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FISCAL POLICY AND MANAGEMENT SECTOR FRAMEWORK DOCUMENT

FISCAL MANAGEMENT DIVISION

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ABBREVIATIONS

BEPS	Base erosion and profit shifting
BRICs	Brazil, Russia, India, and China
CAF	Andean Development Corporation
CCTP	Conditional cash transfer program
CFATF	Caribbean Financial Action Task Force
CIAT	Inter-American Center of Tax Administrations
CPE	Country program evaluation
DSA	Debt sustainability analysis
ECLAC	Economic Commission for Latin America and the Caribbean
ERP	Enterprise resource planning
FATF	Financial Action Task Force
FTE	Fiscal Transparency Evaluation
G20	Group of Twenty
GAFILAT	Financial Action Task Force of Latin America
GIZ	*Deutsche Gesellschaft für Internationale Zusammenarbeit*
IFD/FMM	IDB Fiscal and Municipal Management Division
IFMS	Integrated Financial Management System
IMF	International Monetary Fund
INTOSAI	International Organization of Supreme Audit Institutions
IPSAS	International Public Sector Accounting Standards
LAC	Latin America and the Caribbean
MTEF	Medium-term expenditure framework
MTFF	Medium-term fiscal framework
OBI	Open Budget Index
OECD	Organization for Economic Cooperation and Development
OVE	Office of Evaluation and Oversight
PBL	Policy-based loan
PEFA	Public Expenditure and Financial Accountability
PFM	Public financial management
PPP	Public-private partnership
PROCONFIS	Programa de Consolidação do Equilíbrio Fiscal [Fiscal Stability Consolidation Program]
PROFISCO	Programa de Apoio à Gestão e Integração dos Fiscos no Brasil [Program to Support the Management and Integration of Finance Administrations in Brazil]
SAI	Supreme Audit Institutions
SFD	Sector Framework Document
TSA	Treasury single account
VAT	Value-added tax

EXECUTIVE SUMMARY

This updated version of the Fiscal Policy and Management Sector Framework Document fulfills the requirement set out in document GN-2670-1, paragraph 1.20, which establishes that Sector Framework Documents (SFDs) should be updated every three years. It replaces the SFD approved in December 2015 (document GN-2831-3).

This SFD reflects the challenges, progress, and lessons learned in terms of fiscal policy and management and the role of the digital economy in Latin American and Caribbean countries, with an emphasis on the design and implementation of policies that foster robust, stable, sustainable, and equitable growth. The SFD presents: (i) the role of fiscal policy in growth, public debt sustainability, and macroeconomic stability; (ii) the impacts of tax and public expenditure system structure on the growth and efficient allocation of productive factors; and (iii) the impact of fiscal policy on equity and productivity. The document emphasizes institutional capacity-building in the public sector, taking into account the multidimensional nature of fiscal policy and acknowledging political economy constraints. In its annexes, the SFD also covers public-sector budget transparency and financial management—areas that will be developed in a future Transparency and Integrity SFD. However, subjects such as sector expenditures in education, health, energy, and infrastructure are addressed in their respective sector frameworks.

This document features five sections. Section I defines the themes and scope of this SFD. Section II addresses the developments in fiscal policy and management issues in recent years regarding the Bank's work in the sector using the relevant literature, as well as international experience and evidence concerning the effectiveness of fiscal policy management. It looks at three dimensions: (i) the role of fiscal policy and fiscal institutions in economic growth and macroeconomic and financial sustainability and stability; (ii) the structure of tax systems and tax administrations and its effect on efficient resource allocation and productivity; and (iii) the impacts of equity on fiscal policy.

Section III analyzes the same dimensions as Section II, but from the standpoint of the challenges faced by the countries of the region, emphasizing the role of fiscal policy and management as essential instruments for economic and social development in the context of Latin American and Caribbean countries. This section also addresses how the structure of the tax system and public expenditure affect efficient resource allocation and productivity. In addition to being one of the regions with the slowest growth rates, Latin America and the Caribbean is also one of the most inequitable in the world. Accordingly, Section III analyzes how fiscal policy impacts equity and equal opportunity in the region and the relation of these impacts to economic efficiency and productivity.

Section IV presents the Bank's experience in the sector in recent years, describing a series of loan operations, technical-cooperation projects, knowledge products, and dissemination activities. This section depicts how the Bank's experiences, lessons learned, and good practices have contributed to the sector. It underscores the Bank's comparative advantages as a trusted provider of technical assistance and finance in the design and management of fiscal policies.

Lastly, Section V describes the goals, principles, dimensions of success, and lines of action that will guide the Bank's operational, knowledge, and dissemination activities in the sector. The Bank's goal in the sector, as proposed in this SFD, is to promote fiscal policy management that fosters more proactive, stable, sustainable, and equitable growth. The Bank's actions will be guided by the following principles: (i) institutional capacity-building in the public sector; (ii) consideration of the multidimensional nature of fiscal policy; (iii) recognition of the political economy constraints and dynamics imposed on sector decision-making; and (iv) adaptation of fiscal policy management recommendations to the individual circumstances of each country. The following four dimensions of success will guide the Bank's activities: (i) fiscal policies will seek to reinforce sustained growth in a context of fiscal sustainability and macroeconomic stability; (ii) governments will build the public sector's institutional capacities to design and implement fiscal policies that improve efficient mobilization and allocation of resources; (iii) governments will promote fiscal policies that improve equity and social inclusion, consistent with the efficient allocation of resources; and (iv) governments will promote strengthening the efficiency of tax administrations, financial management and use of public resources, and fiscal risk management.

I. THE SECTOR FRAMEWORK DOCUMENT IN THE CONTEXT OF CURRENT REGULATIONS AND THE IDB 2010-2020 INSTITUTIONAL STRATEGY

A. The Fiscal Policy and Management Sector Framework Document as part of the existing regulations

1.1 This Sector Framework Document (SFD) establishes the Bank's objectives for the fiscal policy and management sector (hereinafter the "Sector") and has been prepared in accordance with document GN-2670-1, "Strategies, Policies, Sector Frameworks and Guidelines at the IDB." It aims to guide the Bank's operational, dialogue, and knowledge-generation activities with the countries, their governments, and private borrowers.

1.2 This SFD recognizes the multisectoral nature of fiscal policy and management, is flexible, and can be adapted to the individual circumstances and preferences of each country in terms of both the design and the implementation of Sector projects. It will allow the Bank to address the changing contexts and challenges faced by its 26 borrowing member countries, while guiding Bank financing in the Sector for sovereign-guaranteed and non-sovereign guaranteed operations. This updated version of the SFD replaces the previous one (document GN-2831-3), as provided in paragraph 1.20 of document GN-2670-1.[1]

B. The Fiscal Policy and Management SFD and the IDB Institutional Strategy

1.3 This SFD falls within the framework of the Bank's five sector strategies,[2] specifically the Sector Strategy Institutions for Growth and Social Welfare (document GN-2587-2). It is also consistent with the Update to the Institutional Strategy 2010-2020: Partnering with Latin America and the Caribbean to Improve Lives (document AB-3008).

1.4 This SFD contains five sections that emphasize tax policy and administration, given the changes on this issue within the international context and a review of the recent literature. However, there is less emphasis on expenditure policy and management, since other SFDs (IDB 2015k, 2016f, 2017b, 2017c) and the IDB flagship publication, Development in the Americas 2018, include substantive discussions of this issue. Section II presents a sample of the international empirical evidence available regarding Sector policies and programs. Section III identifies the major challenges facing the Sector in Latin America and the Caribbean. Section IV summarizes the lessons learned from the Bank's experience in the Sector. Section V sets out the goal, principles, dimensions of success, lines of action, and specific activities that the Bank will prioritize in the Sector. Lastly, Annex II presents issues

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1 SFDs should be updated every three years, on a rolling basis.

2 This SFD is associated with the IDB Infrastructure Strategy: Sustainable Infrastructure for Competitiveness and Inclusive Growth (document GN-2710-5) and the Strategy on Social Policy for Equity and Productivity (document GN-2588-4), in view of the role public expenditure and financial management policies play in the allocation and management of resources in expenditure budgets, strategic planning, medium-term fiscal frameworks (MTFFs), public procurement systems, public investment systems, and fiscal transparency and accountability. It also relates to the IDB Integrated Strategy for Climate Change Adaptation and Mitigation, and Sustainable and Renewable Energy (document GN-2609-1), which identifies the need for specific fiscal management policies and research; and to the Sector Strategy to Support Competitive Global and Regional Integration (document GN-2565-4), which provides for promoting international fiscal harmonization and regulation of transfer pricing.

related to financial management and fiscal transparency, which will be developed in a future Transparency and Integrity SFD.

II. INTERNATIONAL EVIDENCE REGARDING THE EFFECTIVENESS OF FISCAL POLICY AND MANAGEMENT PROGRAMS AND IMPLICATIONS FOR THE IDB'S WORK

A. The role of fiscal policy in economic growth and sustainability and macroeconomic stability

2.1 **Fiscal policy and growth.** There is considerable body of empirical literature on the various paths through which fiscal policy and management can impact growth. Many of these have emerged in light of the theories of endogenous growth (Romer, 1986 and 1990; Lucas, 1988; Aghion and Howitt, 1998; among others),[3] which unlike the neoclassical theories of growth, incorporate changes in human capital, spending on research and development, technological change, and a rise in savings and investment. Taking into account the effects of these changes, the role of public policy and particularly, of fiscal policy, these become more relevant for long-term economic growth (Ter-Minassian, 2015). More recently, the literature highlights the role that digital technologies can play in driving economic growth (Huawei and Oxford Economics, 2017) and promoting fiscal progress (International Monetary Fund or IMF, 2017; IMF, 2018). In addition, the literature has focused on the tradeoffs between efficiency and equity goals that can result from fiscal policy and the influence of political economy factors on the decision-making of public policy implementers.

2.2 Another important area of the literature on growth highlights the fundamental role of institutions in explaining differences in growth and development among the countries (Acemoglu and Robinson, 2008). Economic institutions, which include fiscal institutions, affect economic growth by shaping incentives for the main economic actors. Budgetary institutions include all systems, rules, procedures, and processes that govern budget planning, approval, and implementation. This definition encompasses all institutions working to ensure government accountability and prevent the diversion of public funds, enhance the efficient use of public resources, foster fiscal stability and discipline, and promote fulfillment of the strategic objectives of a society. In particular, the literature emphasizes innovations in the design of fiscal control boards, fiscal rules, medium-term fiscal frameworks (MTFFs), medium-term expenditure frameworks (MTEFs), and institutions that promote transparency (IMF, 2014a).

2.3 **Fiscal sustainability.** One of the most important consequences of the Great Recession of 2008-2009 has been the increase in public debt in developed economies and the resulting revision of the literature on the relationship between public debt (measured as a percentage of gross domestic product or GDP) and growth (Kumar and Woo, 2010; Reinhart and Rogoff, 2010; Panizza and Presbitero, 2012). This relationship tends to be negative once certain levels of debt are reached, for reasons that include the following: (i) uncertainty regarding the sustainability of the debt exerts upward pressure on interest rates as sovereign risk premiums increase, with the resulting adverse impacts on private investment and fiscal headroom, thereby limiting the prospects for implementing countercyclical policies;

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[3] For a summary and formal presentation of the theories of growth, see Jones and Vollrath (2013). For an expansion of these models and their implications for economic policies for growth, see Aghion and Howitt (1998).

(ii) spending restrictions mainly impact public investment, thus limiting short- and medium-term growth even further; and (iii) economic agents sense that a fiscal adjustment will eventually be unavoidable if the government is to remain solvent, whether in the form of an increase in the tax burden and/or a permanent reduction in spending.[4]

2.4 There is no single critical debt threshold for all countries that can indicate the point at which governments will become insolvent, since this is not a linear relation. The threshold differs from country to country and depends on several factors (Calderón and Fuentes, 2013; IMF, 2012b), notably including: (i) the country's level of development and degree of economic diversification; (ii) the depth and degree of openness of the local financial systems; (iii) the quality of the country's institutions; and (iv) historical precedent in terms of episodes of insolvency or default on public debt (Reinhart and Rogoff, 2013). However, debt levels exceeding 100% of GDP for developed economies and 60% of GDP for developing economies constitute critical thresholds that portend danger of insolvency (IMF, 2012b, 2018a, 2018b; Gaspar and Jaramillo, 2018). Lastly, the costs of fiscal insolvency or of debt crises have lasting effects on growth (Miller and Zhang, 2013), in terms of the real income of the population, especially the lower-income segments.

2.5 The dynamics of debt sustainability depend on a set of economic variables which include economic growth, real interest rates, the primary fiscal balance, and the initial debt levels.[5] However, three additional factors may affect these dynamics: (i) the composition of the debt; (ii) the vulnerability of countries to sudden stops of capital inflows (Calvo et al., 2003, 2004, 2008);[6] and (iii) statistical discrepancies between primary deficit figures (which constitute flows) and debt stocks (IDB, 2007).

2.6 A debt sustainability analysis (DSA) conducted on the basis of gross debt as formally recorded or recognized by the central government may be insufficient for evaluating the long-term sustainability of public finances. Therefore, it should be supplemented with: (i) consolidated public sector debt, including the secured debt of State-owned enterprises, subnational governments, and public trusts, which are not usually included in the recorded debt; (ii) contingent liabilities, such as bank deposit guarantees and those of other financial institutions, legal actions against the State which may give rise to future spending commitments, and other implicit guarantees such as the actuarial deficits of government pension systems not associated with an individual capitalization or pay-as-you-go account (Bloch and Fall, 2015); and (iii) actual and contingent commitments (such as explicit guarantees) from public-private partnerships (PPPs).[7]

2.7 In the developed countries, annual spending on old-age pensions is expected to increase by nearly three percentage points of GDP by 2050 (IMF, 2011a). The

[4] If it is perceived monetary financing will be used to cover fiscal deficits, inflationary expectations will rise and create upward pressure on interest rates, thereby accentuating the crowding out of private investment and the narrowing of fiscal headroom due to higher debt service, in addition to the other harmful effects of inflation, particularly on income distribution.

