

Debt Management Institutions in Latin America and the Caribbean: A Comparative Analysis

**Institutions for
Development Sector**
**Connectivity, Markets,
and Finance Division**

**DISCUSSION
PAPER N°
IDB-DP-925**

Joan Prats
Jimena Chiara

Debt Management Institutions in Latin America and the Caribbean: A Comparative Analysis

Joan Prats
Jimena Chiara

February 2022



<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. 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.

Note that the 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.



DEBT MANAGEMENT INSTITUTIONS IN LATIN AMERICA AND THE CARIBBEAN

A COMPARATIVE ANALYSIS



Authors: Joan Prats and Jimena Chiara



Contents

Abstract	vii
1 Introduction	1
2 Survey on Debt Management Structures and Practices	3
3 Institutional Capacities of Debt Management Offices in the Latin American and Caribbean Region	7
4 Conclusiones	51
Bibliography	59

Abstract

Public debt management is one of the most crucial functions of any government, but we know little about how debt management offices operate. Based on a survey of 24 Latin American and Caribbean countries, this document presents the first systematic effort to analyze how these offices are organized and how they perform crucial debt management functions: developing and executing the strategy for managing the States' portfolio of liabilities and new borrowing. The

evidence indicates that, although institutional capacity to manage public debt has improved in the region, the experience is uneven among countries. We conclude by highlighting potential areas for improvement.

JEL Codes: H63, Y1

Key words: debt management office, institutional capacities, public debt management

Introduction

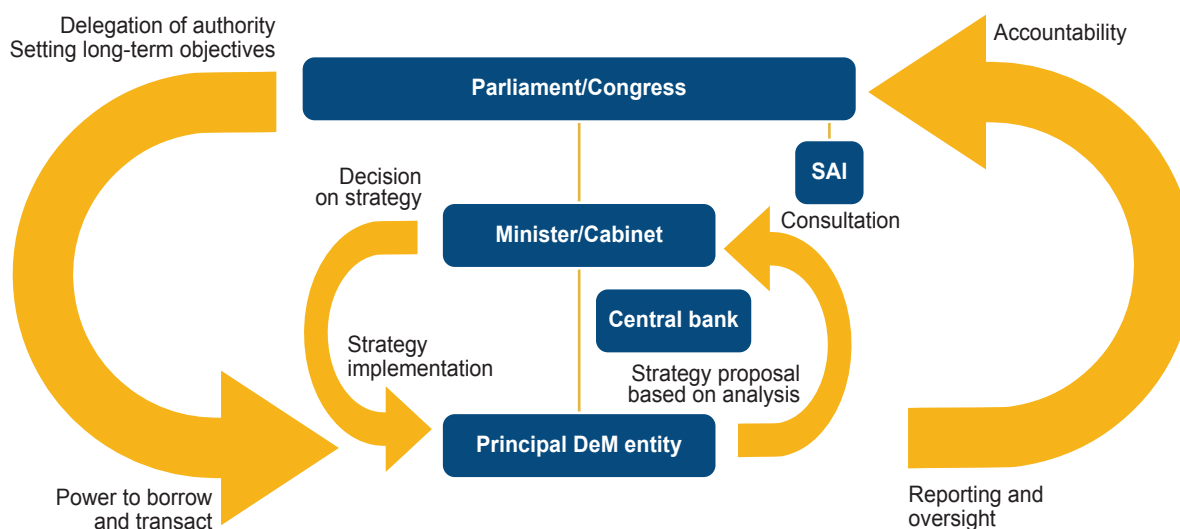
Debt management institutions need to be both professionalized to adequately manage debt contingencies and robust to political economy problems. The legal and regulatory framework in which debt management offices (DMOs) operate is instrumental to these ends, as well as their technical capacities to effectively develop resilient strategies. Debt management institutions can best be described as a set of procedures and units within government tasked with developing and executing a strategy for managing the State's portfolio of liabilities and new borrowing required for funding, while also achieving the government's risk and cost objectives, and any other objectives, including developing and maintaining an efficient market for government securities (World Bank and IMF, 2001). A robust institutional debt management framework is a key component of governance aimed at avoiding excessive accumulation of risk on the sovereign balance sheet, while supporting growth and stability. Debt management institutions are crucial not only for developing risk-adjusted cost-minimizing debt strategies, but also for contributing to the development of comprehensive and resilient debt strategies.

Unlike other public policies, debt management functions are not linked to a single or narrow group of institutions within government. The

concept of public debt management is broad and encompasses several policies and practices involved in the process of managing government liabilities. The IMF defines public debt management as "...the process of establishing and executing a strategy for managing the government's debt in order to raise the required amount of funding, achieve its risk and cost objectives, and to meet any other sovereign debt management goals the government may have set, such as developing and maintaining an efficient market for government securities" (World Bank and IMF, 2001). Public debt management practices are necessarily distributed across a host of agencies—offices of heads of government, ministries of finance, and central banks—while also involving several related markets (e.g., domestic, and external financial markets) and market participants, private and public institutions, and levels of government (e.g., federal, state, or municipal) and state-owned enterprises.

A stylized debt management governance structure entails the interplay of many key state actors, including the parliament, the cabinet, and the central bank, with the DMO serving as the cornerstone and main executing device (see Figure 1). Ultimately, the main function of a properly structured set of debt management institutions and procedures is to execute the government's

FIGURE 1 STYLIZED DEBT MANAGEMENT GOVERNANCE STRUCTURE



Source: World Bank (2015).

Note: SAI = Supreme Audit Institution.

financing requirements at the lowest possible cost, given a certain risk tolerance. Although debt managers are not tasked with developing or setting fiscal priorities or policies, their input can and should inform policymakers regarding what may be prudent and/or possible, as well as which strategies are best for addressing debt vulnerabilities in a country. In some countries, debt management functions tend to be concentrated in what is generally referred to as a debt management agency or office, which is often housed within central banks or ministries of finance or, less frequently, established as a separate agency. Even in countries where there is no such centralized debt management agency or unit, debt management practices, procedures, and legislation are generally referred to as a country's institutional structure for debt management. Sound debt management structures help governments reduce their exposure to risk (e.g., interest rate, currency, refinancing, and other risks) and help to ensure transparency in terms of objectives, benchmarks for both cost and risk, and decision making.

This document presents the first institutional comparative analysis of debt management organization and practices in LAC. This is useful to see how DMOs are organized in LAC countries, and what their major differences are regarding the most important dimensions of debt management (i.e., strategy, coordination with macro policies, borrowing activities, recording, and others). It also provides a benchmark to identify areas of improvement, as well as general trends and commonalities among regions or income groups. The document is organized as follows. Section 2 describes the survey and the methodology used to gather and analyze the data. Section 3 summarizes the results obtained from the responses to the survey, and Section 4 presents the main conclusions that can be drawn from the results.¹

¹ This document does not describe the specific results by country. Referred results were sent directly to each DMO in a summary table that presents the country's answer to each question (in one column) and the results for that question grouping countries by subregion, income bracket and size of the economy, so that each DMOs can see where there might be a gap or an area of improvement.

Survey on Debt Management Structures and Practices

There is no single blueprint or form that a DMO should have to ensure that it perfectly performs all its functions. However, there are a few proven sets of principles and recommendations that international agencies have developed to establish best practices and provide a roadmap to follow when attempting to strengthen debt management institutions. The most widely used are the IMF and World Bank's joint Guidelines for Public Debt Management (World Bank and IMF, 2001), which are also the basis for the World Bank's Debt Management Performance Assessment (DeMPA) program. The Guidelines and the DeMPA program were developed to set out key principles to support institutional and capacity development for countries in need.

Inspired by the DeMPA framework, we designed a survey to contribute to the development of a comparative diagnosis of debt management offices in the Region. The questionnaire follows the DeMPA's main building blocks, and its questions are aimed at identifying compliance with basic institutional and organizational best practices (see Annex I for the questionnaire sent

to each country DMO to gather the data). The answers to the survey are based on each country's self-reported information. The information is validated and double-checked by debt management experts who review the documentation that supports the answers to the questionnaire (i.e., the legal documents that prove how a DMO is organized or the process to issue debt in each country). The following 24 countries responded to the survey: Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, and Uruguay. This makes it the most comprehensive comparative institutional database for LAC countries to date.

