	0.020	0.104***	0.215***
Transport	0.476***	0.039	0.098***	0.202***
Water	0.510***	0.013	0.098***	0.217***
Panel B: Private Mobilization				
Mining	0.237***	0.003	0.029	0.212***
Oil Gas	0.234***	0.014	0.042**	0.211***
Power	0.261***	-0.004	0.060**	0.187***
Renewables	0.290***	-0.004	0.053*	0.219***
Social Infrastructure	0.276***	0.010	0.049**	0.221***
Telecoms	0.270***	0.011	0.051**	0.215***
Transport	0.271***	0.017	0.064**	0.202***
Water	0.286***	0.004	0.048**	0.217***
Panel C: Official Mobilization				
Mining	0.160***	0.025***	0.027**	0.212***
Oil Gas	0.161***	0.018*	0.032***	0.211***
Power	0.151***	0.012	0.024**	0.187***
Renewables	0.178***	0.018*	0.023*	0.219***
Social Infrastructure	0.172***	0.023**	0.025**	0.221***
Telecoms	0.170***	0.020**	0.026**	0.215***
Transport	0.161***	0.026**	0.015	0.202***
Water	0.172***	0.019**	0.026**	0.217***

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=0}^2 b_i MDB_{c,s,t-i} + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$. The dependent variable is normalized by the country's trend GDP at time t. The independent variable is a dummy variable equal to 1 when MDBs have financed at least one operation in a country-subsector at time t and 0 otherwise. Significance is computed based on country-subsector clustered standard errors. We report the results for the main coefficients and their sum, eliminating one subsector at a time from the sample. Panel A reports for all resources mobilized, panel B for private resources, and panel C for official or public resources. *** p<0.01, ** p<0.05, * p<0.1

Appendix Table A3. Different Time Samples

Sample	Panel A: Total				Panel B: Private				Panel C: Official			
	MDB _{c,s,t}	MDB _{c,s,t-1}	MDB _{c,s,t-2}	Σ _i MDB _{c,s,t-i}	MDB _{c,s,t}	MDB _{c,s,t-1}	MDB _{c,s,t-2}	Σ _i MDB _{c,s,t-i}	MDB _{c,s,t}	MDB _{c,s,t-1}	MDB _{c,s,t-2}	Σ _i MDB _{c,s,t-i}
2005 - 2014	0.472***	0.00775	0.0594	0.539***	0.255***	-0.00250	0.0375	0.290***	0.163***	0.0224	0.0175	0.203***
2006 - 2015	0.460***	-0.00730	0.0621	0.515***	0.237***	-0.0163	0.0353	0.256***	0.172***	0.0226	0.0266*	0.221***
2007 - 2016	0.462***	0.00454	0.0944**	0.561***	0.237***	-0.00275	0.0529	0.287***	0.175***	0.0231*	0.0339**	0.232***
2008 - 2017	0.425***	0.0206	0.103***	0.548***	0.218***	0.00786	0.0510*	0.277***	0.169***	0.0248*	0.0361**	0.230***
2009 - 2018	0.398***	0.0201	0.0758**	0.493***	0.193***	0.00359	0.0297	0.226***	0.164***	0.0259**	0.0297**	0.220***
2010 - 2019	0.391***	0.00608	0.0631*	0.460***	0.190***	-0.000404	0.0167	0.207***	0.163***	0.0153	0.0295**	0.208***
2011 - 2020	0.352***	0.0119	0.0625**	0.427***	0.173***	0.0113	0.0208	0.205***	0.152***	0.0153	0.0216*	0.189***

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=0}^2 b_i MDB_{c,s,t-i} + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$. The dependent variable is normalized by the country's trend GDP at time t. The independent variable is a dummy variable equal to 1 when MDBs have financed at least one operation in a country-subsector at time t and 0 otherwise. Significance is computed based on country-subsector clustered standard. We report the results for the main coefficients and their sum for different subsamples of 15 years. Panel A reports for all resources mobilized, panel B for private resources, and panel C for official or public resources. *** p<0.01, ** p<0.05, * p<0.1