[5] For a review of the literature on debt sustainability dynamics, see Buiter (1983, 1985, 1990); van Wijnbergen (1989); Fischer and Easterly (1990); and IMF (2003).

[6] These publications are an important IDB contribution to this issue in general and to the analysis of fiscal sustainability and public debt management in the region in particular.

[7] The DSA recommends including the flow of actual future payments and PPP-related risks as part of primary spending.

European Commission, together with its member countries, projects expenditures associated with the aging of the population every three years. Starting in 2012, the DSA for each country is being prepared employing three levels or pillars of measurement: (i) the conventional DSA, which uses the recorded public debt and incorporates stochastic analyses (fan charts) in projections; (ii) the impact of population aging on projections for various scenarios; (iii) a new module added in 2014, which incorporates contingent liabilities (European Commission, 2012b, 2014).[8]

2.8 The materialization of concealed and contingent liabilities in some European countries, such as Spain, Portugal, and Iceland, during the Great Recession shows that these liabilities continue to be insufficiently dealt with both in the DSAs and in the public accounts of countries. A recent example of the effect of a failure to record actual or contingent liabilities is the Great Recession in Portugal. Portugal's debt rose from 76% of GDP in 2009 to 130% of GDP in 2014. One half of this increase was attributable to the reclassification of entities that were off the general government accounts—primarily State-owned enterprises, as well as several PPPs—and to interventions aimed at shoring up financial institutions (Cangiano et al., 2014). On average, countries with PPP programs that have been successful over time are those with effective structures and robust institutional capacity to implement these programs. This includes capacity for planning, managing, and monitoring PPPs (Reyes-Tagle and Garbacik, 2016).

2.9 The guidelines of the Organization of Economic Cooperation and Development (OECD) include improving the PPP selection process by promoting the use of cost-benefit techniques, strengthening the legal and institutional frameworks, and making spending commitments and contingent liabilities more transparent (OECD, 2012c). Other recommendations include limiting the monetary value of projects to be executed through PPPs by applying specific annual and/or cumulative ceilings, setting quantitative limits on guarantees, and recording assumed commitments as debt, even in the case of pure concessions since, from an accounting standpoint, a PPP is equivalent to a public debt incurred with the concessionaire[9] (Irwin, 2007; Funke et al., 2012). According to the IMF, guarantees granted by governments in PPP contracts should take into account certain transparency provisions (Annex I, Table 1).

2.10 With regard to minimizing fiscal risk for State-owned enterprises, the literature suggests: (i) reducing discretion in the fiscal relationship between the central government and State-owned enterprises, in order to decrease expectations of a bailout (Musacchio et al., 2015; Ter-Minassian, 2017); (ii) reducing information asymmetries between the central government and State-owned enterprises by

[8] In the IMF analysis, current DSA projections for countries with access to the financial markets have a five-year horizon. This excludes the possibility of including the impact of health and pension spending, which is expected to materialize in the long term. However, the IMF recommends including it when spending pressures materialize quickly. In this case, it recommends that its teams use flexibility in terms of lengthening the horizon of the projections. In other cases, it recommends adding a memorandum item listing the present value of pension and health costs as a percentage of GDP. It also recommends including the risk that contingent liabilities could materialize in its debt stress tests (IMF, 2013b).

[9] The correct approach would be to apply the International Public Sector Accounting Standards (IPSAS 32). These standards provide a framework for reducing the bias in favor of PPPs: when control of the asset is in the hands of the grantor (the government), they require the grantor to record the debt while the asset is being built.

establishing centralized monitoring units (Musacchio et al., 2015) or strengthening market oversight (Wagner, 2017); (iii) introducing a regulatory framework for State-owned enterprise borrowing, based on rules and their revenue (Ter-Minassian, 2017); and (iv) improving the corporate governance of State-owned enterprises (OECD, 2016a).

2.11 With regard to all other contingent liabilities, the Great Recession revealed gaps in many governments' knowledge of their underlying fiscal position and the shocks that could affect them.[10] In addition, fiscal risks associated with climate change and natural disasters are more frequent and have a greater impact. However, these associated risks could be transferrable to certain markets, such as catastrophe bonds or insurance policies.

2.12 Lastly, to identify and mitigate the various sources of fiscal risk, it is essential to improve fiscal transparency rules and practices, including: (i) more complete coverage of public-sector institutions and transactions; (ii) presentation of more comprehensive reports on public-sector assets and liabilities; and (iii) presentation of more frequent and timely fiscal reports (Cotarelli, 2012). Several countries, including Australia, Brazil, Canada, Chile, Colombia, France, New Zealand, and the United Kingdom, identify at least some of the fiscal risks and prepare a report that is submitted together with the annual budget. In general, in these countries, the obligation to report fiscal risks is set forth in fiscal responsibility laws (Cebotari et al., 2009).

2.13 **Stability.** Another important role that fiscal policy should perform is to stabilize aggregate domestic demand so as to moderate macroeconomic volatility and thereby contribute to medium-term growth (Fatas and Mihov, 2011; Aghion and Marinescu, 2008; IMF, 2015a). Moreover, recent studies found that economic volatility can have a significant impact on the well-being of people with low levels of human capital or those displaced from their jobs (Mukoyama and Sahin, 2006; Krebs, 2007). Economic volatility can also affect an economy's medium-term growth, mainly by reducing productive investments due to the uncertainty it generates (Aghion et al., 2005; Aghion and Banerjee, 2005). Fiscal policy can play an important role in moderating these adverse impacts through automatic stabilizers, discretionary fiscal policy under certain conditions, fiscal rules, MTFFs, MTEFs, stabilization funds, and fiscal boards.

2.14 Automatic stabilizers are the principal tool for enabling fiscal policy to fulfill its stabilizing function (Debrun and Kapoor, 2010; Baunsgaard and Symansky, 2009). In developed countries, automatic stabilizers account for most of the stabilizing capacity of fiscal policy and are strongly correlated with lower levels of macroeconomic volatility (Fatas and Mihov, 2001; Gali, 1994). Unlike discretionary political economy interventions, automatic stabilizers are not subject to implementation lags and can quickly and easily be reversed with a change of cycle,

[10] In 10 countries that experienced the largest unforeseen increases in gross public debt as a proportion of GDP between 2007 and 2010, 23% of that increase was attributable to incomplete information on the government's underlying fiscal position. The existence of concealed or implicit obligations with State-owned enterprises and PPPs outside the general government perimeter damaged public finances when the financial crisis erupted in Germany, the United States, Greece, Iceland, and Portugal. In Spain, Greece, and Portugal, the cash-based budgetary and accounting system and the government reporting system were unable to capture or control spending commitments, leading to an accumulation of past-due payments both before and during the crisis.

ensuring a timely and symmetrical fiscal policy response to shocks (Blanchard et al., 2010).

2.15 Discretionary fiscal policy can prove necessary under certain conditions, such as: (i) significant and unexpected shocks requiring additional action to supplement automatic stabilizers; (ii) rigid policy frameworks and/or contexts allowing limited leeway for monetary policy; (iii) smaller size of automatic stabilizers, as occurs in most developing countries; and (iv) labor markets with high informality levels that lack unemployment insurance or offer limited protections. However, the misuse of discretionary fiscal policy can undermine the impact of automatic stabilizers and contribute to the creation of sustainability problems (IMF, 2015a). With respect to other discretionary fiscal policy risks, the incentives for the various political stakeholders can introduce a deficit-prone, procyclical bias into fiscal policy (Alesina and Perotti, 1995; Alesina and Tabellini, 1990). Mechanisms to correct and improve these incentives include a broad spectrum of rules, procedures, and instruments for budgetary institutions.

2.16 Fiscal procedure rules determine the functions, responsibilities, and prerogatives of participants in budget negotiations (Alesina and Perotti, 1995). More hierarchical rules that concentrate power in stakeholders with a greater interest in maintaining public finances under control (Poterba and von Hagen, 1999; Alesina et al., 1999) help to reduce fiscal deficits, facilitate the implementation of fiscal consolidation programs, and can contribute to fiscal sustainability (Hallerberg et al., 2009a). In contrast, numerical fiscal rules establish quantitative restrictions on certain fiscal aggregates, such as the maximum size of the public debt, allowed deficit limits (primary or global), limits on the maximum level of public expenditure, or limits on tax revenue (Kopits and Symansky, 1998).

2.17 The rules that have proven most successful in fostering fiscal discipline have broad institutional coverage, restrict variables directly related to fiscal sustainability, are easy to understand and monitor, and promote countercyclical fiscal policies, particularly during large-magnitude events (Eyraud et al., 2018). Other fiscal instruments that have proven efficient in promoting tax discipline are MTFFs and MTEFs (Debrun et al., 2008; Fabrizio and Mody, 2006). These instruments allow governments to commit to fiscal targets beyond the confines of a single fiscal year by incorporating intertemporal budget constraints (World Bank, 2012).

2.18 The stabilization funds that are common in countries with abundant nonrenewable natural resources are another type of budgetary institution that entails a set of rules for savings and use of resources during the commodity price cycle, reducing public spending and, ultimately, aggregate demand. The volatility of total expenditures in countries with abundant nonrenewable natural resources that have stabilization funds is 13% lower than in similar countries that do not employ this type of instrument (Sugawara, 2014). These instruments require: (i) good design, which involves including clear rules to accumulate, invest, and use resources; (ii) transparency and accountability standards for compliance with resource investment guidelines (Bacon and Tordo, 2006; Asfaha, 2007); and (iii) complementary fiscal rules to prevent the issuing of debt to increase spending during boom periods for commodity prices and revenue accumulation.

2.19 Lastly, fiscal boards[11] can help improve the quality of fiscal policy by strengthening the mechanisms to ensure compliance with such policies, reducing deficit and procyclical policy biases. Therefore, fiscal boards can also reinforce the effectiveness of fiscal rules, MTFFs, MTEFs, and stabilization funds. Countries with fiscal boards tend to present more accurate and less biased macroeconomic and budgetary projections, and have higher probabilities of compliance with fiscal rules (Beetsma et al., 2018; Debrun and Kinda, 2014; Kopits, 2013; Frankel and Schreger, 2012). The effectiveness of fiscal boards also depends on their political and institutional autonomy, capacity to prepare macroeconomic projections for annual and medium-term budgets, having a robust presence in the public debate, and explicit role in monitoring fiscal rules (IMF, 2013a).

B. The structure of the tax and public expenditure systems and their impact on economic efficiency and productivity

2.20 **Tax systems.** Several studies have analyzed the impact of various types of taxes on growth and productivity (Antón, Hernández, and Levy, 2012; Myles, 2009a, 2009b, 2009c; OECD, 2010c; Martínez-Vázquez et al., 2013; Mirrlees et al., 2011; Pagés, 2017). The most important conclusions are (Ter-Minassian, 2015): (i) real property taxes are the least likely to affect growth and distort the allocation of resources to savings and investment; (ii) value-added taxes have no impact on savings-investment decisions; (iii) selective indirect excise taxes appear not to have any impact on growth, and their final effect on consumption will depend on the type of goods on which they are levied; (iv) payroll taxes affect employment levels and the informal employment rate; (v) highly progressive personal income taxes can adversely impact savings rates above a certain level; and (vi) corporate income taxes have a greater adverse impact on growth due to the investment sensitivity of businesses.

2.21 With respect to regulations, Mirrlees et al. (2001) indicate, among other suggestions, that every tax system should generate enough resources to finance a country's spending needs and be progressive, neutral (not affecting the decisions of economic agents), and simple. While not all taxes need to be progressive, the system as a whole should be. Likewise, direct taxes are the best means for achieving progressivity, while other instruments of the tax system should focus on seeking efficiency and sufficiency in terms of generating resources. Thus, there is a relationship between attaining progressivity and minimizing the loss of economic efficiency, which is known as neutrality.[12]

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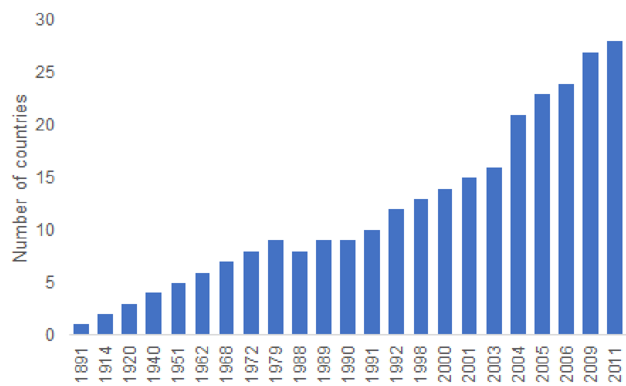
[11] A fiscal board is a permanent agency with a legal or executive mandate to evaluate a government's fiscal policies, plans, and performance—publicly and free from partisan influence—against macroeconomic objectives related to long-term sustainability of public finances, short- and medium-term macroeconomic stability, and other government objectives (Debrun et al., 2009).

[12] Neutrality is understood to mean that similar economic persons and activities should be given an analogous tax treatment, avoiding discrimination and minimizing the economic distortions that affect resource allocation and factor productivity. Nevertheless, some activities generate negative or positive externalities and warrant differentiated treatment.

2.22 Four global trends in tax policy have been identified in recent decades, led primarily by the OECD countries. The first seeks a greater balance between neutrality and progressivity and has led to attempts to modify the personal income tax, which is the most important component in the tax structure of OECD countries (33.5%).[13] Thus, the introduction of the dual income tax system in Nordic countries, which taxes labor income and capital income on a separate basis, represents a break with simplified design systems in which all types of income are taxed similarly at the same level of income. Other developed countries have introduced semidual systems, which provide a different treatment for capital income but not for mixed income. They include Spain, Germany, Slovenia, Austria, Poland, Belgium, Italy, Portugal, Greece, France, and the Netherlands. The evidence points to changes in the composition of household savings, owing to the shift from nonfinancial to financial assets. This, in turn, is the result of the greater neutrality brought about by the dual system (Strand, 1999; Picos, 2003).