DESCRIPTION OF THE SURVEY

The survey design sought to cover all relevant dimensions of institutional capacity to manage public debt and sovereign risk. It prioritized

TABLE 1 ANALYTICAL DIMENSIONS INCLUDED IN THE SURVEY

Institutional arrangements and governance	Coordination with macroeconomic policies	Debt strategy and sustainability	Management and resources of the DMO	Debt data and operational risk management	Debt borrowing and other debt-related activities
DMO Location. DMO Structure (front, middle, and back office). DMO's functions. Legislation for public debt management. Communication between DMO and parliament/ congress. Audits on public debt management activities.	Existence/ composition of debt management committee. Elaboration/content of forecasts on central government debt services. Information sharing between the DMO and the fiscal/ budget authorities. Separation between monetary policy operations and debt management transactions. Coordination with the central bank (CB) Government access to financial resources from the CB.	Existence/ content of a medium-term debt management strategy. Undertaking of debt sustainability analysis.	Human resource management. Professional staff. Existence of procedure manuals. Access to adequate software (record, analysis, report).	Existence of debt records and of a central registry system. Publication of sovereign debt data (statistical report, frequency, content). Business continuity (existence of business continuity plan, operational recovery site, documented guidelines for operational risk management).	Existence of documented procedures for borrowing in domestic/ foreign markets; derivative transactions; issuance of central government on-lending and loan guarantees. Frequency of meetings with domestic market participants, foreign investors, and rating agencies.

Source: Author's elaboration.

developing a set of clear questions with simple answers, most of which were either binary (yes-no) or multiple-choice. This enabled the identification of specific organizational characteristics, capacities, and tasks. In turn, this level of identification allowed a more robust comparative and benchmarking exercise. The survey is divided into six analytical dimensions (Table 1) briefly described below:

Institutional Arrangements and Governance.

This section assesses the legal and institutional arrangements for public debt management, including location, structure, and functions of

the DMO. It inquires about the communication between the DMO and the parliament/congress and how public debt management activities are audited.

Coordination with Macroeconomic Policies.

This section inquires about the existence and composition of a debt management committee in charge of strategy and coordination issues related to the macro-fiscal environment and/or global indebtedness decisions; the elaboration by the DMO (and content) of forecasts on central government debt service; information sharing between the DMO and the fiscal or budget

authorities; separation between monetary policy operations and debt management transactions; coordination with the central bank; and government access to financial resources from the central bank.

Debt Strategy and Sustainability. This section focuses on assessing the existence and content of a medium-term debt management strategy and the undertaking of debt sustainability analysis.

Management and Resources of the DMO. This section inquires about human resource management in the DMO, professional staff, the existence of procedure manuals for tasks executed by the DMO, and access to adequate software to record, analyze, and report sovereign debt.

Debt Data and Operational Risk Management. This section assesses the existence of debt records and a central registry system; the publication of sovereign debt data (sovereign debt statistical reporting, frequency, and content); and business continuity (existence of a business continuity plan, an operational recovery site, and documented guidelines for operational risk management).

Debt Borrowing and other Related Activities. This section inquires about the existence of documented procedures (and their content) for borrowing in domestic and foreign markets, derivative transactions, issuance of central government on-lending, and issuance of loan guarantees. It also inquires about the frequency of meetings held by the DMO with domestic market participants, foreign investors, and credit rating agencies.

METHODOLOGY

The survey was emailed to the LAC countries' DMOs in August 2020. Two debt management experts hired by the IDB supported the implementation of the survey, provided guidance to

DMOs during survey completion to ensure that the questionnaire was correctly interpreted, and reviewed the corresponding documentation that supported the answers to the questionnaire. The responses were compiled in a database that constitutes, to the best of our knowledge, the first comprehensive database on DMO capacities for public debt and risk management in LAC.

Although the data is highly qualitative, the binary nature of the survey categories provides the opportunity to build a system to analyze DMOs' main dimensions based on best practices. The survey was constructed using the following logic: each question of the survey that implies compliance with a requirement necessary for adequate public debt management gets a score if answered in the affirmative. Some questions in the survey are not included in the scoring because of not complying with (or not having) what is being asked. This does not necessarily imply a weakness or the existence of a gap to be closed, even though it can have a highly descriptive value. For example, the "Management and Resources of the DMO" section takes into consideration (scores) whether the DMO has (or does not have) access to adequate software. But the kind of system used (SIGADE, MERIDIAN/CS-DRMS, In-House developed) is not scored, because no answer is better than any other. Nor is the location of the DMO (within the Ministry of Finance, the Central Bank or in a Separate Agency) scored, as no answer is better than any other. This is the case for many of the questions in the survey. The scoring system used was validated in a peer-reviewed exercise with debt management officers from six LAC countries.

The results obtained by a country in each dimension considered in the survey are an indicator of the DMO's institutional capacities in that specific area. Since the sections in the survey have different maximum possible values, they were normalized so that each dimension has the same weight in the analysis. The maximum possible normalized value by section is five points. To analyze the data, countries were grouped by

subregion (Andean,² Caribbean,³ Central America,⁴ and Southern Cone⁵), size of the economy,⁶ and income level.⁷

² Andean countries: Bolivia, Colombia, and Peru.

³ Caribbean countries: Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago.

⁴ Central American countries: Belize, Costa Rica, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, and Panama.

⁵ Southern Cone countries: Argentina, Brazil, Chile, Paraguay, and Uruguay.

⁶ Measured by the gross domestic product (GDP).

⁷ According to the World Bank country classifications by income level: 2021–2022.

Institutional Capacities of Debt Management Offices in Latin America and the Caribbean

This section describes the data derived from the answers to the survey. It first presents a general analysis of the results, with regard to trends in institutional development in the region from a comparative perspective and its main macro drivers (e.g., size of the economy, level of development, and others). It then describes the main results obtained in each section of the questionnaire, highlighting the main differences among regions and income levels.

GENERAL RESULTS

A general finding is that the overall institutional capacities of DMOs in LAC for public debt and risk management are strongly and positively correlated to the size of the economy.⁸ GDP explains 39 percent of the variation in the scoring obtained in the survey.⁹ This result is consistent with theory. That is, with a bigger debt market, the DMO

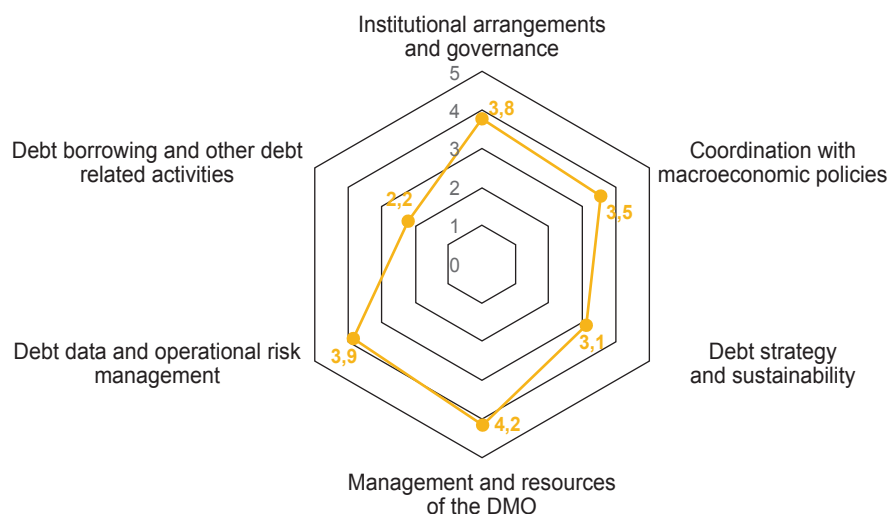
is expected to have greater institutional capacity and sophistication. However, some countries score lower than the size of their economy would predict and vice-versa. For instance, Colombia, Jamaica, and Paraguay score significantly higher than would be expected by the size of their economies. Regarding the composition of total gross public debt, external debt has a greater impact on the institutional capacities of DMOs than domestic debt (see result of regressions II.2 and II.3 in Annex II).

When analyzing the data by dimensions of institutional capacity for public debt and

⁸ No significant correlation is observed between the institutional capacities of DMOs and GDP per capita. The relationship between DMOs' institutional capacities and the World Bank's governance indicators was also analyzed, and no significant relationships were found.

⁹ GDP and total gross public debt are highly correlated with each other ($R^2=0.94$). See Coefficient of Determination Matrix in Annex II.

FIGURE 2 INSTITUTIONAL CAPACITIES OF DEBT MANAGEMENT ORGANIZATIONS
(LAC average)



Source: Author's elaboration based on survey on DMOs institutional capacities results.