Appendix Table A4. Controlling for Voice Accountability and Regulatory Quality

Dependent Variable	Total (1)	Private (2)	Public (3)	Total (4)	Private (5)	Public (6)
MDB _{c,s,t}	0.354*** (0.0862)	0.133** (0.0549)	0.175*** (0.0298)	0.424*** (0.0799)	0.171*** (0.0474)	0.192*** (0.0305)
MDB _{c,s,t-1}	-0.119** (0.0601)	-0.0709 (0.0435)	-0.00336 (0.0195)	0.00145 (0.0523)	0.0400 (0.0307)	-0.000523 (0.0205)
MDB _{c,s,t-2}	0.0974 (0.0944)	0.0311 (0.0651)	0.0253 (0.0287)	0.0194 (0.0839)	-0.0621 (0.0508)	0.0219 (0.0304)
VAE: Voice Accountability						
MDB _{c,s,t} # VAE T2	0.0469 (0.0990)	0.0724 (0.0628)	-0.00251 (0.0364)			
MDB _{c,s,t} # VAE T3	0.0784 (0.108)	0.127* (0.0705)	-0.0530 (0.0364)			
MDB _{c,s,t-1} # VAE T2	0.165** (0.0710)	0.0928* (0.0491)	0.0318 (0.0247)			
MDB _{c,s,t-1} # VAE T3	0.147** (0.0709)	0.0821 (0.0504)	0.0225 (0.0240)			
MDB _{c,s,t-2} # VAE T2	-0.0257 (0.102)	-0.0201 (0.0685)	0.0153 (0.0339)			
MDB _{c,s,t-2} # VAE T3	-0.0571 (0.102)	-0.00486 (0.0709)	-0.0153 (0.0319)			
RQE: Regulatory Quality						
MDB _{c,s,t} # RQE T2				-0.0696 (0.0995)	-0.0125 (0.0599)	-0.0341 (0.0378)
MDB _{c,s,t} # RQE T3				0.00627 (0.0995)	0.0911 (0.0624)	-0.0537 (0.0365)
MDB _{c,s,t-1} # RQE T2				-0.0328 (0.0631)	-0.0782** (0.0398)	0.0312 (0.0257)
MDB _{c,s,t-1} # RQE T3				0.0246 (0.0705)	-0.0360 (0.0437)	0.0161 (0.0254)
MDB _{c,s,t-2} # RQE T2				0.139 (0.103)	0.135** (0.0638)	0.0336 (0.0372)
MDB _{c,s,t-2} # RQE T3				0.00157 (0.0914)	0.0808 (0.0567)	-0.0165 (0.0331)
Observations	9,743	9,743	9,743	9,743	9,743	9,743
R-squared	0.442	0.456	0.405	0.442	0.456	0.405
Sum	.333	.093	.197	.444	.149	.213
P-Value F-test	.011	.327	0	0	.037	0
Year*Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year*Sector FE	Yes	Yes	Yes	Yes	Yes	Yes
Country*Sector FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=0}^2 (b_i MDB_{c,s,t-i} + q_i MDB_{c,s,t-i} * T2_{c,t} + r_i MDB_{c,s,t-i} * T3_{c,t}) + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$. The dependent variable is normalized by the country's trend GDP at time t. The independent variables are a dummy variable equal to 1 when MDBs have financed at least one operation in a country-subsector at time t and 0 otherwise, and its interaction with dummy variables equal to 1 when countries are in the second tercile by worldwide governance indicator (VAE = voice accountability, or RQE = regulatory quality), or in the third tercile at time t and 0 otherwise. Countries grouped by tercile and governance indicator are shown in Figure A1. Country-subsector clustered standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Appendix Table A5. Controlling for Rule of Law and Control of Corruption

Dependent Variable	Total (1)	Private (2)	Public (3)	Total (4)	Private (5)	Public (6)
MDB _{c,s,t}	0.433*** (0.0707)	0.192*** (0.0416)	0.189*** (0.0278)	0.375*** (0.0660)	0.172*** (0.0392)	0.172*** (0.0251)
MDB _{c,s,t-1}	0.00668 (0.0445)	0.0265 (0.0274)	0.0112 (0.0189)	-0.0311 (0.0406)	-0.0123 (0.0252)	0.0220 (0.0181)
MDB _{c,s,t-2}	0.105 (0.0828)	0.0171 (0.0557)	0.0413 (0.0288)	0.116 (0.0733)	0.0508 (0.0493)	0.0299 (0.0260)
RLE: Rule of Law						
MDB _{c,s,t} # RLE T2	-0.0393 (0.0914)	-0.0266 (0.0547)	0.00267 (0.0362)			
MDB _{c,s,t} # RLE T3	-0.0433 (0.0970)	0.0742 (0.0631)	-0.0946*** (0.0331)			
MDB _{c,s,t-1} # RLE T2	-0.0752 (0.0572)	-0.0766** (0.0378)	-0.00181 (0.0232)			
MDB _{c,s,t-1} # RLE T3	0.0675 (0.0679)	-0.00106 (0.0432)	0.0230 (0.0257)			
MDB _{c,s,t-2} # RLE T2	-0.0267 (0.0955)	0.00472 (0.0630)	-0.00425 (0.0340)			
MDB _{c,s,t-2} # RLE T3	-0.0681 (0.0922)	0.0100 (0.0624)	-0.0339 (0.0324)			
CCE: Control of Corruption						
MDB _{c,s,t} # CCE T2				-0.0127 (0.0860)	-0.000351 (0.0531)	-0.0155 (0.0336)
MDB _{c,s,t} # CCE T3				0.0973 (0.0990)	0.109* (0.0631)	-0.0291 (0.0342)
MDB _{c,s,t-1} # CCE T2				0.0305 (0.0531)	0.00486 (0.0351)	-0.00427 (0.0225)
MDB _{c,s,t-1} # CCE T3				0.0546 (0.0717)	0.0174 (0.0458)	-0.00808 (0.0258)
MDB _{c,s,t-2} # CCE T2				-0.0781 (0.0858)	-0.0555 (0.0573)	0.00828 (0.0304)
MDB _{c,s,t-2} # CCE T3				-0.0556 (0.0875)	-0.0213 (0.0578)	-0.0203 (0.0317)
Observations	9,743	9,743	9,743	9,743	9,743	9,743
R-squared	0.441	0.456	0.408	0.441	0.456	0.404
Sum	.545	.235	.241	.46	.211	.224
P-Value F-test	0	.001	0	0	.001	0
Year*Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year*Sector FE	Yes	Yes	Yes	Yes	Yes	Yes
Country*Sector FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The equation estimated is: $m_{c,s,t} = \sum_{i=0}^2 (b_i MDB_{c,s,t-i} + q_i MDB_{c,s,t-i} * T2_{c,t} + r_i MDB_{c,s,t-i} * T3_{c,t}) + a_{c,s} + d_{c,t} + g_{s,t} + e_{c,st}$. The dependent variable is normalized by the country's trend GDP at time t. The independent variables are a dummy variable equal to 1 when MDBs have financed at least one operation in a country-subsector at time t and 0 otherwise, and its interaction with dummy variables equal to 1 when countries are in the second tercile by worldwide governance indicator (RLE = rule of law, or CCE = control of corruption), or in the third tercile at time t and 0 otherwise. Countries grouped by tercile and governance indicator are shown in Figure A1. Country-subsector clustered standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.