2.23 The second trend is that all but six of the OECD countries have moved toward a corporate tax system based on territorial income (Figure 1), coupled with a trend to lower corporate income tax rates. This includes the United States with the tax reform that entered into force in early 2018.

Figure 1. Number of OECD member countries with territorial tax systems



Source: PricewaterhouseCoopers (2013).
Note: does not include Latin American and Caribbean countries that are OECD members.

2.24 The third trend, triggered by two global events[14] that brought about a fundamental change in international cooperation processes, includes an initiative under way in the areas of tax transparency and combatting tax evasion during the past two decades, promoted by the Group of Twenty (G20) and led by the OECD. Its three lines of action are: (i) the global effort to combat money laundering and terrorism

[13] Authors' estimates based on OECD (2015e).

[14] The September 11 terrorist attacks in 2001 marked the beginning of global efforts to counter money laundering and the financing of terrorism, with the strengthening of the Financial Action Task Force (FATF). The second event was the beginning of the Great Recession, which fostered the conceptual development and practical implementation of tax transparency and information exchange standards.

financing;[15] (ii) the conceptual development and practical implementation of tax transparency and information exchange standards;[16] and (iii) the Base Erosion and Profit Shifting or BEPS project,[17] which combats tax evasion and avoidance due to the aggressive fiscal planning of large multinational companies that transfer their earnings to countries with little or no taxes in order to avoid paying corporate taxes (Barreix, Roca, and Velayos, 2016).

2.25 Over the past two decades, technological innovations in digitalization processes and the information and communications technology industry have prompted changes in the international taxation and fiscal framework in the form of two trends. The first of these involves the digitalization of information and development of large databases that can be structured, processed, and transmitted in real time, representing a major opportunity for public policy and fiscal management decision-making, both for tax and customs administrations as well as for financial management and public spending (IMF, 2014c).

2.26 The second trend in digitalization is the emergence of new business models that operate on worldwide digital platforms in the intangible services sector and the creation of value through high transaction volumes in a sector known as the "digital economy." These activities can be carried out in any jurisdiction, using local public assets and public and/or private infrastructure to create value, without paying for them. By not paying taxes or tariffs for the use of local telecommunications infrastructure, these activities compete with local providers of similar services, which are at a disadvantage. These activities also involve a risk of exacerbating base erosion and profit shifting, by creating value in local jurisdictions in which they operate without making applicable tax contributions (OECD, 2014e).

2.27 The digital economy presents a complex challenge for tax policy (OECD/G20, 2018). First, tax policy should not undermine or discourage technological innovation or the creation of new businesses. Second, the creation of economic value should be accompanied by payment of value-added taxes (VAT) and corporate income taxes. The experience with VAT shows that these taxes are easy to implement. However,

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[15] The FATF is the governing agency for combatting money laundering and terrorism financing, particularly in intervening in the financial system and in property-related issues (real estate, notaries public, casinos, etc.). It is made up of 190 jurisdictions that committed to applying its standards. The FATF issues international standards that are known as 40 interpretive recommendations, evaluates compliance by the countries (defines methodology and good practices), follows up with countries that show deficiencies, and can impose coercive measures.

[16] The Global Forum, currently made up of 151 countries and its Secretariat at the OECD, has developed standards for Transparency and Exchange of Information for Tax Purposes. These standards and their application have been evolving and so has the technical complexity of the requirements for jurisdictions to fulfill. The standards are based on three pillars: availability of information, access to this information by tax authorities, and the possible exchange of this information. The main challenges arising from implementation of these standards focus on three areas: (i) the abolition of bank secrecy, particularly for financial transactions, and the elimination of bearer shares; (ii) the exchange of tax information, both automatic and on request; and (iii) the implementation of processes to identify the ultimate beneficial owner throughout the property chain, a concept that emerged from the FATF's actions. In all cases, completely confidential handling of the information transmitted must be ensured.

[17] The BEPS project has contributed to the following substantial progress: (i) establishment of a duty to measure and monitor concrete results achieved by the countries after adopting some or all the measures proposed; (ii) establishment of a duty by companies (and fiscal advisors) to disclose aggressive planning mechanisms to tax administrations before implementing them, or face sanctions; (iii) standardization, improvement, and customization of country-by-country reports on tax information regarding transfer pricing by multinationals; and (iv) establishment of streamlined mechanisms to resolve double-taxation disputes among countries, even ultimately resorting to tax arbitration.

corporate income taxes are more complex, since determining the proportionality of each jurisdiction in which these platforms operate is no simple task. This is particularly true in the absence of effective international cooperation, including the systematic, transparent exchange of information. Lastly, determining the value of (and hence, the tax base for) collecting mass data on the users of these platforms—the subsequent use of which is in itself a source of added value—is also complex and a topic of debate in the discussions of the BEPS project. The only aspects on which there is a consensus are: taxes levied on these activities should be proportional and shared among the jurisdictions in which these companies' digital platforms operate; taxation should not prevent tax neutrality; and double-taxation should be avoided.

2.28 **Expenditure policy and management.** The long-term impact of an increase in public spending is difficult to forecast and estimate with accuracy. A positive correlation between expenditure and growth, which would be consistent with the Keynesian view, does not imply causality, since it could be a matter of reverse causality: countries tend to have bigger governments as they develop, and thus the correlation between public spending and growth operates in both directions. Furthermore, increased spending can also be associated with lower GDP growth, since the government can crowd out the private sector by absorbing resources; this relationship is likely to have an inverted U-shaped curve, where the growth rate increases for lower levels of public spending and then slows down as expenditures rise (Tanzi and Zee, 1997). Despite the fact that the initial empirical analysis found no conclusive evidence regarding the impact of the size of expenditures on growth. However, recent studies using better data and econometric methods (Afonso and Jalles, 2014; Bergh and Henrekson, 2011, 2015) have found that, above a certain level, higher spending is associated with lower growth, particularly in more developed countries.

2.29 The long-term impact of increased spending will depend on the composition of the change (expenditure switching) as well as on the effects of each of the individual categories. Expenditures associated with the production function (productive expenditures in physical and human capital) affect the growth rate, while expenditures associated with the utility function (unproductive expenditures) affect growth to a lesser extent depending on how they are financed. Studies that disaggregate spending into its components, usually into consumption and capital expenditures (Barro, 2003) or into further disaggregated levels, find that current spending and government consumption expenditures are less effective or even reduce growth when compared to public investment in infrastructure or in human capital (Acosta-Ormaechea and Morozumi, 2013). More specifically, the current expenditure multiplier is virtually zero in the medium term, while the effect of a one-dollar increase in public investment is on average similar to a one-dollar increase in GDP. This amount rises with lower stocks of initial public capital (Izquierdo et al., 2017) or higher levels of public expenditure efficiency (Furceri and Li, 2017; Abiad et al., 2016). For OECD countries, higher spending on health, education, and infrastructure appears to favor long-term growth, while an increase in other types of expenditures appears to have the opposite effect (Gemmel et al., 2009; Barbiero and Cournède, 2013).

2.30 With respect to productive expenditures, both in physical and human capital, infrastructure expenditures that increase stocks of physical capital have positive effects on growth (Straub and Terada-Hagiwara, 2012, for Asia; Erget et. al., 2009, for OECD countries; Calderón and Servén, 2010; and Lanau, 2017, for Latin America). Studies have also been conducted on the impact of infrastructure in reducing income inequality (Furceri and Li, 2017, for developing economies; Calderón and Servén, 2008, for Africa; Calderón and Servén, 2004, for Latin America; Hooper et al., 2017, for the United States). Public investment does not seem to create tradeoffs between efficiency and equity; rather it tends to improve both macroeconomic and distributive results (Furceri and Li, 2017).

2.31 The impact of public spending also depends on its efficiency and quality. Spending efficiency can be allocative (prioritizing expenditures among sectors) or operational (efficient service delivery). The recent literature has focused almost exclusively on operational efficiency, on the assumption that expenditure allocation is optimal or given or perhaps difficult to address. To measure technical or operational efficiency, the literature proposes a number of intermediate outcome, output, and final outcome indicators for different categories of public expenditures.

2.32 Analyzing the efficiency of public expenditures requires indicators of costs, which are directly controlled by the policy implementers. The allocative inefficiency of expenditures can be high in certain countries at specific points in their history or even at all times. Allocation should be based on a social cost-benefit analysis of expenditures. Performance indicators link policy options to outcomes, thereby measuring policy efficiency and effectiveness. The composite indicators developed by Afonso et al. (2005) and the Andean Development Corporation or CAF (2012) have become a useful tool for comparisons between countries (Economic Commission for Latin America and the Caribbean or ECLAC, 2013). These indicators and the measurement of technical efficiency are useful for identifying relative inefficiencies but are not capable of explaining the reasons for the differences in inefficiency. The indicators should be treated as one more tool in the toolkit for analyzing public expenditures, and be supplemented by qualitative and sector-specific analyses (Barrios and Schaechter, 2009).

2.33 The social and economic impact of public investment also depends on the efficiency of its management (Agénor, 2010). A comparison of the value of public capital and measures of infrastructure quality and coverage between countries reveals a level of inefficiency in the investment process of approximately 30%.[18] The economic dividend of closing this efficiency gap is therefore substantial: strengthening the management of public investment can close up to two thirds of the investment efficiency gap (Gupta et al., 2014; Dabla Norris et al., 2011; IMF, 2015c).[19]

2.34 To improve efficiency in the different categories of spending, the OECD countries adopted various approaches, such as increasing decentralization[20] and devolution of responsibilities; strengthening competition by transforming workforce structure and size; changing budget practices and procedures; and in particular, introducing

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[18] Infrastructure is a significant component of public capital, and the public sector continues to be the largest provider.

[19] For an interesting experience in investment expenditure management in partnership with the private sector, see: Infrastructure Ontario.

[20] A large part of public expenditures, particularly in the areas of health and education, is executed by subnational governments, which have poor institutional capacity and limited incentives to efficiently implement public spending. Nevertheless, as part of their expenditure policy and management, national governments can resort to conditional and equalization transfers (in addition to unrestricted transfers to subnational governments), which can become useful tools for incentivizing improvements in spending efficiency and equity (McLure and Martínez-Vázquez, 2000; Oates, 2006, IDB, 2015c, 2018e).

results-oriented approaches to budgeting and management (Curristine et al., 2007). Aside from structural changes, which may require new laws or decrees, the most appropriate tool for linking efficiency indicators to execution is results-based budgeting (Schick, 2006). This requires defining output and/or outcome indicators that are informative regarding the program and the result to be measured, and publishing them on a periodic basis. These indicators could be combined with MTFFs or MTEFs, further strengthening the mechanism and paving the way for improvements in the efficiency, allocation, execution, monitoring, and evaluation of expenditures.

2.35 Other instruments available to improve the quality and efficiency of expenditures include the periodic reviews of public spending commonly carried out in OECD and World Bank countries (Pradhan, 1996). Two of these instruments are public expenditure tracking surveys, which track the flow of financial resources from their approval to the administrative unit closest to service delivery (Reinikka and Svensson, 2004), and quality of service delivery indicator surveys (Bold et al., 2010). Lastly, another instrument[21] is the set of evaluations of expenditures for specific programs, which while desirable due to the depth of their analysis, take longer to complete and tend to result in less specific recommendations than simple indicators. All of these evaluations should be published on a regular basis.

2.36 Lastly, in recent years a number of countries have been developing and implementing digital technologies to support expenditure management, with specific applications for: (i) improving planning of public investment, seeking better alignment with policy priorities and demands from the population, e.g. through cross-tabulation and analysis of mass data on infrastructure gaps; (ii) improving the focus of social programs based on biometric digital identification mechanisms and cross-tabulation of data among the participating institutions, to reduce leakage; and (iii) increasing the use of public financial information produced by Integrated Financial Management Systems, to improve the efficiency of expenditure execution and promote its monitoring and control.

C. The impact of fiscal policy on equity and its relation to economic efficiency and productivity

2.37 The tax and transfer system performs an important role in reducing poverty and inequality. Essentially, tax incidence analysis shows its initial effects, that is, before the behavioral responses or the general equilibrium impact are manifested[22] (Musgrave, 1959; Pechman, 1985; Martínez-Vázquez, 2008). The incidence analysis starts by defining the various types of income used: market income, disposable income, discretionary (post-tax) income, and final income.[23]

[21] Also quite often classified as a subcomponent of results-based budgeting.

[22] The analyses involve assumptions regarding the burden and economic distribution of taxes and transfers as well as assumptions regarding tax evasion and benefit coverage. The information used in tax incidence analysis is obtained by combining microdata from household surveys with administrative information on the amounts and characteristics of the tax system; transfer programs; education, social security, and health systems; and consumer subsidy mechanisms.

[23] Market income is total current income before taxes. Disposable income is equal to market income plus direct government transfers less direct taxes and social security contributions. Discretionary or post-tax income is defined as disposable income plus indirect subsidies less indirect taxes. Final income is defined as discretionary income plus in-kind public transfers in the form of free or subsidized services in health and education (Lustig and Higgins, 2013).

2.38 Some studies indicate that progressive personal income taxes reduce income inequality, while corporate income taxes also have an effect on income inequality which, however, becomes diluted with economic globalization or liberalization. Social security contributions, payroll taxes, and indirect taxes tend to increase income inequality. On the expenditure side, higher social, education, health, and public housing transfers have a positive collective and individual impact on income distribution (Martínez-Vázquez et al., 2012). Nevertheless, redistributive policies such as progressive taxes or cash transfers can reduce the incentives to work in the formal sector or to save and invest in physical and human capital.[24]

2.39 Expenditure policies, however, are more effective in reducing inequality than progressivity policies in the tax system. In fact, the limited effect of direct taxes on the Gini coefficient for disposable income shows that the impacts on disincentives raise the market income Gini, offsetting their progressive effects on disposable income (Poterba, 2007). This fact also partly explains the difference in inequality between European countries and the United States: while the latter has one of the world's most progressive income taxes, it exerts little redistributive power through expenditures. By contrast, European countries on average rely much more on spending policy to reduce inequality (Doerrenberg and Peichl, 2014).