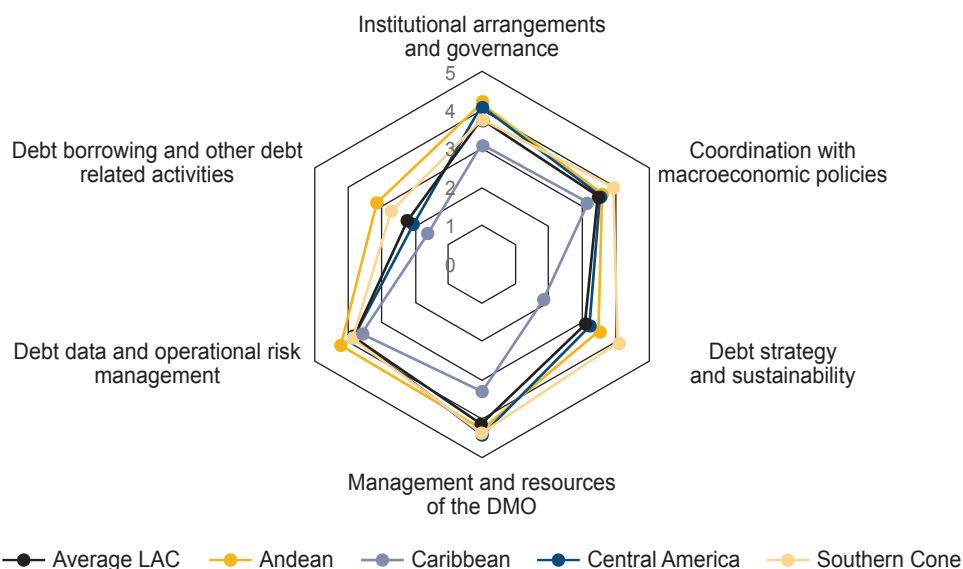
sovereign risk management, they show that DMOs in LAC are (on average) more developed in the areas of “management and resources of the DMO” and “debt data and operational risk management” (see Figure 2). In these areas, the LAC average reaches 4.2 and 3.9 out of 5 points, respectively. This means that DMOs are doing well in terms of human resource management; availability of professional staff; access to adequate software (to record, analyze, and report sovereign debt); having debt records and a central registry system; publication of debt data; business continuity; and having procedure manuals for processing of debt-related payments and receivables, debt data recording and validation, and evaluating debt portfolio risks.

In contrast, the greatest weaknesses and, therefore the aspects needing to be strengthened, are “debt borrowing and other debt related activities” (LAC average of 2.2 out of 5 points) and “debt strategy and sustainability” (LAC average of 3.1 out of 5 points). This is especially important, since it means that DMOs need to improve their strategic medium term debt planning and

their ability to conduct regular public debt sustainability analyses (DSA). Not having a medium-term debt management strategy (MTDS), or implementing one whose content is not complete, hinders the achievement of an optimal public debt management policy¹⁰ and the development of a domestic debt market. The DSA is an important tool for governments to assess sovereign vulnerabilities and can provide them with warnings concerning fiscal policy. DMOs also need to improve documentation of several procedures, such as procedures for borrowing (in both domestic and foreign markets), entering into derivative transactions, engaging in central government on-lending, and issuing loan guarantees. Having documented procedures for these types of transactions is essential to improve the transparency and efficiency of these processes.

¹⁰ An optimal public debt management policy implies to meet the government's financing needs in a timely manner, minimizing the expected cost for the accepted risk level and seeking a sustainable debt path.

FIGURE 3 INSTITUTIONAL CAPACITIES OF DEBT MANAGEMENT ORGANIZATIONS
(average by subregion)



Source: Author's elaboration based on survey on DMOs institutional capacities results.

From a regional comparative perspective, DMOs in Andean countries are, on average, more developed than the LAC average in all dimensions of institutional capacity for public debt and sovereign risk management (see Figure 3). The Southern Cone region performs better or equal to the LAC average in all dimensions except for “institutional arrangements and governance.” The average performance of the Central American countries practically matches the average performance of LAC,¹¹ and the Caribbean countries lagged behind in all the dimensions analyzed. One possible explanation for this result may be related to the size of the economies, since Caribbean countries are small, open economies that, although they have a high per capita income, do not go regularly to the market. By not issuing debt as often as larger countries, Caribbean countries do not need to invest as much in their DMO capacities as other countries. The latter appears to be consistent with their greatest weaknesses in the areas of “debt borrowing and other debt related activities” and “debt strategy

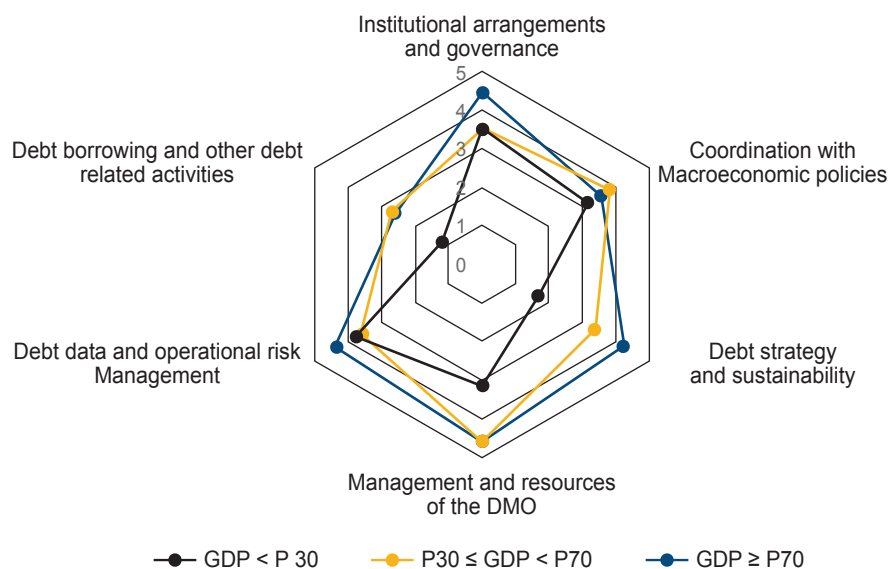
and sustainability” (average of 1.6 and 1.9, out of five points, respectively).

The institutional capacities of DMOs in LAC for public debt and risk management are positively related to the size of the country’s economy. When analyzing the data by dimensions of institutional capacities, this result is clearly observed for the “debt strategy and sustainability,” “institutional arrangements and governance,” and “management and resources of the DMO” dimensions (see Figure 4).¹²

¹¹ This result may be explained, in part, by the fact that the Group of Central American countries is the largest: 10 out of the 24 countries that answered the survey belong to this subregion.

¹² To analyze the relationship between the scoring obtained in the survey and the size of the economy, countries were divided by percentiles of GDP into three groups. The countries with GDP below the 30th percentile (P30) considering the group of countries that answered the survey are the following: Bahamas, Barbados, Belize, Guyana, Haiti, Nicaragua, and Suriname. The countries with GDP between P30 and P70 are the following: Bolivia, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Panama, Paraguay, Trinidad & Tobago, and Uruguay. The countries with GDP greater than P70 are the following: Argentina, Brazil, Chile, Colombia, Dominican Republic, Mexico, and Peru.

FIGURE 4 DMOs INSTITUTIONAL CAPACITIES
(average by volume of GDP - percentiles)



Source: Author's elaboration based on survey on DMOs' institutional capacities results.

Note: GDP <P30 groups those countries with GDP below the 30th percentile considering the countries that answered the survey. P30 ≤ GDP <P70 groups those countries with GDP between the 30th and 70th percentile. GDP ≥ P70 groups those countries with GDP greater than the 70th percentile.

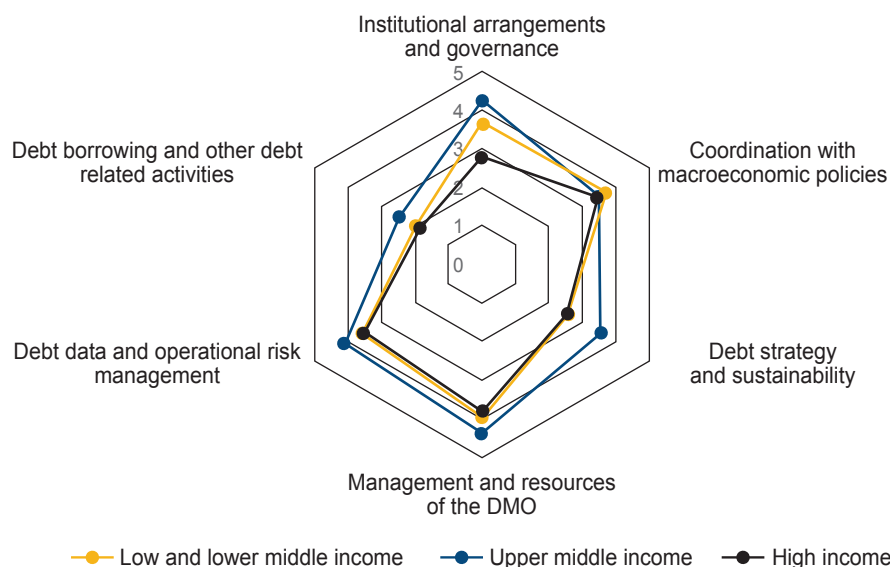
However, no clear positive relationship is observed between the score obtained in the survey and the size of the economy for the “coordination with macroeconomic policies,” “debt data and operational risk management,” and “debt borrowing and other debt related activities” dimensions. In the case of the “coordination with macroeconomic policies” dimension, this result is not surprising, as coordination between public debt management activities and macroeconomic policies clearly depends more on the implementation of macroeconomic policy rather than on the size of the economy.