2.40 Investment in quality human capital is the most important medium-term determining factor for reducing poverty and inequality. Fiscal policy should improve quality human capital accumulation in the poorest segments of the population, since the middle and upper classes have means at their disposal for investing properly (Becker, 1964, 1995). In fact, in OECD countries, the best education systems are those that combine high quality and equity.[25]

2.41 Expenditure management also helps balance the objectives of efficiency and equity, which have traditionally been seen as competing objectives. The benefits of the additional expenditure aimed at reducing poverty and inequality should be equal at the margin to policies aimed at increasing investment in physical and human capital. And in making this choice between spending on monetary transfers on one hand or on health and education services on the other, countries should also distribute the expenditure by analyzing the rate of return of each investment at the margin rather than trying to maximize the short-term political benefits of redistribution.

2.42 There are temporary spikes in inequality that cause concern among governments, such as the one resulting from a fiscal consolidation. Typically, fiscal consolidation leads to a short-term reduction in GDP and employment, which means lower real salaries. If salaried employees are primarily concentrated in lower-income groups, this situation creates greater market income inequality.[26] However, the

[24] This will depend on the elasticities of labor supply and of savings to changes in taxes and transfers, as manifested through wage, income, and interest rate (after-tax) elasticity. The elasticity of labor supply tends to be greater at the lower end of income distribution, especially for single mothers (McClelland and Mok, 2012; Bargain et al., 2014), which means that redistributive measures are sure to affect it. With regard to savings, there is evidence pointing to the negative effects of the interest rate, and particularly of taxes on savings, although in theory the effect is ambiguous (Attanasio and Weber, 2010).

[25] OECD countries face various problems in the equity and quality of education combination, including the following: (i) a secondary school dropout rate of 20%; (ii) approximately 19% of students 15 years of age lack basic reading skills or are illiterate; and (iii) the students most at risk of failing in school are those whose parents have little education or low socioeconomic status.

[26] In many cases, this increase in inequality is mitigated by designing adjustment measures accompanied by offsetting measures. In at least two thirds of economies, fiscal action led to a drop or partially counteracted the disposable income inequality caused by an increase in market income inequality (IMF, 2014b).

consequences of not undertaking fiscal consolidation could be worse. In fiscal or financial crises, real wages tend to fall, poverty tends to increase, and while the evidence for this is not conclusive, inequality may also become greater (Pessino, 1993, 1996; McKenzie, 2004; McIntyre and Pencavel, 2004; López Boo, 2010). The lesson from these experiences is that the short- and long-term effects of fiscal consolidation policies on poverty and inequality should be evaluated in relation to the true counterfactual scenario, which is the possibility of a systematic, aggregated, unresolved, or extended crisis.

2.43 If market income inequality is the product of well-intentioned policies that nevertheless distort the allocation of resources, these policies should be corrected before any attempts are made to patch them up with another policy that could exacerbate and further distort the initial situation or create fiscal sustainability pressures. This is the case in many countries in Europe and Latin America and the Caribbean where social security programs were established starting in the late nineteenth century and consolidated following World War II. These social security programs, which provided health and pension coverage in old age, were implemented only for formal employees (Kaplan and Levy, 2013). However, this design could create incentives for businesses and workers to continue to operate in the informal sector in low-productivity activities (Antón, Hernández, and Levy, 2012; IDB, 2010; Busso et al., 2012). In turn, the lack of social security coverage for workers in the informal sector and high evasion rates generate inequity and incentives to have parallel social security regimes. Therefore, social policies, together with the noncontributory pillars, have promoted increased coverage and social assistance for informal workers, competing with the contributory pillars and becoming de facto informality subsidies (Levy, 2015).

2.44 In order to include a larger number of workers in social security systems, it may be necessary to subsidize contributions, particularly those provided by lower-income individuals (ECLAC, 2012; Bosch et al., 2013b), using general resources such as VAT or personal income tax revenues, or completely decouple social security funding from taxes on labor (as has been done in the case of health insurance in some countries; Levy, 2008; Antón and Leal, 2013; IDB, 2013b). However, this has implications for formal employment. In 2008-2009, an average of one in six employees in the European Union held an informal job as his or her main occupation. The informality rate in the European Union is 11% in the Nordic countries, 15% in the east, 16% in the west, and 28% in the south.[27] A descriptive analysis of OECD and eastern European countries reveals that disincentives to formal employment, estimated by means of a measure that includes the labor tax disincentives as well as the disincentive of ceasing to receive subsidies upon initiating informal employment, are especially high for low-wage earners (Koettl and Weber, 2013).

2.45 To combat informal employment, many countries have implemented a system of special tax regimes for small businesses. These set effective tax rates that are proportional to the size of the companies. It is also common to use redistributive arguments to justify imposing these types of policies. However, evidence available in developing countries suggests that these systems have little or no impact on the levels of informal employment (de Andrade, Bruhn, and McKenzie, 2014; Galiani,

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[27] Among employees, the highest proportion of workers without contracts is in Cyprus (almost half), Greece (one third), and Ireland (more than one quarter) (Hazans, 2011).

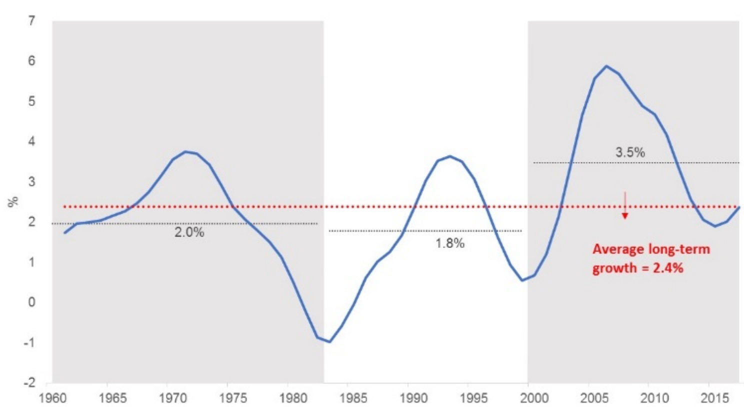
Meléndez, and Navajas, 2017; Slemrod, 2016). Moreover, the redistributive effects of these policies are not guaranteed, for two reasons. First, the progressivity of these policies has an effect on businesses, not individuals. Second, these programs may cause distortions that adversely impact the productivity levels of the economy, as a result of disincentives for companies to grow, since many businesses could choose to limit their size in exchange for tax benefits (Garicano et al., 2016; Best et al., 2015; La Porta and Shleifer, 2014; Hsieh and Klenow, 2009).

III. MAIN CHALLENGES FOR THE REGION

A. The role of fiscal policy in economic growth and sustainability and macroeconomic stability

3.1 **Fiscal policy and growth.** Latin American and Caribbean countries have been experiencing low, unstable growth for several decades now (Figure 2), lagging behind other emerging economies. From a fiscal standpoint, these results are due to factors that include: (i) institutional fiscal frameworks that remain weak and marginally effective at ensuring financial sustainability and reducing macroeconomic and financial volatility (Gavin et al., 1996; Gavin and Perotti, 1997; de Ferranti et al., 2000; IDB, 2013c, 2015e, 2015j, 2018d);[28] (ii) the impact of tax policies that have brought about distortions in the efficient allocation of resources, particularly in the job market, with high levels of informality and low productivity (IDB, 2018d); (iii) low levels of saving and investment, with consequences that include the aging and deterioration of public infrastructure (IDB, 2016g, 2018d; Serebrisky et al., 2018); (iv) low levels of public expenditure quality and efficiency, particularly in education (Levy and Schady, 2013; IDB, 2016f); and (v) low levels of efficiency in the mobilization, management, and use of public resources.

Figure 2. Real GDP growth per capita, Latin America and the Caribbean



Source: IDB (2018d) based on data from Penn Word Table 9.0.
Note: The real GDP series is expressed in 2011 U.S. dollar purchasing power parity units. The data was analyzed using the Hodrick-Prescott filter with a smoothing parameter of λ=7 to eliminate cyclical fluctuations. The regional average was calculated as a simple (unweighted) average by country. The figure shows the average growth rate for the entire period (1961-2017) and three subperiods (shaded).

[28] The volatility of fiscal policy accounts for at least 15% of the excess macroeconomic volatility in the region vis-à-vis the OECD between 1975 and 1999 (de Ferranti et al., 2000).

3.2 At the start of the millennium, budget institutions achieved significant progress in the region, mainly through the adoption of MTFFs, MTEFs, and fiscal rules. From 1998 to 2008, 14 Latin American and Caribbean countries formally implemented an MTFF, in principle to introduce a medium-term outlook into annual budget decision-making (World Bank, 2013). A similar number of countries also adopted fiscal rules (IMF, Fiscal Rules Dataset, 1985-2015). Unfortunately, the original intent of MTFFs was neither to strengthen the linkages among fiscal policy, budgeting, and strategic planning with a multiyear outlook, nor to reform traditional budgetary behavior (incremental budget targeting historical inputs and budgeting). The fundamental objective was to promote fiscal discipline (one of the main benefits of MTFFs), setting aside potential benefits in terms of the allocative and technical efficiency of resources. However, given various economic and financial shocks, the procyclicality in fiscal policy was not reduced. Except for a few countries, there is very little fiscal headroom to sustainably finance economic and social development. Consequently, only a handful have been able to move beyond a medium-term fiscal framework to a budget, expenditure, and even less, a performance framework. In most cases, MTFFs are almost exclusively an exercise in medium-term forecasting that is reviewed annually to submit and approve annual budgets. They lack a strategic growth and development vision and demonstrate little commitment to medium-term budget constraints, and much less so in the case of intertemporal ones.

3.3 With regard to fiscal rules, fiscal performance in some countries has failed to improve following their implementation (Corbacho et al., 2010; IDB, 2015j), and in several cases, their targets were not met or were modified under successive reforms, thereby undermining the credibility of the overall fiscal framework (Celasun et al., 2015). In addition, many of these rules—such as budget balance rules or rules on spending limits—had a pronounced procyclical bias and were designed without providing for escape clauses in the event of exceptional circumstances. This became evident when the effects of the Great Recession were being felt in the region and more recently with the commodity price shocks that started in 2014. In contrast with institutional progress achieved in developed countries, autonomous fiscal boards are just starting to emerge in the region, where Peru stands out. In some cases, independent fiscal boards have very limited, specific functions (forecasting of commodity prices and/or growth) or lack real autonomy due to their institutional design, even if they are formally defined as independent. Consequently, the region faces many challenges in achieving progress and strengthening its fiscal and budget institutions (IDB, 2015j; Ter-Minassian, 2010; García, 2012; Kopits, 2013).

3.4 Moreover, procyclical policies have not been symmetrical either, characterized by cuts in investment spending during recessionary cycles and an increase in current expenditures during expansion phases, including spending commitments that are difficult to reverse (IDB, 2014b, 2015e, 2015j; ECLAC, 2009; Izquierdo et al., 2017). These circumstances have further narrowed the fiscal leeway available in the region to implement countercyclical policies, thereby adversely impacting the effectiveness and efficiency of expenditures in public infrastructure investments (IDB, 2015e; ECLAC, 2015a; IMF, 2015c) and limiting the size and effectiveness of the fiscal multipliers associated with investment spending.

3.5 **Sustainability and fiscal headroom.** During the commodity price boom from 2003 to 2012 and the economic expansion that took place in the region at the time, several countries in the region were able to improve their fiscal position by decreasing debt levels.[29] However, given the drop in commodity prices in late 2013, especially the price for hydrocarbons, the public debt rose again for countries that had not managed to accumulate fiscal savings and implement timely corrective measures to compensate for declining tax revenues. Moreover, several Caribbean and Central American countries that are not commodity producers, but rely on oil or fuel imports for their energy needs, experienced a decline in their fiscal position and current accounts.[30] Along with these circumstances, there was a slowdown in growth (partly due to the cuts in public spending several countries had to implement) and a slight increase in worldwide interest rates in recent years. As a result, overall tax revenues decreased and debt service slightly increased, further weakening the fiscal position of many countries.

3.6 Due to these circumstances, the erosion of fiscal headroom in Latin American and Caribbean countries became more acute between 2014 and 2017, primarily due to the increase in current and fixed expenditures in the years leading up to the commodity price and growth boom. In many cases, investment spending was cut, which had a recessionary effect. These developments jeopardized fiscal sustainability in the region, either because many countries had reached high debt levels as a percentage of GDP and/or posted negative primary balances that were inconsistent with the medium-term stability of the debt-to-GDP ratio. For some countries, however, the level of debt or primary balances have not been problematic. Nevertheless, they lack the fiscal headroom necessary to sustainably address their economic and social development challenges[31] (Figure 3), including potential real and/or financial shocks.

3.7 There are reasons to believe that fiscal pressures will mount in the medium and long term due to the aging of the population in the region. The age dependency ratio (ratio of individuals aged 65 or older to the economically active population, i.e., those aged 15-64) will increase threefold by 2050. This means spending on pensions will increase by eight percentage points of GDP, from the current 4% of GDP to approximately 12% by 2050.[32] Adding to the sustainability problems of the contributory systems is the present and future cost of noncontributory pensions. The average noncontributory pension expenditure in Latin America and the Caribbean is close to 0.5% of GDP per year, and this expenditure could also triple in terms of GDP (Bosch et al., 2013b).

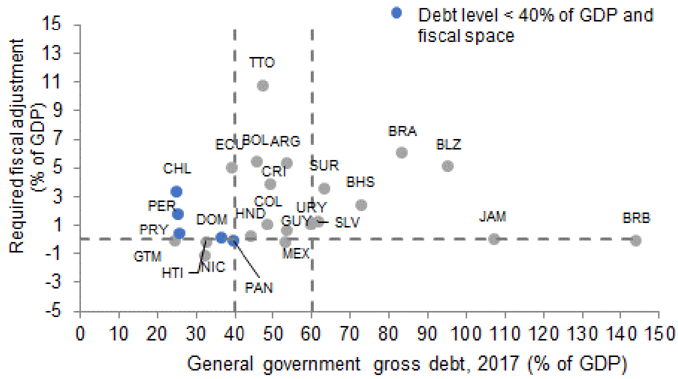
[29] Hydrocarbon prices fell significantly during the first half of 2009, as a result of the Great Recession. However, after six months, these prices quickly recovered, and the period of high prices continued until the third quarter of 2013.

[30] These countries benefited from falling oil prices starting in late 2013, but the fiscal position of several had already been compromised.

[31] There are many definitions of fiscal headroom, as well as ways to calculate it and make it operationally practical for decision-making. For this document, fiscal headroom is being defined as the capacity of governments to make discretionary public policy decisions, through either increased spending or decreased taxes, without risking the sustainability of public debt or access to financial markets at a reasonable cost and risk (Heller, 2005; IMF, 2018a). This concept should be analyzed dynamically and not statically, due to aspects including the number of variables (exogenous and endogenous) that are part of defining medium- and long-term debt sustainability.

[32] If the parametric reforms being adopted by some countries in the region are taken into account, the size of the increase becomes smaller (IMF, 2010). In addition, this approximation has not considered that a portion of the pension expenditure in somewhat less than one third of the countries is managed by private pension funds. However, even with these systems in place, governments are taking charge of minimum pensions and have established solidarity pensions for individuals who, for reasons of employment, did not contribute to those systems.

Figure 3. Available fiscal headroom or required fiscal adjustment



Source: IDB (2018d).

Note: The fiscal effort required is defined here as the difference between the average primary balance for the 2016-2017 period and the primary balance required to maintain the debt-to-GDP ratio, assuming that growth is as forecast at the estimated real interest rate. Definitions of gross debt vary by country. A minus sign indicates that the debt is increasing (and a fiscal effort will therefore be required to maintain a constant ratio of debt to GDP), whereas a plus sign indicates that the debt is decreasing. Peru and Chile show the fiscal adjustment required to maintain a constant debt level, although they could pursue fiscal expansion, given their low levels of debt and growth below potential. Jamaica shows the adjustment required to continue decreasing its debt. The debt for Barbados includes central government debt with the National Insurance Scheme. Venezuela was omitted due to the lack of comparable data.

3.8 For a number of countries in the region, the ability to increase fiscal headroom through taxation is limited. This is because their tax ratios are either approaching or on par with many developed countries (or the average for the OECD countries), regardless of differences in their degree of economic development. Consequently, their ability to design and formulate policies that would prevent public debt from growing further and/or create headroom for investment programs that would increase their growth potential is significantly reduced. Such is the case of most countries of the Southern Cone and some Caribbean countries, which have elevated and growing levels of debt and high tax burdens (Figure 3 and Figure 5). By contrast, the tax burdens of most countries of the Andean region and Central America are low for their degree of development. For some of these countries, the public debt is growing or already high. With respect to the former group of countries, the policy options available for stabilizing the debt and expanding fiscal headroom focus on improving tax administration effectiveness, especially policies aimed at improving public expenditure efficiency and the quality of public services. With regard to the Andean region and Central American countries, any combination of public policies that can increase headroom and contain growth of the debt are on the table.

3.9 The constraints on fiscal headroom as well as the high or growing levels of debt observed in some countries leave them no other choice than to implement fiscal measures if they are to avoid a situation of macroeconomic and financial crisis with major repercussions—especially for low-income population segments. This is one of the reasons giving rise to considerable social and political resistance, which grows in intensity with the severity of the required adjustments. It also exacerbates citizen dissatisfaction with the quality of public services, allegations of corruption, and the lack of transparency in the use of public resources. In some countries of the region, these circumstances frequently undermine the social contract underpinning and guaranteeing democratic and institutional stability. In view of the foregoing, five crosscutting conclusions can be drawn. First, the best economic adjustment is one that avoids or does not require social consensus to preserve long-term fiscal sustainability or macroeconomic and financial stability. Second, fiscal adjustments should be made with the aim of maintaining and/or promoting growth and employment. Third, efforts should be made to protect low-income and impoverished segments of the population, which are always most affected when the government's current-period budget constraint is relaxed. Fourth, considerable gains in public service quality and spending efficiency are needed. Accordingly, the ability to generate fiscal headroom in the medium term can be substantial. This can have significant positive distributive impacts that can help build the consensus needed to reestablish the social contract and democratic stability in many countries.[33] Moreover, new digital technologies have vast potential for making quality, low-cost gains in public services. And fifth, many of the reforms needed in the region, both in terms of improving spending efficiency and rebuilding the social contract in many countries, involve strengthening fiscal transparency and accountability based on results in the use of public resources.[34]

3.10 Fiscal sustainability is also potentially vulnerable to other actual or contingent liabilities that regularly fail to be recorded in the public debt accounts or be included in traditional fiscal risk calculations. It would be advisable to begin to estimate and disseminate the additional pillars added by the European Commission as indicative complements to traditional fiscal sustainability analyses, so as to foster an understanding of the fiscal sustainability challenges faced by the region in the medium and long terms.

3.11 Given the region's medium- and long-term fiscal space constraints, it is imperative to create the conditions necessary for increased private sector participation not only in overall economic activity, but also in providing certain public goods and services, particularly investments in public infrastructure. This would generate significant space to stimulate economic growth. At the same time, it would mobilize private resources in areas that have often been reserved for the public sector and in which private sector contributions in the form of technology and private management capacity could yield major benefits regarding efficiency. The private sector can participate in the provision of public goods and services in several ways, such as through administrative and management contracts, concessions or leasing to perform certain activities, venture capital funds for public infrastructure projects, and PPPs. All these possibilities require an analysis to identify, quantify, and manage implicit and explicit fiscal risks that might arise from the private sector's participation in providing public goods and services. This is intended to prevent issues with contingent liabilities, which if they materialize, would negatively impact the sustainability of fiscal policy.

[33] See the new IDB publication (2018g) *Development in the Americas. Better Spending for Better Lives: How Latin America and the Caribbean Can Do More with Less.*

[34] See IDB (2015j) and Annex II of that document.

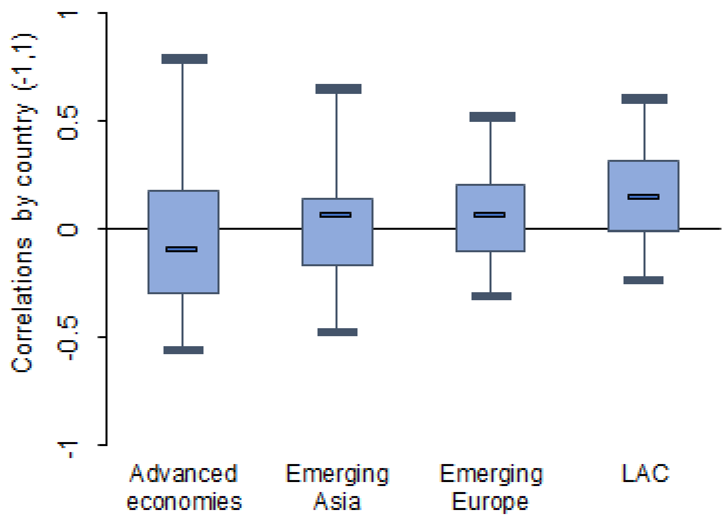
3.12 PPPs are the most generalized method in most countries, given the decrease in fiscal headroom. Several countries in the region implemented public-private partnership legal frameworks after the 2008 crisis.[35] However, the largest drive in this direction has taken place in this decade, due to shortages in public resources for financing infrastructure works and the interest of governments in attracting private resources for this purpose (Reyes-Tagle, 2018). The countries that traditionally have had appropriate structures and strong institutional capacity are Brazil, Colombia, Chile, Mexico, and Peru. However, contingent liabilities are estimated and recorded in very few cases, such as in Chile, Colombia, and Peru.

3.13 **Macroeconomic stability and fiscal rules.** There are limiting factors in achieving greater macroeconomic stability. First, the automatic stabilizers in the region are relatively small and therefore ineffective in moderating output volatility during regular economic cycles (IDB, 2013; Suescún, 2008). This is attributable to a tax structure in which income tax, particularly personal income tax, comprises a small share, and to the limited role of unemployment insurance as a result of informality levels and the low financial capacity of unemployment insurance funds. Second, the deterioration of the underlying fiscal position is partly due to certain limitations hindering the implementation of discretionary fiscal policy in the region. The fiscal stimulus packages introduced in most countries between 2008 and 2010 included significant increases in certain public expenditure categories (wages and transfers), and these increases are difficult to undo when economic conditions improve. In turn, there is evidence from several countries indicating that fiscal policy behaves asymmetrically: structural fiscal balances tend to worsen when production is below potential (IDB, 2014b), but the underlying fiscal position does not improve significantly in good times (when the output gap is positive). This reduces fiscal headroom. Third, cyclical behavior is different in the various categories of public expenditure (Ardanaz and Izquierdo, 2017; Clements et al., 2007; Akitoby et al., 2006): while current expenditures increase in good times, they do not decrease in bad times. On the contrary, public investment spending decreases in bad times and does not fully recover during the top stage of the cycle (Figure 4).[36] Fourth, despite advances in the past 20 years in implementing budgetary reforms aimed at reinforcing fiscal sustainability, there is room for improvement in the quality of budget institutions in several respects (Dabla-Norris et al., 2010; IDB, 2006a), such as fiscal rules (Corbacho et al., 2010; Celasun et al., 2015).

35 Peru (2008); Guatemala and Honduras (2010); Uruguay (2011); Colombia, Mexico, and Trinidad and Tobago (2012); El Salvador and Paraguay (2013); Jamaica (2014); Ecuador (2015); and Argentina, Costa Rica, and Nicaragua (2016) (Reyes-Tagle, 2018).

36 Bias is defined by the sign and size of a country's correlation between the cyclical component of GDP and public investment for periods in which there is a negative output gap. Positive and negative values indicate procyclical and countercyclical reactions, respectively. The average value for Latin American and Caribbean countries (0.14) is twice that for developing countries in Europe and Asia (for an average OECD country, the correlation is -10) (Ardanaz and Izquierdo, 2017).

Figure 4. Procyclical bias of capital expenditures



Source: Ardanaz and Izquierdo (2017).
Note: Bias is measured by means of the correlation between the cyclical component of capital expenditures and GDP, with higher values indicating a higher degree of procyclicality.

3.14 The lessons learned in the years since the Great Recession demonstrate the need to improve the design and implementation of fiscal instruments, particularly with regard to fiscal rules (Schaechter et al., 2012b; García, 2012; Ter-Minassian, 2010). Similarly, the region' experience with the stabilization funds suggests that these vehicles tend to undergo frequent changes and are not always used as expected, consequently failing to show any connection to fiscal performance (Villafuerte et al., 2010). With regard to MTFFs, the coverage, depth, and especially the use of these instruments with compulsory rather than merely indicative budgetary or fiscal goals are still limited (Filc and Scartascini, 2010; IDB, 2006a).

3.15 In terms of procedural rules, despite real evidence of a movement toward centralizing budget decision-making in the countries' finance ministries, there are persistent weaknesses in annual budget processes. These weaknesses include discretionary macroeconomic and/or revenue projections that are either under- or over-estimated, recurring modifications during the fiscal year that undermine budget credibility, problems of over- or under-execution (Hallerberg et al., 2009a), and low public sector coverage, including extrabudgetary transactions. Lastly, despite the merits and benefits associated with the introduction of institutions such as independent fiscal boards, the region has not contributed to expanding their presence in recent years. In fact, Chile, Colombia, Peru, and Brazil are the only countries in LAC with fiscal boards that are actually independent, and from a comparative standpoint, in some cases they have rather limited functions in the budgetary process (Debrun and Kinda, 2014; Kopits, 2013; Santiso and Varea, 2013).

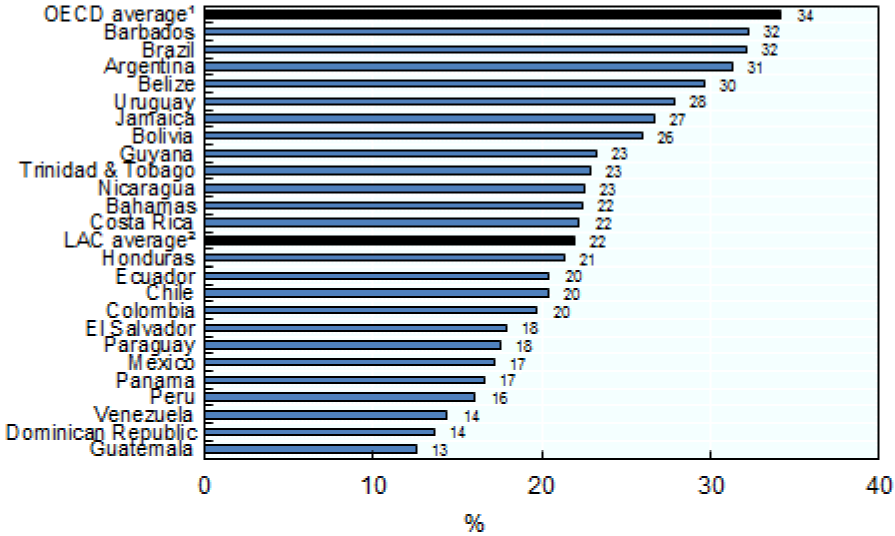
B. The structure of the tax and public expenditure systems and their impact on economic efficiency and productivity

3.16 **Tax systems.** Tax systems have also played an important role in the region's economic growth. The most recent findings for the countries of Latin America and the Caribbean (Martínez-Vázquez et al., 2013) draw conclusions similar to those for other countries (particularly the OECD countries) on how specific taxes impact growth, even at smaller sizes or dimensions. This can be explained by the significant weight of fiscal revenue derived from commodities (especially nonrenewable resources) and the limited weight in the region of real property and personal income taxes. Nonetheless, the most noteworthy effect is that in the region, tax systems have a wide range of results when it comes to the tax burden. In most of the countries, tax systems fail to generate revenues consistent with the country's development level, while in a few the fiscal burden is extremely high (Figure 5). On average, however, the trends exhibited in LAC countries over the past three decades show that tax revenue[37] rose by more than 54% (approximately 8 percentage points)—from an average of 14% of GDP in 1990 to an average of 22% in 2016 (IDB/Inter-American Center of Tax Administrations or CIAT/ECLAC/OECD, 2018; and IDB 2013c). This growth of the tax burden was largely driven by the VAT (24%) and corporate income tax (since 2013), fueled in turn by the rise in commodity prices (also by a large extent). For its part, personal income tax revenue posted the lowest growth of any tax revenue in the period under review.