As part of the analysis, countries were grouped by income level following the World Bank classification. This classification divides the world's economies into four income groups (high, upper-middle, lower-middle, and low) by per capita gross national income. Of the countries that answered the survey, The Bahamas, Barbados, Chile, Panama, Uruguay and Trinidad and Tobago belong to the high-income country group; Argentina, Belize, Brazil, Colombia, Costa

Rica, Dominican Republic, Guatemala, Guyana, Jamaica, Mexico, Paraguay, Peru, and Suriname belong to the upper-middle income country group; Bolivia, El Salvador, Honduras, and Nicaragua belong to the lower-middle income group; and Haiti classifies as a low-income country.

No correlation is observed between the income level and the DMOs' institutional capacities for public debt and risk management. For instance, high-income countries achieve on average the lowest scores in the “institutional arrangements and governance” area, and upper-middle income countries perform better than high-income countries in all the dimensions considered except “coordination with macroeconomic policies,” on which both groups have the same score (3.5 out of five points) (see Figure 5). This result may be affected by the situation of the Caribbean countries which have a high per capita income but do not need to invest much in their DMOs' institutional capacities because they do not go regularly to the market.

FIGURE 5 DMOS INSTITUTIONAL CAPACITIES
(average by income group – LAC)



Source: Author's elaboration based on survey on DMOs institutional capacities results.

Once this effect is factored in (considering only Latin American countries), high-income countries' performance improves (except in the "institutional arrangements and governance" area), and the expected positive relation between income level and DMOs' institutional capacities is observed in two of the six dimensions under analysis: "debt strategy and sustainability" and "debt borrowing and other debt related activities." These are the two areas of analysis in which the Caribbean countries present the greatest weaknesses. In the other four areas of analysis, no positive relationship is observed between income level and DMOs' institutional capacities for public debt and risk management (see Figure 6).

RESULTS BY DIMENSION OF ANALYSIS

This section explains the results of the survey in each of the dimensions considered in the analysis.

Its objective is to expand the benchmark and identify more precisely the main areas for potential improvement.

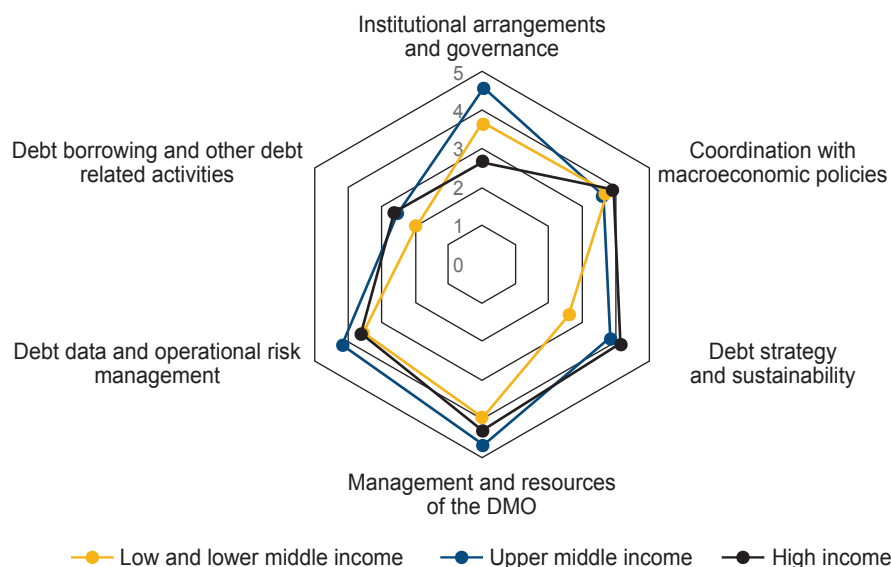
INSTITUTIONAL ARRANGEMENTS AND GOVERNANCE

Institutional Arrangements

In recent years, institutional arrangements for public debt management in LAC have improved significantly. The great majority of countries (24 out of 25) have a DMO specialized in the management of the public debt portfolio. However, there is still room for improvement in this regard. For instance, 25 percent of LAC countries still have no clear separation between front, middle, and back-office functions within the DMO, which is a fundamental element of an effective organization of a DMO.

DMO location. In 22 out of the 24 respondent countries, the DMO is located within the Ministry

FIGURE 6 DMOS INSTITUTIONAL CAPACITIES
(average by income group – LA)



Source: Author's elaboration based on survey on DMOs institutional capacities results.

of Finance. In one country, the DMO is a stand-alone agency, and one country has no DMO.

DMO structure. Seventy-five percent of LAC countries (18 out of 24) claim to have a clear separation between front, middle, and back-office functions within the DMO. When analyzing the responses by subregion, the percentage stands at 90 percent for Central American countries, 67 percent for Andean and Caribbean countries, and 60 percent for Southern Cone countries.

DMO functions. In more than half of the LAC countries (58 percent), all debt management tasks (front, middle, and back-office functions) are executed within the DMO. The percentages stand at 70 percent for Central American countries, 67 percent for Andean countries, 50 percent for Caribbean countries, and 40 percent for the Southern Cone countries group.

In the countries where the DMO does not execute all debt management-related tasks, the

functions that are carried out outside the DMO are mainly back- and front-office tasks, in the same proportion. Five out of nine countries state that back- and front-office tasks are executed outside the DMO. Of these, two Caribbean countries state that both back- and front-office tasks are executed outside the DMO. The fact that back-office functions are carried out outside the DMO is not surprising since historically in many countries, the central bank carries out these tasks.

In the countries where the DMO is not the only office in charge of debt management tasks, the other offices involved in such activities are the central bank (54 percent of countries), other offices within the same ministry (54 percent of countries), and offices in another ministry (15 percent of countries).

Governance

In general, LAC countries have good governance of public debt management. The legal framework provides clear authorization to issue new debt, and most countries conduct regular external

TABLE 2 RESULTS SUMMARY. INSTITUTIONAL ARRANGEMENTS

Countries where DMO:		Countries average subregion (percentage)										
		Subregion				Size of the economy (gdp-percentile in LAC)			Income level			LAC
		Andean	Caribbean	Central America	Southern Cone	GDP < P30	P30 ≤ GDP < P70	GDP ≥ P70	Lower and lower middle	Upper middle	High	
Ministry of Finance	100%	67%	100%	100%	71%	100%	100%	100%	92%	83%	92%	
Is located in:	Central bank	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Separate agency	0%	17%	0%	0%	14%	0%	0%	0%	8%	0%	4%
	Other	0%	17% ^a	0%	0%	14%	0%	0%	0%	0%	17%	17% ^a
Has a clear separation between front, middle and back office functions	67%	67%	90%	60%	71%	70%	86%	60%	92%	50%	75%	
Executes all debt management related tasks	67%	50%	70%	40%	43%	50%	86%	60%	69%	33%	58%	

Source: Author's elaboration based on survey on DMOs institutional capacities results.

^a The Bahamas does not have a stand-alone DMO.

financial and compliance audits. However, there is still room for improvement, as only half of LAC countries conduct regular external performance audits.

Legal framework on public debt management.

The survey results indicate that LAC countries have adequate legal frameworks for the issuance of public debt. All respondent DMOs responded that legislation in their country provides clear authorization¹³ for the issuance of new debt, and almost 92 percent (22 of the 24 countries) stated that it provides clear authorization to grant loan guarantees. This percentage increases with the size of the economy and the income level.

Communication between the DMO and the Parliament/Congress.

More than half of LAC DMOs (58 percent) submit an annual report on debt management activities to the parliament,¹⁴ and 10

out of 24 countries (42 percent) have an office or committee in the parliament or congress devoted to debt management issues. There is a positive relationship between the size of the economy and stronger communication between the DMO and the parliament. This result is consistent with the fact that the Caribbean is the subregion where DMOs communicate with the parliament the least.