3.17 Despite the growth of the tax burden in most LAC countries, the region continues to exhibit shortcomings in tax system adequacy and composition as compared with the OECD countries. There, social security contributions and the personal income tax remain the two main pillars (25.8% and 24.4%, respectively, of total tax receipts in 2016), compared with 16% and 9.5% of that total in the LAC countries. By contrast, the VAT and other indirect taxes on goods and services account for a much larger share of total receipts in the LAC countries (28.6% and 21.7%, respectively) than in the OECD countries (20% and 12.4%, respectively). In terms of GDP, differences in the weight of social security system contributions and personal income taxes are more pronounced in the OECD countries (9% and 8.4%, respectively) than in the LAC countries (3.7% and 2.2% respectively). For all other taxes, the differences are less than 1% of GDP (IDB/CIAT/ECLAC/OECD, 2018i; and IDB 2013c).

[37] Tax burden is defined as the revenue collected by a country in the form of taxes at all levels of government; fiscal burden additionally includes social security contributions; and equivalent fiscal pressure includes all of the above plus contributions to all mandatory social security systems (pension and health) and freely disposable net income transferred to the government by companies that exploit natural resources (IDB/CIAT/ECLAC/OECD, 2015).

Figure 5. Tax revenues as a % of GDP in Latin America and the Caribbean, 2016



Source: OECD/ECLAC/CIAT/IDB (2018).

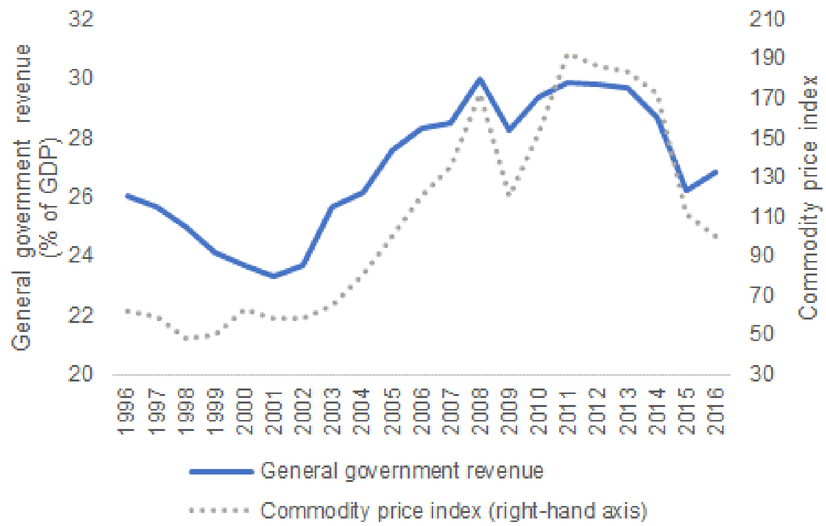
Notes: The data do not include subnational revenue for Argentina (although it does include revenue for the provinces), the Bahamas, Barbados, Cuba, Dominican Republic, Honduras, and Venezuela, since the information is not available.

[1]Represents the average for OECD member countries. Chile and Mexico are part of the average for the OECD group (35).

[2]Represents the unweighted average for 25 Latin American and Caribbean countries.

3.18 The common denominator and main focus of the tax reforms implemented in the past two decades has been to improve revenue collection, setting aside issues such as the impact on economic growth and efficiency (particularly the creation of savings and labor incentives) and the redistributive capacity of the fiscal system as a whole (Focanti et al., 2013). In point of fact, revenue collection continues to be volatile and highly dependent on commodity price cycles (Figure 6). For countries that produce nonrenewable natural resources, the average percentage of fiscal revenue derived from such resources rose from 19% of the total in between 1994 and 1998 to 26% of the total in 2016, having reached a maximum of 28% in 2013-2014. Over the same period, their share of revenue available to the central government also increased, along with the vulnerability of total revenue collection to price drops in the global markets (IDB, 2013c; Ossowski and Gonzáles, 2012). The dependence of tax revenue collection on commodity prices becomes a weakness for the tax system when income derived from both renewable and nonrenewable natural resources effectively displaces the countries' tax effort. Furthermore, revenue volatility adversely affects the public expenditure and investment cycle. Consequently, reducing the dependency associated with the commodity price cycle and cushioning the volatility of tax revenues constitutes a significant challenge for the region.

Figure 6. Fiscal revenues and commodity prices in Latin America and the Caribbean



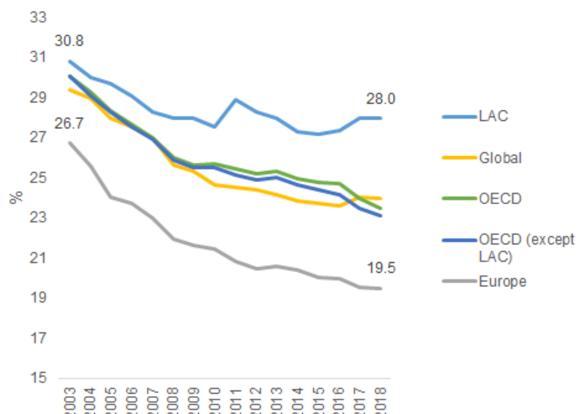
Source: Prepared by the authors based on IMF data.

3.19 The region's tax structures are also characterized by an abundance of fiscal incentives and preferential treatments for certain types of taxpayers and sectors, and low-quality taxes. In Latin America and the Caribbean, fiscal incentives have been used extensively to attract foreign investment with the aim of fostering economic growth or correcting a market failure (IDB, 2014a). At present, 88% of the countries in the region provide some sort of tax exemption, while 32% offer reduced rates, 52% offer deductions on investments in capital goods or on interest payments,[38] and 12% offer deductions on research and development investments (James, 2013). While the effectiveness of these measures has not been demonstrated, their costs in terms of efficiency and revenue losses have been documented. Thus, Cubeddu et al. (2008) quantify the tax expenditures arising from tax incentives in the Caribbean at 5.5% of GDP. Overall, forgone tax revenues in Latin American and Caribbean countries range from 0.5% to 6% of GDP (Villela et al., 2009). In addition, incentives distort decision-making by economic agents on budget allocation and mobilization, erode the tax base, create horizontal inequities in the system, and in some cases can lead government to forgo taxing residents so as to avoid preferential and distortionary treatment of foreign companies. Furthermore, incentives complicate the tax administration function and their opacity often creates fertile ground for corruption (IMF, 2011c). Similarly, many incentives tend to produce substantial benefits, thereby creating interest groups that exert pressure to make them permanent or extend them over time (IDB, 2014f). Free trade zones, another tax incentive instrument, have been used extensively in the region. They provide large benefits to their beneficiary businesses, have modest effectiveness, target large companies, and facilitate tax evasion through transfer pricing (Artana and Templado, 2012; IDB, 2015g).

[38] As a result of the Great Recession, the excessive interest deductions taken in corporate income taxes have come under scrutiny (de Mooji, 2011; Slemrod, 2009; IMF, 2009c). In practice, these deductions have created an excessive bias in favor of corporate debt as opposed to capital contributions as a means of financing investment, thus becoming a *de facto* savings disincentive. In addition, many multinational companies use intracorporate financing arrangements with their subsidiaries (particularly those located in developing countries) to transfer all of their profits to low-tax jurisdictions, thus eroding the income tax base.

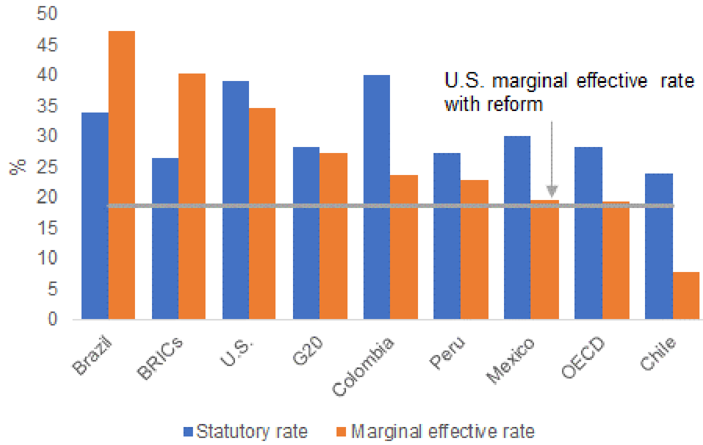
3.20 The region also faces challenges in terms of competitiveness in attracting foreign direct investment, for two reasons. First, during the past two decades there has been a considerable drop in the statutory rate for this tax at the global level (Figure 7). However, this has happened at a slower pace in Latin America and the Caribbean, which might be making it harder to attract foreign direct investment. However, the statutory corporate income tax rate provides little information as a measure of the erosion of the region's competitive position, making it necessary to calculate marginal effective tax rates. Bazel and Mintz (2017) calculated the effective tax rate on capital for a sample of 43 countries, five of which are in Latin America and the Caribbean (Brazil, Chile, Colombia, Mexico, and Peru). Before tax reforms in December 2017, Colombia and the United States had the highest statutory tax rates in the sample. The statutory rates for Brazil, Colombia (in 2018, it decreases to 33%), and Mexico are above 30% and higher than the average of those for OECD and G20 countries (Figure 8). With respect to effective rates, Colombia, Peru, and Mexico have rates below those of the United States, G20, and OECD countries. Among the countries included in the sample, Brazil has the highest effective tax rate, followed by Japan. Second, unlike OECD countries, which transitioned to territorial tax systems, most countries in the region have worldwide income tax systems, which are also detrimental to international competitiveness in attracting foreign direct investment.

Figure 7. Average statutory corporate income tax rate



Source: KPMG Online Tax Rates Tool.

Figure 8. 2017 corporate income tax rate with statutory and marginal effective rates (%)



Source: Mintz (2018); Bazel, Mintz, and Thompson (2018); Bazel and Mintz (2017).

Note: For Brazil, the high marginal effective tax rate is caused by the nonrefundable VAT on capital purchases. In other cases, wealth taxes and transfer taxes on fixed assets and financial transactions are significant.

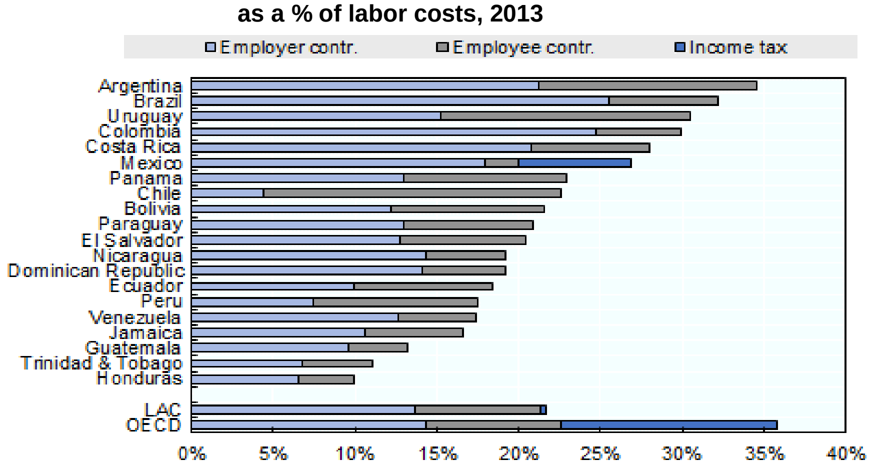
3.21 The need to mobilize domestic resources in the region has led to a search for and implementation of taxes that can generate quick revenue, without any attention being paid to the major distortions they produce. In the case of the tax on financial transactions, seven countries currently include it among their permanent taxes, collecting an average of 0.8% of GDP. The evidence (Kirilenko and Summers, 2003; Arbeláez et al., 2005; Kirilenko and Perry, 2004) indicates that the performance of this tax falls off in the medium term, since it lacks the capacity to become an efficient source of revenue. Moreover, the financial disintermediation created in the long term is irreversible, even if the tax is abolished. Meanwhile, production revenues or gross revenues only exist as revenues for subnational governments in some countries in the region. Although the rates are relatively low, these taxes may represent a tax burden similar or close to corporate income taxes, since they only include little or no deductions. In addition, they have downstream effects that can make them significantly distortionary, discouraging private investment and the efficient allocation of resources to produce goods and services.

3.22 The region's tax systems also make little use of taxes to correct negative externalities, particularly those associated with climate change. This characteristic is considered essential for the mobilization of resources to foster the development and efficiency of the tax systems by correcting negative externalities (such as those produced by fossil fuels, use of vehicles and traffic congestion in large cities, carbon emissions created by some industries, overexploitation of nonrenewable natural resources, and consumption of high-calorie foods and other products harmful to human health), but is being used in a limited way in Latin America and the Caribbean. The taxes most frequently used in the region to address these problems are excise taxes on fuel, alcoholic beverages, tobacco, and, most recently, fast foods, motor vehicles (IDB, 2013c), and sweetened beverages. Yet these taxes, which were originally conceived as a means to obtain revenue rather than correct externalities, are far from optimal for forcing economic agents to incorporate the costs of the resulting externalities (e.g. congestion, pollution, accidents, and disease) as well as the maintenance costs. Therefore, the challenge consists of improving the design of these taxes with a view to minimizing efficiency losses and promoting their inclusion in the tax structures of more countries.

3.23 Another challenge is that real estate (property) taxes are not well developed in the region. While the literature shows that property taxes can be efficient and equitable, the Latin American and Caribbean region has failed to make full use of them. Their main strength is that they are applied on a relatively immobile base and their progressivity is assured by the strong correlation between property ownership and income level (IMF, 2011c). While revenues from real property taxes in the OECD have risen from 0.9% of GDP to 1.2% in the past decade, property tax revenues in Latin America have remained practically unchanged over the same period at roughly 0.4% of GDP. This shows the significant potential of real estate taxes in the context of subnational governments (IDB, 2014e). Political economy factors and constraints in the administrative capacity of local governments, mainly related to updating and maintaining property registries, limit the performance of this tax. Uruguay, through its Innova Catastro initiative, is overcoming logistical and property registry maintenance cost issues by using drones and satellite imaging.

3.24 Owing to the low level of personal income tax collection, the variable that has the most impact on the allocation of factors of production—and that makes labor costs more expensive—are social security contributions, which are borne by salaried workers (Figure 9) (Bosch et al., 2013b). Given their high cost, which in effect is shouldered exclusively by salaried workers, social security contributions constitute the largest labor market distortion, as demonstrated by Antón et al. (2012) in the case of Mexico.

Figure 9. Income taxes plus employee and employer social security contributions as a % of labor costs, 2013

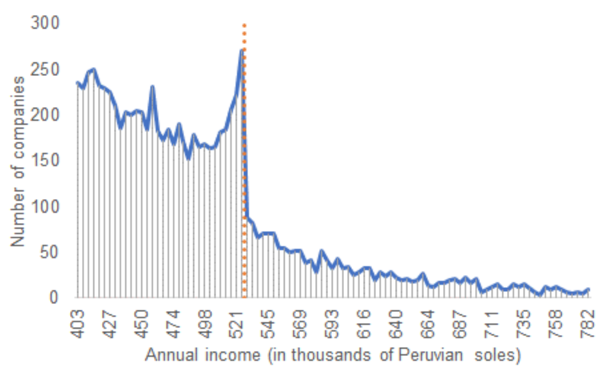


Source: OECD/ECLAC/CIAT/IDB (2018).

3.25 The high level of informality in the region's economies has led most countries to implement tax measures aimed at alleviating the situation (Annex I, Table 2). In this regard, countries have elected to implement special alternative income tax regimes and special treatment for small taxpayers. With respect to the former, alternative income tax regimes were designed to increase revenue, expand the tax base, and increase the number of taxpayers, thus aiming to reduce tax evasion (Bulutoglu, 1995). However, the implementation of a minimum tax covers up the problems of tax administrations and the legal flaws in the definition of income tax. Thus, the objective of revenue collection is ultimately eroded due to the diminished fiscal effort that can result from this measure (Baer, 2006). Furthermore, when the minimum tax is greater than the tax calculated on income, it discourages productive investment since inventories, machinery, and other fixed assets are being taxed. This can result in disinvestment in companies, regardless of the tax mechanism (e.g. lump sum, percentage of assets, and gross income). In fact, when levied above net income, it becomes a tax on capital (IDB, 2013c).

3.26 These special tax regimes for small companies are widely disseminated throughout the region. In fact, with the exception of El Salvador[39], Panama, and Venezuela, the other countries of the region have implemented some type of differential treatment system. The evidence suggests that at best, these policies achieve only marginally significant and temporary increases in informal employment (Galiani et al. 2017; Rocha et al. 2018) and generate more incentives for tax avoidance, since many companies will prefer to declare less income to reduce their actual tax rate. Evidence in Peru suggests that systems of this type promote tax evasion and discourage company growth (Figure 10) (Azuero, et al. 2017). As mentioned in Section II, international evidence suggests that by subsidizing an economy's least productive sector these policies can reduce productivity by up to 25%. Although there is no hard evidence as to impact of such policies on productivity in LAC, these systems may in fact be significantly undermining the efficient allocation of production factors. Furthermore, they can create incentives for companies to break up into several smaller companies in order to reap tax benefits (SUNAT, 2018). According to Busso, Madrigal, and Pagés (2013), if LAC's manufacturing sectors put an end to the inefficient allocation of factors of production, the result would be productivity gains of between 41% and 122%.

Figure 10. Distribution of companies and eligibility threshold for Peru's special corporate income tax system



Source: Azuero, et al. (2017)
Note: This figure depicts the distribution of the companies participating in Peru's special income tax system. For companies with annual income of less than S/ 525,000, participation in this system is voluntarily. Under this system, they pay a tax of 1.5% on their income, instead of the 29.5% corporate income tax rate on annual earnings. This figure shows a surge around the eligibility threshold, which would support the view that companies have incentives to limit their size or underreport income in order to reap the tax benefits of the country's special income tax system.

3.27 In addition, these levies elevate the risk that activities taxed under the normal or personal income tax system will be passed off as activities subject to the alternative

[39] Although El Salvador has no special tax system for small businesses, the 2014 Microenterprise and Small Business Promotion and Development Act (Ley de Fomento, Protección y Desarrollo para la Micro y Pequeña Empresa de 2014) instructs the Ministry of Finance to develop a special tax system for small and medium-sized enterprises.

regime. Similarly, simplified taxes pose the obvious risk of giving rise to fake invoices since they are disconnected from the general system or are levied in the form of a lump sum or an amount not dependent on the volume of income. This encourages both VAT and income tax evasion. Recently, leveraged by electronic invoicing and the use of big data and data analytics, some tax administrations, such as the Ministry of Finance of Pernambuco, Brazil, have been implementing alert systems for taxpayer registration. They seek primary indications of tax risks, such as potential front companies or businesses established to obtain tax credits.

3.28 One of the most significant impacts expected of the digital economy, robotics and process automation, and machine learning, is how they will affect the labor market, which is still being explored. These impacts, together with the effects of globalization and demographic changes will have consequences on the quantity and quality of labor markets going forward, and, by extension, on tax regimes and social protection programs, including pension systems (OECD 2018). As mentioned previously, social security contributions constitute one of the three essential pillars of the tax systems of Latin America and the Caribbean after VAT and corporate income tax. This will certainly affect the structure of tax systems and future level of revenue collection as a result of the changes that will occur in the composition of labor markets both internationally and in the region.

3.29 **Tax administration.** Many tax administrations in the region have accelerated institutional and technological modernization processes in recent years. Nevertheless, several countries still have lags in technology and important processes. These include taxpayer records; current accounts for taxpayers; manual monitoring instead of electronic, risk-based monitoring; and the use of sophisticated techniques such as data analytics, artificial intelligence, and big data for cross-tabulation of information. Many systems within tax administrations still operate as separate silos rather than being integrated to provide a 360-degree view of taxpayers that includes all the processes for all types of taxes. One of the areas with the least integration is customs processing, which lacks the transmission of information and import shipment manifests in advance in an electronic format. Overall, tax and customs administrations are managed without an integrated vision or an organizational culture based on risk management. However, there are significant differences among countries. This largely explains why there are still high rates of tax evasion, for both VAT and income taxes, the latter both by individuals and companies (Pecho et al., 2012).

3.30 There is a necessary institutional network supporting the tax collection functions (penalty systems, tax courts, ethics and administrative committees). The institutions tasked with supporting the tax administrations in certain collection functions require more general or overall strengthening processes. In this regard, the development of the Tax Code Model (IDB/*Deutsche Gesellschaft für Internationale Zusammenarbeit* or GIZ/CIAT, 2015) is an important step forward designed to create greater stability by regulating the relations between tax administrations and taxpayers.

3.31 The electronic invoicing of taxes is one of Latin America’s contributions to the fight against evasion, spearheading the digitalization of tax and customs administrations and supporting tax transparency in domestic settings. Electronic invoicing was initially introduced by tax administrations as an instrument of documentary control over the invoicing process, so as to avert both the omission of sales and the inclusion of fake purchases (Barreix and Zambrano, 2018). Brazil, Chile, and Mexico have achieved the most progress, particularly in fully developing electronic invoicing, including electronic invoicing for foreign trade and up to the consumer level, in addition to intensively using the Internet for all tax return filing and payment processes. The original idea was extended to other areas of tax control, such as electronic payroll in Argentina, Mexico, and Peru; monitoring goods in transit and electronic accounting in Brazil; and new services such as factoring in Chile and providing benchmark prices for consumer goods in Brazilian states.

3.32 In fact, electronic invoicing not only facilitates better monitoring of tax transactions, but has provided innovations that benefit taxpayers through services that increase their competitiveness, reducing the time spent and lowering compliance costs with high levels of security. In addition, expanding the digitalization efforts of tax administrations and using emerging technologies have the potential to improve collection efficiency (Barreix and Zambrano, 2018). For example, in Brazil, the electronic tax invoice has enabled a reduction in the VAT evasion rate from 32% to 25% (Instituto Brasileiro de Planejamento e Tributação). At the same time, it has streamlined private businesses, reduced informal employment, decreased paper consumption, and provided additional benefits to the collection process (McKinsey, 2014).[40]

3.33 **Expenditure policy and management.**[41] Public expenditure policies in Latin America and the Caribbean face significant medium- and long-term challenges that, unless resolved, could jeopardize the quest for economic growth, fiscal consolidation, and equity. The region has room to enhance the public expenditure efficiency, particularly spending on infrastructure, education, and health due to its significance for growth, and to generate savings in energy and transportation subsidies, and in the leakage of conditional cash transfers (IDB, 2015k, 2016f, 2017b, 2017c, 2018g). In the short and medium term, the region can enhance fiscal consolidation through savings on spurious expenditures and other inefficiencies, including improvements in the management of procurement and human resource systems, explicit subsidies (conditional transfers and noncontributory pensions), and implicit subsidies (price of energy, rates for specific public services, and tax expenditure. In the medium term, strategic planning should improve expenditure allocation, targeting, composition, and quality so as to: (i) maximize growth and increase productivity; and (ii) reduce poverty and inequality. The optimal combination will depend on each country's circumstances and strategic priorities.

3.34 Explicit and implicit subsidies absorb considerable resources in LAC countries, the most important being energy susbsidies, tax expenditure, noncontributory pension leakage, and conditional transfers. Even poverty reduction programs that have received very positive evaluations—e.g. conditional transfers—present significant leakages to nonpoor population segments. Some subsidies, especially implicit ones, lack justification in terms of their economic efficiency or tax equity, since they are extended to the entire population and therefore result in significant leakages to nonpoor population segments. Such is the case of energy prices (particularly the implicit fuel subsidy), rates for specific public services, and tax expenditure (which constitutes a tax subsidy that should be explicitly incorporated as an expense in the

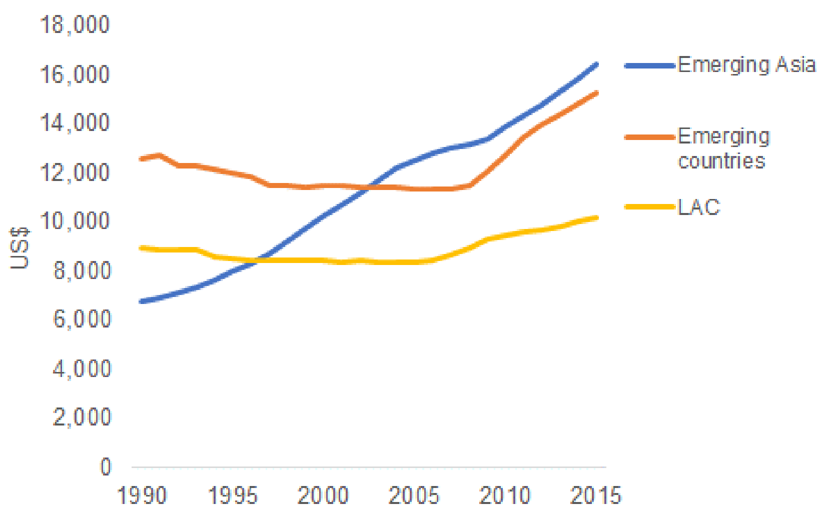
40 The electronic tax invoice and the Digital Public Accounting System made it more likely that tax evaders would be identified and helped reduce informal employment in Brazil in the past 10 years from 55% to 40%.

41 This section only provides a summary of expenditure policy and management in LAC. For an exhaustive analysis of this topic, see *Development in the Americas. Better Spending for Better Lives: How Latin America and the Caribbean Can Do More with Less* (IDB, 2018g).

countries' annual budgets). On average, the countries of LAC spend 2.6% of their GDP on subsidies, including the two above-mentioned social programs, energy subsidies, and tax expenditure. Of these subsidies, roughly two thirds (65.4% or 1.7% of GDP) leak to nonpoor population segments, thereby evidencing a significant opportunity for improving fiscal sustainability in some countries or for more efficiently channeling resources for investment in human capital and public infrastructure (IDB 2018g) to boost growth in other countries.

3.35 From a medium-term view, public investment contributions to total spending have been decreasing secularly (Izquierdo, Puig, and Vuletin 2018; Serebrisky, 2018). In addition, the region has one of the world's lowest stocks of real public capital per capita, and its evolution over time contrasts with the behavior observed in emerging Asian countries that have experienced periods of accelerated growth (Figure 11). As a result, Latin America and the Caribbean lost ground in terms of competitiveness in relation to its peers and competitors. Based on an analysis of efficiency gaps (IMF, 2015e), there is significant room to improve public investment efficiency in the region, since there could be an efficiency gain of 27% with the same level of investment.