External audits. The majority of LAC countries (nearly 80 percent) conduct regular external

¹³ Assigned to the president, the cabinet or council of ministers, or directly to the minister of finance.

¹⁴ It should be noted that the great value of having a sovereign debt statistical report is in the transparency, not necessarily in the forum where it is published. For instance, if the DMO shares the information with the society through the webpage (regularly publishes a report), the parliament may not need to call the DMO to present the information to them because it is available in the website.

TABLE 3 RESULTS SUMMARY. GOVERNANCE

Countries where:	Countries average (percentage)										
	Subregion				Size of the economy (GDP-percentile in LAC)			Income level			LAC
	Andean	Caribbean	Central America	Southern Cone	GDP < P30	P30 ≤ GDP < P70	GDP ≥ P70	Lower and lower middle	Upper middle	High	
Legislation for public debt management (DeM):											
• Provides clear authorization to issue new debt.	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
• Provides clear authorization to grant loan guarantees.	100%	83%	90%	100%	86%	90%	100%	80%	92%	100%	92%
Communication between the DMO and Parliament/Congress:											
• A report covering DeM activities is submitted annually to the Parliament/Congress	67%	50%	50%	80%	43%	50%	86%	20%	85%	33%	58%
• Referred report includes the DeM strategy and an assessment of outcomes against that strategy	50%	33%	80%	75%	33%	80%	67%	0%	73%	50%	64%
• There is a debt-related office/committee in the Parliament/Congress	67%	0%	50%	60%	14%	30%	86%	40%	62%	0%	42%
External Audits											
• External compliance audits on DeM transactions are undertaken annually	100%	33%	70%	100%	57%	70%	86%	80%	77%	50%	71%
• External financial audits on DeM activities are undertaken regularly	100%	83%	80%	60%	100%	60%	86%	80%	92%	50%	79%
• External performance audits are undertaken regularly	67%	0%	70%	60%	43%	50%	57%	80%	62%	0%	50%

Note: In the cases where a question is contingent on fulfilling a previous condition, the percentage presented on the table refers to the number of countries that fulfill the initial condition. For example: the percentage of reports that include the debt management strategy and an assessment of outcomes against that strategy is obtained considering the number of countries where the DMO annually submits a report to the parliament on debt management activities.

financial audits on debt management activities, and 17 out of 24 countries (71 percent) conduct external compliance audits annually. No relationship is observed between the undertaking of these audits and the size of the economy or income level. DMO external performance audits are carried out regularly in only half of the respondent countries. The data show that the percentage of countries that perform this type of audit on a regular basis is positively related to the size of the economy (no Caribbean country undertakes DMO external performance audits on a regular basis) and negatively related to income level (reaching zero in the case of high-income countries).

COORDINATION WITH MACROECONOMIC POLICIES

Debt Management Committee. More than half of LAC countries (54 percent) have a debt management committee (DMC) in charge of strategy and coordination matters related to the macro-fiscal environment and/or global indebtedness decisions. All Andean countries have a DMC. The percentage stands at 60 percent for the Southern Cone countries and drops to 50 percent and 33 percent for the Central American and Caribbean countries, respectively. No relationship is observed between having a DMC and the size of the economy or the income level.

With respect to the composition of the DMC, the ministry of finance is represented in all cases, followed by the central bank (represented in 77 percent of DMCs). The parliament and market experts are represented in the DMC in only 8 percent of the cases.

DMOs prepare timely forecasts on central government debt service as part of the government's annual budget preparation in all respondent countries. Forecasts include scenario analyses and stress testing with respect to interest and exchange rate shocks in 54 percent and

50 percent of the cases, respectively. Including scenario analysis and stress testing in the forecasts of central government debt service is positively related to the size of the economy. In contrast, the percentage of DMOs that include scenario analysis and stress testing in their forecasts falls with the income level.

Information sharing between the DMO and the fiscal or budget authorities. In almost all LAC countries (23 out of 24), the government regularly prepares a document detailing key fiscal variables. In 67 percent of LAC countries, referred information is shared with the DMO at least quarterly. Southern Cone countries have the highest information sharing frequency between the DMO and the fiscal or budget authorities (in 60 percent of Southern Cone countries, the information sharing frequency is on a monthly basis, and in 20 percent on a quarterly basis). At the other extreme, two-thirds of the Andean countries share key information on fiscal variables with the DMO only when requested.

DMO-central bank relationship.¹⁵ Data show that LAC countries clearly separate central bank and DMO transactions. In 21 out of 22 countries (95 percent)¹⁶ the central bank keeps government debt management transactions separate from monetary policy operations. Relationship between the central government and the CB is specified in an agency agreement in 57 percent of LAC countries. This percentage stands at 100 percent for Southern Cone countries, 67 percent for Andean countries, and 44 percent and 33 percent for Central American and Caribbean countries, respectively. There is a positive relationship between having referred agency agreement and the size of the economy.

¹⁵ Questions regarding the central bank do not apply to Panama, which has no central bank.

¹⁶ Questions regarding monetary policy do not apply to Panama or El Salvador, as these countries are dollarized economies and thus do not have monetary policy.

TABLE 4 RESULTS SUMMARY. COORDINATION WITH MACROECONOMIC POLICIES

Countries where:	Countries average (percentage)										
	Subregion				Size of the economy (GDP-percentile in LAC)			Income level			LAC
	Andean	Caribbean	Central America	Southern Cone	GDP < P30	P30 ≤ GDP < P70	GDP ≥ P70	Lower and lower middle	Upper middle	High	
Debt Management Committee (DMC)											
A DMC is in charge of strategy and coordination matters related to the macro-fiscal environment and/or global indebtedness decisions	100%	33%	50%	60%	29%	70%	57%	60%	62%	33%	54%
Offices/entities represented in the DMC											
Parliament	0%	0%	20%	0%	50%	0%	0%	33%	0%	0%	8%
Central bank	33%	100%	100%	67%	100%	100%	25%	100%	63%	100%	77%
Market experts	0%	50%	0%	0%	0%	14%	0%	0%	13%	0%	8%
Ministry of Finance	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Academics	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Timely Forecasts on central government debt services											
Are prepared by the DMO as part of the government's annual budget preparation	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
• Include scenario analyses	100%	17%	60%	60%	29%	60%	71%	80%	62%	17%	54%
• Include stress testing with respect to interest and exchange rate shocks	100%	17%	50%	60%	29%	50%	71%	80%	54%	17%	50%
Information sharing between the DMO and the fiscal or budget authorities											
A document detailing key fiscal variables is regularly prepared by the government	100%	83%	100%	100%	86%	100%	100%	100%	92%	100%	96%
• fiscal variables information sharing frequency with the DMO											
Monthly	0%	50%	40%	60%	14%	60%	43%	0%	54%	50%	42%
Quarterly	33%	17%	30%	20%	29%	20%	29%	40%	8%	50%	25%
Only when requested	67%	33%	30%	20%	57%	20%	29%	60%	38%	0%	33%
DMO and Central Bank (CB) relationship^a											
The CB maintains government DeM transactions separate from monetary policy operations.^b	100%	100%	88%	100%	100%	100%	86%	100%	92%	100%	95%

(continued on next page)

(continued)

TABLE 4 RESULTS SUMMARY. COORDINATION WITH MACROECONOMIC POLICIES

Countries where:	Countries average (percentage)										
	Subregion				Size of the economy (GDP-percentile in LAC)			Income level			LAC
	Andean	Caribbean	Central America	Southern Cone	GDP < P30	P30 ≤ GDP < P70	GDP ≥ P70	Lower and lower middle	Upper middle	High	
Relationship between the central government and the CB is specified in an agency agreement	67%	33%	44%	100%	43%	56%	71%	60%	62%	40%	57%
Information on current and future debt transactions and central government cash flows is regularly shared between the DMO and the CB	100%	100%	89%	100% 100%	89%	100%	80%	100%	100%	96%	
• Information sharing frequency:											
Monthly	33%	83%	63%	60%	71%	50%	71%	50%	69%	60%	64%
Weekly	33%	17%	25%	0%	14%	38%	0%	50%	8%	20%	18%
Daily	33%	0%	0%	40%	0%	13%	29%	0%	15%	20%	14%
other	0%	0%	13%	0%	14%	0%	0%	0%	8%	0%	5%
Government access to financial resources from the CB is prohibited by law or limited to emergency situations	67%	33%	89%	60%	43%	78%	71%	100%	54%	60%	65%
Legislation imposes a ceiling that limits government access to financing from the CB	67%	83%	78%	60%	86%	78%	57%	80%	69%	80%	74%

Source: Author's elaboration based on the results of the survey on the institutional capacities of DMOs.

Note: In the cases where a question is contingent on fulfillment of a previous condition, the percentage presented on the table refers to the number of countries that fulfill the initial condition. For example, the percentage of countries whose Ministry of Finance is represented in the DMC is obtained considering the number of countries that have a DMC.

^a These questions do not apply to Panama as it has no central bank. Percentages related to these questions are calculated excluding Panama from the list of countries.

^b This question does not apply to El Salvador because its economy is dollarized and thus it does not have a monetary policy. Percentages related to this question are calculated excluding El Salvador from the list of countries.

LAC countries show a good information sharing structure between the CB and the DMO. In 22 out of 23 countries (96 percent), information on current and future debt transactions and

central government cash flows is regularly shared between the DMO and the CB. In 95 percent of the cases, the information sharing frequency is at least monthly.

Regarding limits on financing from the central bank for fiscal matters, government access to financial resources from the central bank is prohibited by law or limited to emergency situations in 65 percent of LAC countries (15 out of 23 countries). No correlation is observed with the size of the economy or the income level. In two countries, government access to financial resources from the central bank is prohibited by law, and in 13 countries it is limited to emergency situations. Ten countries have an upper limit on accessing financial resources from the central bank in emergency situations, while the remaining three have no such upper limit. One country permits government access to financial resources from the central bank and has no upper limit.

STRATEGY AND SUSTAINABILITY ANALYSIS

Medium-term Debt Management Strategy. Sixty-three percent of LAC countries (15 out of 24) have a medium-term debt management strategy in place. In all these cases, DMOs claim that the strategy is consistent with the medium-term budget framework. All Southern Cone countries have a medium-term debt management strategy in place, and 70 percent and 67 percent for Central America and Andean countries, respectively, have such a strategy. Only 17 percent of Caribbean countries have a medium-term debt management strategy in place. A strong positive correlation between having a medium-term debt management strategy in place and the size of the economy is observed. However, no correlation is observed between having a debt management strategy in place and income level. This result may be explained by the effect of the Caribbean countries which, as mentioned above, are small, open, high-income economies.

The vast majority of medium-term debt management strategies in place (14 out of 15) cover all existing and projected central government debt. Most strategies consider realistic target ranges for specific indicators (87 percent) and

credit guarantees (73 percent). Forty percent consider state-owned enterprise (SOE) debt and subnational government debt, and only 7 percent consider central bank debt.

Debt sustainability analysis. In 21 out of 24 LAC countries (88 percent) the government undertakes debt sustainability analyses (DSAs). In 81 percent of the cases, the frequency of undertaking DSAs is at least annual, and in the same percentage of cases the DMO takes an active role in conducting DSAs.

MANAGEMENT AND RESOURCES OF THE DMO

Human Resource Management. In most LAC countries (83 percent), DMO statutes or manuals clearly define responsibilities and processes. Once again, a positive correlation is observed with the size of the economy. More than half of respondents (54 percent) consider that their country's DMO has sufficient professional staff that is adequately trained and has formal job descriptions. Sixty-seven and 54 percent of respondents believe that their country's DMO is having difficulty in recruiting and retaining skilled staff, respectively, and 18 out of 24 (75 percent) believe that training would help in this regard.

DMO Professional Staff. DMOs in LAC employ, on average, 28 full-time professional staff. As expected, there is a strong positive relationship between the number of DMO professional employees and the size of the economy. The latter is strongly related to the size of the sovereign debt market, so it is logical that a larger economy requires a larger DMO. This result is consistent with the fact that the Caribbean countries have, on average, the smallest DMOs. Regarding the allocation of human resources among the functions within a DMO, the back office area tends to have the largest number of employees, almost double the personnel assigned to the other areas

TABLE 5 RESULTS SUMMARY. STRATEGY AND SUSTAINABILITY ANALYSIS

Countries where:	Countries average (percentage)										
	Subregion				Size of the economy (GDP-percentile in LAC)			Income level			LAC
	Andean	Caribbean	Central America	Southern Cone	GDP < P30	P30 ≤ GDP < P70	GDP ≥ P70	Lower and lower middle	Upper middle	High	
Medium-term DeM strategy											
A medium-term DeM strategy is in place	67%	17%	70%	100%	14%	70%	100%	40%	77%	50%	63%
It covers all existing and projected central government debt	100%	100%	86%	100%	100%	86%	100%	100%	100%	67%	93%
Credit Guarantees	50%	100%	71%	80%	100%	86%	57%	100%	70%	67%	73%
State-owned enterprises (SOEs)' debt	50%	100%	57%	0%	100%	43%	29%	100%	30%	33%	40%
Subnational governments' debt	50%	100%	43%	20%	100%	43%	29%	100%	30%	33%	40%
It considers:											
CB debt	0%	0%	0%	20%	0%	0%	14%	0%	10%	0%	7%
Realistic target ranges for specific indicators (e.g. interest rate, FX, refinancing risk)	100%	100%	86%	80%	100%	86%	86%	100%	90%	67%	87%
It is consistent with the medium-term budget framework	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Debt Sustainability Analysis (DSAs)											
DSAs are undertaken by the government	100%	83%	80%	100%	71%	90%	100%	80%	92%	83%	88%
Once every 2 years	0%	20%	13%	0%	20%	0%	14%	0%	17%	0%	10%
Annually	67%	40%	88%	40%	60%	67%	57%	100%	50%	60%	62%
More frequently than Annually	33%	0%	13%	40%	0%	22%	29%	0%	25%	20%	19%
Other	0%	40%	0%	20%	40%	11%	0%	0%	17%	20%	14%
The DMO leads/takes an active role regarding DSA	100%	60%	88%	80%	80%	78%	86%	75%	100%	40%	81%

Note: In the cases where a question is contingent on fulfilling a previous condition, the percentage presented on the table refers to the number of countries that fulfill the initial condition. For example, the percentage of countries whose DMO takes an active role conducting DSAs is obtained considering the number of countries where the government undertakes DSAs.

(middle office, front office, and general management / other professional support).

DMO procedure manuals. In 21 out of 24 LAC countries (88 percent), the DMO has readily accessible procedure manuals for processing debt-related payments and receivables, recording debt data, validation, storage of agreements and debt administration records. All Andean and Southern Cone countries meet this requirement, as do 90 percent of Central American countries. The Caribbean region lags behind, with 67 percent of countries having procedural manuals.

With respect to procedure manuals for evaluating debt portfolio risk, the percentage drops to 58 percent of the DMOs surveyed. Central America has the highest compliance (80 percent), followed by the Southern Cone countries (60 percent).

Software to record, analyze and report sovereign debt. All LAC country DMOs have access to adequate software to record, analyze, and report sovereign debt. All Caribbean countries surveyed use the MERIDIAN/CS-DRMS, while most Latin American countries (61 percent) use the SIGADE, and one-third use a system developed in-house. Having a system developed in-house is positively correlated to the size of the economy. Only half of all LAC country DMOs use complementary software to evaluate risk and/or execute other tasks.

DEBT DATA AND OPERATIONAL RISK MANAGEMENT

Debt records and central registry system. The data show that LAC countries have adequate debt records and central registry systems. All DMOs surveyed claim to have complete records for central government debt (domestic, foreign, and guaranteed) and all debt-related transactions, while 23 out of 24 countries use a delivery versus payment basis for government securities settlement. Over 70 percent of LAC countries have

a central registry with up-to-date records of all holders of government debt. A negative correlation is observed between the size of the economy and having such a central registry. This result is consistent with the fact that a greater percentage of Caribbean countries have a central registry of this type.

Publication of sovereign debt data. All LAC countries regularly publish a statistical report on sovereign debt. The frequency of publication is at least semi-annual in almost 90 percent of the cases. Southern Cone countries publish such a report at least quarterly, and Andean countries do so at least every six months. The percentage stands at 90 percent for Central American countries and drops to 67 percent for Caribbean countries. A negative correlation is observed between income level and publishing a statistical report on sovereign debt at least semi-annually. This result can be explained by the Caribbean situation (two out of six Caribbean countries are in the high-income group and publish the report annually).

In the vast majority of cases, statistical reports on sovereign debt include information on the debt stock, classified by creditor, residency, currency, interest rate basis, residual maturity, and information on debt flow payments (principal and interest)—96 and 92 percent of cases, respectively. The percentage drops to 58 percent with respect to reports that include information on main risk measures of the debt portfolio. The larger the economy, the greater the percentage of countries whose sovereign debt reports include information on main risk measures.

Business continuity. The data show that there is room for improvement regarding business continuity of DMOs in LAC countries. Only 29 percent of the DMOs surveyed reported having a written business continuity plan and a disaster recovery plan that have been tested in the past three years. This percentage increases with the size of the economy. Ten out of 24 DMOs (42 percent) have documented

TABLE 6 RESULTS SUMMARY. MANAGEMENT AND RESOURCES OF THE DMO

Countries average (percentage)												
Countries where:	Subregion				Size of the economy (GDP-percentile in LAC)			Income level			LAC	
	Andean	Caribbean	Central America	Southern Cone	GDP < P30	P30 ≤ GDP < P70	GDP ≥ P70	Lower and lower middle	Upper middle	High		
	DMO Human Resource Management											
DMO Statute/Manuals clearly define responsibilities and processes	100%	67%	90%	80%	57%	90%	100%	100%	85%	67%	83%	
DMO professional staff is sufficient and adequately trained with formal job descriptions	67%	33%	50%	80%	29%	60%	71%	60%	54%	50%	54%	
It is difficult for the DMO to:	recruit skilled staff	67%	83%	60%	60%	71%	80%	43%	80%	77%	33%	67%
	retain recruited staff	67%	67%	50%	40%	71%	50%	43%	60%	62%	33%	54%
Training would facilitate the recruitment and retention of skilled staff	100%	50%	80%	80%	57%	80%	86%	80%	77%	67%	75%	
Existence of DMO Procedure Manuals												
The DMO has readily accessible procedure manuals for:	Processing of debt-related payments and receivables	100%	67%	90%	100%	57%	100%	100%	80%	92%	83%	88%
	Debt data recording, validation, storage of agreements and debt administration records	100%	67%	90%	100%	57%	100%	100%	80%	92%	83%	88%
	Evaluating risks for the debt portfolio	33%	33%	80%	60%	43%	70%	57%	40%	69%	50%	58%
Manuals reviewal frequency:	At least every 2 years	0%	17%	30%	0%	14%	20%	14%	0%	23%	17%	17%
	At least annually	67%	33%	40%	40%	29%	50%	43%	40%	38%	50%	42%

(continued on next page)

(continued)

TABLE 6 RESULTS SUMMARY. MANAGEMENT AND RESOURCES OF THE DMO

Countries where:		Countries average (percentage)										
		Subregion				Size of the economy (GDP-percentile in LAC)			Income level			LAC
		Andean	Caribbean	Central America	Southern Cone	GDP < P30	P30 ≤ GDP < P70	GDP ≥ P70	Lower and lower middle	Upper middle	High	
Only when required		33%	17%	20%	60%	14%	30%	43%	40%	31%	17%	29%
Software to record, analyze and report sovereign debt												
The DMO has access to adequate software to record, analyze and report sovereign debt		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
System used:	SIGADE	33%	0%	80%	40%	29%	70%	29%	100%	38%	17%	46%
	MERIDIAN/CS-DRMS	0%	100%	10%	0%	71%	20%	0%	0%	31%	50%	29%
	In-house developed	67%	0%	10%	60%	0%	10%	71%	0%	31%	33%	25%
The DMO uses a complementary software to evaluate risks and/or to execute other tasks^a		67%	50%	50%	40%	29%	60%	57%	40%	62%	33%	50%

Note: In the cases where a question is contingent on fulfilling a previous condition, the percentage presented on the table refers to the number of countries that fulfill the initial condition. For example: the percentage of DMOs that review its procedure manuals at least annually is obtained considering the number of countries where the DMO has referred manuals.

^a Complementary software used includes: Bloomberg Platform; Matlab, Excel; Mimics; R, STATA; Python; Toolkit developed by the IMF and World Bank; DSA tool of the IDB endogenous model; and Excel models developed in-house.

guidelines for operational risk management, and half of those surveyed have an operational recovery site that is tested at least annually. The Andean region has stronger institutional capacity with respect to business continuity than the rest of LAC: two out of three countries meet these three conditions.

DEBT BORROWING AND OTHER DEBT RELATED ACTIVITIES

Documented procedures for borrowing. 71 percent and 58 percent of surveyed countries have

documented procedures for borrowing in domestic and foreign markets, respectively. A strong positive correlation is observed between having documented procedures for borrowing and the size of the economy. In most cases (65 percent and 71 percent for domestic and foreign markets, respectively), these procedures are updated with a frequency equal to or greater than every two years. The size of the economy is also positively correlated to the percentage of countries that update their procedures annually. Once again, the Andean region has the strongest institutional capacity in this area compared to the rest

TABLE 7 AVERAGE NUMBER OF FULL-TIME PROFESSIONAL STAFF IN THE DMO

Countries grouped by:		Primary Assignment to:				Total staff
		Back office	Middle office	Front office	Other support	
Subregion	Andean^a	10	9	0	2	21
	Caribbean^b	5	4	3	4	13
	Central America	13	5	8	9	34
	Southern Cone	17	7	9	1	31
Income level	Lower and lower middle	11	4	5	6	25
	Upper middle	15	7	9	8	35
	High	5	4	4	3	14
Size of the economy	GDP < P30	7	3	4	5	16
	P30 ≤ GDP < P70	10	5	7	6	25
	GDP ≥ P70	20	8	11	10	46
LAC (average)		12	5	7	6	28

^a Colombia and Peru: data on DMO professional staff are not available. Thus, the data for the Andean countries correspond to the data for Bolivia.

^b Guyana: data available for “total staff” but not for breakdowns by area within the DMO. In Guyana’s DMO, back-office and middle-office functions overlap, with no clear segregation of duties.

of LAC. All Andean countries have documented procedures for borrowing both in the domestic and foreign markets; the Caribbean region lags behind the LAC average in this regard.

Meetings with market participants and credit rating agencies. Most DMOs in LAC countries regularly hold meetings with domestic market participants and credit rating agencies. The DMOs surveyed reported holding meetings with credit rating agencies and market participants at least annually in 75 percent and 54 percent of the cases, respectively.¹⁷ This percentage drops to 42 percent with respect to regular meetings with foreign investors.

Derivative transactions. Only one-third of LAC countries report engaging in derivative transactions. The data show a strong positive correlation between entering into such transactions, the size of the economy, and the income level. No low- and lower-middle- income country enters into

derivative transactions, compared to 67 percent of high-income countries that do so. The Caribbean region has the highest percentage of countries (50 percent) that engage in derivative transactions.

Documented procedures. Among the countries that engage in derivative transactions, 75 percent (six out of eight) have documented procedures for this type of transaction. The two countries that engage in derivative transactions without having documented procedures for doing so are Caribbean countries. In only half of the cases, the documented procedures contain rules for managing risk, including counterpart credit risk, throughout the life of the transaction.

While 15 out of 24 countries (63 percent) have documented procedures for the issuance of loan guarantees, only one-third of LAC countries

¹⁷ One out of the 24 DMOs surveyed reported that it does not hold meetings with credit rating agencies.

TABLE 8 RESULTS SUMMARY. DEBT DATA AND OPERATIONAL RISK MANAGEMENT

Countries that:	Countries average (percentage)											
	Subregion				Size of the economy (GDP-percentile in LAC)			Income level			LAC	
	Andean	Caribbean	Central America	Southern Cone	GDP < P30	P30 ≤ GDP < P70	GDP ≥ P70	Lower and lower middle	Upper middle	High		
Debt Records and Central Registry System/Includes												
Have complete records for central government debt (domestic, external, and guaranteed) and all debt-related transactions	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Have a central registry with up-to-date records of all holders of government debt	67%	83%	70%	60%	100%	60%	57%	60%	85%	50%	71%	
Use a delivery versus payment basis for government securities Settlement	100%	83%	100%	100%	86%	100%	100%	100%	92%	100%	96%	
Publication of Sovereign Debt Data												
Regularly publish a sovereign debt statistical report	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Frequency of publication:	annually	0%	33%	10%	0%	14%	20%	0%	0%	8%	33%	13%
	semi-annually	33%	0%	0%	0%	0%	10%	0%	20%	0%	0%	4%
	quarterly	0%	33%	40%	40%	57%	20%	29%	60%	15%	50%	33%
	monthly	67%	33%	50%	60%	29%	50%	71%	20%	77%	17%	50%
Includes information on:	debt stocks classified by creditor, residency, currency, interest rate basis, and residual maturity	100%	83%	100%	100%	86%	100%	100%	100%	100%	83%	96%
	debt flows (principal and interest) payments	100%	83%	90%	100%	100%	80%	100%	80%	92%	100%	92%
	main risk measures of the debt portfolio	33%	17%	90%	60%	43%	60%	71%	80%	62%	33%	58%

(continued on next page)

(continued)

TABLE 8 RESULTS SUMMARY. DEBT DATA AND OPERATIONAL RISK MANAGEMENT

Countries that:	Countries average (percentage)										
	Subregion				Size of the economy (GDP-percentile in LAC)			Income level			LAC
	Andean	Caribbean	Central America	Southern Cone	GDP < P30	P30 ≤ GDP < P70	GDP ≥ P70	Lower and lower middle	Upper middle	High	
Business Continuity											
Have a written business continuity plan and a disaster recovery plan, that have been tested in the past three years	67%	17%	20%	40%	14%	20%	57%	0%	38%	33%	29%
Have an operational recovery site that is tested at least annually	67%	67%	40%	40%	43%	40%	71%	20%	69%	33%	50%
Have documented guidelines for operational risk management	67%	17%	50%	40%	29%	20%	86%	40%	54%	17%	42%

Note: In the cases where a question is contingent on fulfilling a previous condition, the percentage presented on the table refers to the number of countries that fulfill the initial condition. For example, frequency of publication of a statistical report on sovereign debt data is obtained considering the number of countries that regularly publish such a report.

have documented procedures for the issuance of central government on-lending. The data show a negative correlation between having documented procedures for the issuance of central

government on-lending and both the size of the economy and the income level. No relationship is observed in the case of documented procedures for the issuance of loan guarantees.

TABLE 9 RESULTS SUMMARY. DEBT BORROWING AND OTHER DEBT-RELATED ACTIVITIES

Countries that:		Countries average (percentage)										
		Subregion				Size of the economy (GDP-percentile in LAC)			Income level			LAC
		Andean	Caribbean	Central America	Southern Cone	GDP < P30	P30 ≤ GDP < P70	GDP ≥ P70	Lower and lower middle	Upper middle	High	
Documented Procedures for Borrowing												
Have documented procedures for borrowing in the domestic market		100%	33%	80%	80%	29%	80%	100%	60%	77%	67%	71%
Frequency of procedures updating:	At least every two years	33%	50%	25%	25%	50%	38%	14%	0%	20%	75%	29%
	Annually	33%	0%	38%	50%	0%	25%	57%	33%	40%	25%	35%
	other	33%	50%	25%	25%	0%	38%	29%	67%	30%	0%	29%
Have documented procedures for borrowing in the external markets		100%	17%	60%	80%	14%	70%	86%	80%	62%	33%	58%
Frequency of procedures updating:	At least every two years	33%	0%	17%	50%	100%	29%	17%	25%	25%	50%	29%
	Annually	33%	0%	50%	50%	0%	29%	67%	25%	50%	50%	43%
	other	33%	100%	33%	0%	0%	43%	17%	50%	25%	0%	29%
Meetings with Market Participants and Credit Rating Agencies												
Frequency of holding meetings with domestic market	Annually	0%	0%	20%	20%	0%	20%	14%	0%	15%	17%	13%
	At least semi-annually	33%	17%	20%	0%	0%	30%	14%	20%	23%	0%	17%
	At least quarterly	33%	0%	20%	60%	14%	10%	57%	20%	23%	33%	25%
	Without any regularity	33%	83%	40%	20%	86%	40%	14%	60%	38%	50%	46%
Frequency of holding meetings with foreign investors	Annually	0%	17%	20%	20%	0%	40%	0%	0%	23%	17%	17%
	At least semi-annually	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	At least quarterly	33%	0%	30%	40%	14%	20%	43%	20%	23%	33%	25%
	Without any regularity	67%	83%	50%	40%	86%	40%	57%	80%	54%	50%	58%

(continued on next page)

(continued)

TABLE 9 RESULTS SUMMARY. DEBT BORROWING AND OTHER DEBT-RELATED ACTIVITIES

Countries that:		Countries average (percentage)										
		Subregion				Size of the economy (GDP-percentile in LAC)			Income level			LAC
		Andean	Caribbean	Central America	Southern Cone	GDP < P30	P30 ≤ GDP < P70	GDP ≥ P70	Lower and lower middle	Upper middle	High	
Frequency of holding meetings with credit rating agencies	Annually	0%	33%	50%	40%	29%	50%	29%	40%	38%	33%	38%
	At least semi-annually	100%	17%	20%	40%	14%	30%	57%	20%	38%	33%	33%
	At least quarterly	0%	0%	0%	20%	0%	0%	14%	0%	0%	17%	4%
	Without any regularity ^a	0%	50%	30%	0%	57%	20%	0%	40%	23%	17%	21%
Enter into derivative transactions		33%	50%	20%	40%	14%	40%	43%	0%	31%	67%	33%
Have documented procedures for:												
Derivative transactions		100%	33%	100%	100%	0%	75%	100%	N/A	100%	50%	75%
That include rules for managing risks, including counterparty credit risk, throughout the life of the transaction	Issuance	100%	0%	50%	50%	N/A	67%	33%	N/A	25%	100%	50%
Issuance of central government on-lending		33%	50%	20%	40%	43%	40%	14%	40%	38%	17%	33%
That require:	credit risk assessment	0%	67%	100%	50%	67%	75%	0%	50%	80%	0%	63%
	coverage charge calculation	0%	67%	50%	50%	67%	50%	0%	50%	60%	0%	50%
Issuance of loan guarantees		100%	67%	50%	60%	43%	80%	57%	60%	69%	50%	63%
That require:	credit risk assessment	67%	50%	80%	67%	67%	63%	75%	33%	89%	33%	67%
	charge compensation calculation	33%	50%	40%	33%	67%	38%	25%	33%	44%	33%	40%

Note: In the cases where a question is contingent on fulfilling a previous condition, the percentage presented on the table refers to the number of countries that fulfill the initial condition. For example, the frequency of updating of procedures is obtained considering the number of countries that have documented procedures for borrowing.

^a Includes one country that does not hold meetings with credit rating agencies.

Conclusions

It is clear from this study that the overall institutional capacities of DMOs in LAC for public debt and risk management are strongly and positively correlated with the size of the economy. This result is consistent with theory, since with a larger debt market a higher degree of sophistication of the DMO is expected. However, there is considerable heterogeneity among countries and subregions. The DMOs in Andean countries are the most sophisticated, followed by those in Southern Cone countries, while the Caribbean countries fall below the LAC average in all of the dimensions considered.

Some countries do not comply with certain key institutional requirements (best practices) that every DMO should meet. It is urgent that these shortcomings be addressed and corrected, given the relevance of these issues to good management of sovereign debt.

The main elements that every DMO should have which are lacking in some DMOs in LAC countries, and that therefore require urgent corrective action, are the following (listed by dimension of analysis):

- **Coordination with Macroeconomic Policies.** (a) **Existence of a debt management committee** (DMC) in charge of strategy and coordination matters related to the

macro-fiscal environment and/or global indebtedness decisions. It is striking that almost half of the respondent countries (11 out of 24) do not have such a DMC; (b) **Prohibition of direct access to financing from the central bank.** In one-third of the cases (8 out of 24), direct access to financing from the central bank is not prohibited by law or limited to emergency situations. Fifty percent of the countries that do not comply with this requirement are in the Caribbean region.

- **Debt Strategy and Sustainability. Existence of a medium-term debt management strategy** (MTDS) in place. Nine out of 24 respondent DMOs do not have a medium-term debt management strategy in place. More than half of the countries that do not comply with this requirement (56 percent) are in the Caribbean region. It is especially important that these countries take steps to implement a MTDS, as not having one, or implementing an incomplete one, hinders the achievement of an optimal public debt management policy and the development of a domestic debt market.
- **Debt Borrowing and other related activities. Documentation of procedures.** Several DMOs in LAC, especially from the Caribbean

and Central America, need to improve the documentation of procedures. The percentage of DMOs that do not have documented procedures for issuing central government on-lending, borrowing in foreign markets, issuing loan guarantees, and borrowing in the domestic market stands at 58 percent, 42 percent, 38 percent, and 29 percent, respectively. Having documented procedures for these types of transactions is essential to improve the transparency and efficiency of issuance processes.

- **Management and resources of the DMO.** DMOs in LAC have, on average, relatively strong institutional capacities in the area of management and resources. However, 4 out of 24 survey respondents claimed that responsibilities and processes are still not clearly defined in the DMO statute/manuals.

In the remaining two areas of institutional capacities (governance and debt data and operational risk management), no significant shortcomings that require urgent reforms were identified.

Bibliography

World Bank. Debt Management Performance Assessment Methodology. Washington, DC: World Bank.

World Bank and International Monetary Fund. 2001. Guidelines for Public Debt Management. Washington DC: World Bank and International Monetary Fund. Available at: <https://www.imf.org/external/np/mae/pdebt/2000/eng/index.htm>.