Figure 11. Public capital per capita (2011 purchasing power parity)



Source: Ardanaz et al. (2018), based on the IMF's 2017 Investment and Capital Stock Dataset.

3.36 Recent trends in the use of digital technologies promise to help improve the efficiency of managing investments, enabling access to relevant information on gaps in infrastructure and population needs through cross-tabulation and complex analyses of data from multiple sources, as well as through the adoption of information systems to manage the entire project cycle in an automated, transparent, timely, and intelligent manner.

3.37 Starting in the 1980s, many countries in the region decentralized a significant portion of their expenditures to subnational governments. Subnational public expenditures in Argentina, Brazil, and Mexico account for more than 40% of total expenditures. Consequently, the way responsibilities are allocated and the degree of fiscal correspondence in terms of taxation powers are major determinants of the incentives to provide basic services with minimum levels of quality (such as health, education, and infrastructure). There are opportunities for introducing fiscal savings by streamlining the system of transfers between different levels of government and performing better monitoring and control of expenditures and their results. Conditional intergovernmental transfers and equalization transfers can be improved by aligning them with a given country's strategic objectives. Reforms in the mobilization of subnational resources in Latin America and the Caribbean are essential for fostering development at the local level. The Decentralization and Subnational Governments SFD is a reference source for information on the diagnostic assessments, challenges, and policies regarding these issues in Latin America and the Caribbean (IDB, 2018e).

C. The impact of fiscal policy on equity and its relation to economic efficiency and productivity

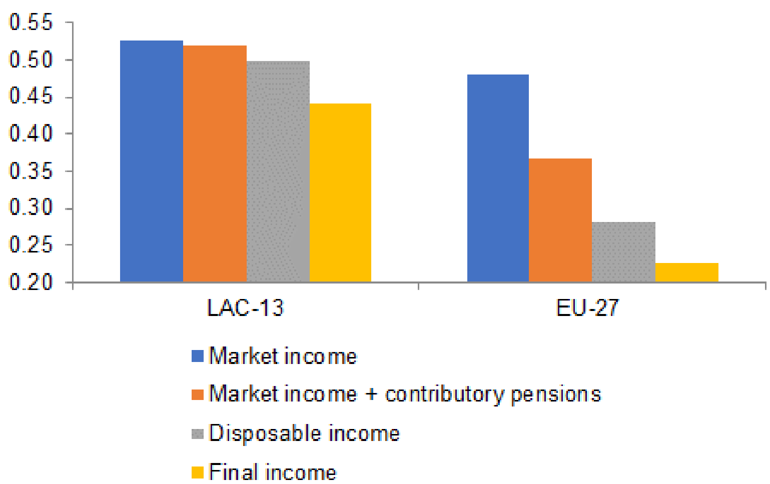
3.38 The distributive effects of tax policies in Latin America and the Caribbean have been evaluated extensively. The first studies for the region (Barreix et al., 2006, 2009a, 2009b) assessed the net impact of tax policy and the public expenditure it finances, showing that personal income taxes are very progressive but are paid by very few taxpayers. In addition, they showed that the VAT can be either progressive or regressive depending on the method used to estimate it. Thus, it is regressive when estimated on the basis of declared income, but its regressivity significantly decreases when the estimate is based on consumption and the contributions of the various income brackets and when the combined revenue-expenditure effect is examined. More recently, Lustig et al. (2015) found that direct taxes and cash transfers reduce inequality and poverty in Argentina, Brazil, and Uruguay, to a lesser extent in Mexico, and to a relatively limited extent in Bolivia and Peru. They also found that direct taxes are progressive, but that their redistributive impact is insignificant since direct tax collection as a percentage of GDP is very low.

3.39 Tax systems in Latin America and the Caribbean are affected by high tax expenditures, which are defined as the revenue forgone by the State when it grants incentives or benefits that reduce the tax burden for certain taxpayers (Villela, Lemgruber, and Jorrat, 2009; Pecho, 2014). In the five-year period of 2008-2012, tax revenue forgone for this reason in Latin American countries averaged 4.3% of GDP. For a region that on average collects 22% of GDP, the tax expenditure is high (18% of regional average tax collection), particularly considering extreme cases such as Guatemala, where forgone taxes total more than 50% of tax revenues. Worse yet are the effects of many of the tax expenditures on the tax system's equity. Tax incentives for businesses create horizontal inequities among taxpayers, depending on the sector in which the business activities are carried out.

3.40 Furthermore, it is worth noting that, in Latin American and Caribbean countries, personal income tax deductions (approximately 1.6% of GDP) on mortgage interest payments, private education expenses for children of a certain age, medical expenses, and other expenses that only benefit higher-income population groups create repercussions on equity and are therefore a highly regressive form of tax expenditure. Similarly, tax exemptions in the form of reduced VAT rates, zero rates (for activities other than exports), and differential rates aimed at enhancing the progressivity of this tax end up creating a regressive tax expenditure as a result of targeting or inclusion errors (Barreix et al., 2009), since many of these exemptions end up benefiting a larger proportion of higher-income population segments.

3.41 In 12 Latin American and Caribbean countries, taxes and direct transfers reduce inequality on average by only 5%, while in a sample of OECD and European Union countries they are shown to reduce it by 40% (Figure 11). First, the Latin American and Caribbean countries that reduce inequality the most (between 9% and 14%) are, in descending order, Uruguay, Argentina, and Brazil. These countries lead the region in social spending. However, even when compared to these countries, advanced nations reduce inequality four times more. The low weight of some direct taxes, such as the personal income tax and real estate tax in most Latin American and Caribbean countries, largely explains these results. Second, the redistributive effect of pension expenditures is minimal. In terms of contributory pensions, the average expenditure for the 12 countries is 4.1% of GDP, compared to 8.7% for the OECD.[42] Despite the fact that some Latin American and Caribbean countries spend a figure close to the OECD average on pensions as a percentage of GDP, the difference between the Gini coefficient with, and without, pensions is minimal in these countries and much greater in the OECD.[43] Third, direct transfers in Latin American and Caribbean countries have targeting problems, with leakage toward the nonpoor, compared to OECD countries. On average, approximately 40% of conditional transfer beneficiaries and 50% of noncontributory pension beneficiaries in Latin America and the Caribbean are not poor (Robles et al., 2015).

Figure 12. Effect of fiscal policy on income distribution (Gini coefficient for market income and final income) Selected Latin American and Caribbean countries and average for the European Union 27 (circa 2010)



Source: IDB/OECD (2016) based on Lustig and Pessino (2014) and Lustig (2015).

[42] For the OECD, this figure includes both contributory and noncontributory pensions. This is not the case for the Latin American and Caribbean countries.

[43] With the addition of pensions, the Gini coefficient for market income only drops from 0.523 to 0.516 in Latin America and the Caribbean, while dropping from 0.482 to 0.366 in the OECD; in other words, their equalizer effect is slightly higher than 1% in Latin America and the Caribbean, compared to almost 25% in the OECD (Lustig and Pessino, 2014; Lustig, 2015). This is due to the low coverage of the contributory pension systems in most Latin American and Caribbean countries (an average of 41%), since these systems include only formal employees and do not extend to informal workers, who for the most part are low-income individuals (Bosch et. al, 2013b).

3.42 One of the main reasons for the spending leakages is the high informality level throughout the region, which affects the entire welfare and redistribution system in terms of both actual tax collection and redistribution of resources.[44] Informality, which is used by some taxpayers to avoid certain taxes (particularly, payroll or labor factor taxes) and benefit from certain social transfers, hinders the functioning and effectiveness of the welfare system and limits effective revenue collection and the redistributive capacity thereof (Birdsall et al., 2008). Obviously, the ideal solution is to create economic incentives to reduce the problem of informality and, along with them, subsidies used to counteract its undesirable effects. At the same time, the targeting systems can and should be improved. Several countries in the region use means-tested or geographical targeting systems, which provide an estimate of per-capita income or consumption based on demographic characteristics and ownership of assets, but account for only 50% to 60% of the observed variability in living standards (Robles et al., 2015). The integrated information systems implemented in Argentina in 1997 and in Brazil in 2001 could be used as initial models to improve targeting in the region's countries (Pessino and Fenochietto, 2007; Azevedo et al., 2011).

3.43 Most of the studies addressing the impact of public spending on inequality and poverty fail to account for the regressive effect of energy subsidies, which are economically inefficient, poorly targeted, and thus referred to as pro-rich subsidies.[45] In several countries, propane gas, gasoline, diesel, and electricity subsidies benefit the higher-income population segments, with decile 10 receiving one quarter of all the benefits while the poorest decile receives only 5%. In other words, in these countries, the high-income population receives five times more subsidies than the poor (Llerena et al., 2015; Paz-Arauco et al., 2014). These subsidies are distortionary, since they are extended to the entire population through the final sales price of the subsidized products, regardless of the consumers' income level. To reverse these distortions, widespread energy subsidies should be replaced by targeted transfers (Arze del Granado et al., 2012; IDB, 2015b, 2017b; OECD/IDB, 2016). These transfers, valued at cost in the fiscal policy incidence analysis, are on average highly progressive, reducing inequality to an even greater extent than do direct transfers.

3.44 Beginning in the 1990s, most of the countries, starting with Mexico, Venezuela, and then Brazil, developed conditional cash transfer programs (CCTPs). To ensure that these transfers do not become a permanent need, they should be directly contingent on investment by the beneficiary households in human capital, particularly health, nutrition, and education, especially for children (Levy, 2015). In turn, the amounts should be limited and should not be permanent in order to avoid creating a disincentive for development and employment (IDB, 2015k, 2016f, 2017b, 2017c).

3.45 The excessive tax burden on formal employment, with a social security system that discriminates in favor of formal workers, prevents more of the expected benefits of CCTPs from being captured. In fact, this circumstance has forced the region to create parallel noncontributory social security programs, for both health and pensions, which are poor in comparison to the benefits of the social security systems

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44 In order to be effective, the welfare state needs to know the first and last name, identification number, and address of the beneficiaries, as well as their transactions, assets, and market income.

45 If the subsidy's concentration or quasi-Gini coefficient is positive, the subsidy benefits the higher-income population.

for formal workers. There is no unemployment insurance or workplace accident or disability coverage in the informal sector. Moreover, given the low proportion of productive capital in the informal sector and the limited size of informal enterprises or companies, largely to avoid labor or other taxes, productivity is extremely low in most of these economic activities (IDB, 2017c).[46] Consequently, the region has reached a point where it levies various fiscal charges (labor-related and otherwise) on formality and subsidizes informality in a number of ways. These circumstances not only limit the growth of the productivity and real income of informal workers, but also unfairly discriminate in terms of social security coverage and quality, prevent breaking the vicious circle of informality and poverty for which CCTPs were designed, and put significant pressure on fiscal sustainability (Levy, 2015). The dynamics among poverty, equity, efficiency, and fiscal sustainability may constitute one of the most important challenges for the region's economic development.

3.46 Lastly, an essential aspect of the relationship between equity on one hand and fiscal policy and management on the other, regarding which the theoretical and empirical evidence is still limited, is the impact of fiscal policy and management on gender equity (Grown and Valodia, 2010). This impact can be assessed by focusing on three significant elements of fiscal policy and management: tax policy, budgeting, and public procurement. In general, the tax systems in Latin America and the Caribbean are implicitly biased against women-led households, despite the absence of any bias in the tax codes. This systemic bias is particularly true in the case of direct taxes, while in the case of indirect taxes it depends on how wellbeing is measured (IDB, 2015i). With regard to the budget, Latin American and Caribbean countries continue to exert only limited efforts to examine the impact of budget allocations on the gender gap. However, noteworthy initiatives on this issue have started in Trinidad and Tobago, and St. Vincent and the Grenadines in the Caribbean (Christie and Thakur, 2016), as well as in Mexico, Ecuador, Bolivia, and El Salvador in Latin America (Pérez Fragoso and Rodríguez Enríquez, 2016). With respect to public procurement, significant strides have been made in some Latin American and Caribbean countries, such as Chile and the Dominican Republic. Their models have shown positive effects, not only from the standpoint of inclusion and empowerment of women, but also in terms of economic growth. Therefore, the institutional capacity in various countries in the region should be strengthened in order to reduce barriers to entry and foster the participation of women-led enterprises in public procurement.

IV. Lessons Learned from the Bank's Experience in the Sector

A. Reports by the Office of Evaluation and Oversight

4.1 This section is based on the conclusions and recommendations from the following recent evaluations by the Office of Evaluation and Oversight (OVE): (i) an evaluation of the Bank's role in tax policy and administration (IDB, 2017d); (ii) the most recent

[46] In late 2012, Colombia approved a tax reform (Law 1607), which reduced the tax burden on the labor factor, or payroll taxes, in order to stimulate formal employment and enhance productivity. The loss in revenues resulting from these measures was neutralized with an adjustment to the corporate income tax and a simplification of VAT rates. The reform increased formal employment and reduced the unemployment rate, while increasing revenues as a result of enhanced growth (Steiner, 2014; Antón, 2014; Bernal et al., 2015).

country program evaluations (CPEs), as regards the Sector's relevance in the country strategy evaluated; and (iii) the Annual Report 2013-2014 (IDB, 2015h).

4.2 **Review of the Bank's support in tax policy and administration, 2007-2016**.[47] The Bank has combined its work on tax issues with public expenditure management and macrofiscal aspects, approving a total of US$15.1 billion in operations since 2007, in addition to providing knowledge products and sponsoring dissemination activities. The report highlights that the Bank has accumulated considerable experience in tax policy, positioned itself as a trusted advisor for the countries in the region that is consistent with country priorities, and focused on raising tax revenues, particularly in countries with lower revenue capacity.

4.3 The main OVE recommendations include the following: (i) continue to work towards understanding and addressing tradeoffs in fiscal reforms in terms of equity and efficiency; (ii) support the trusted advisor role by ensuring sufficient and sustainable in-house technical expertise, even with staff turnover; (iii) foster greater cooperation and knowledge sharing among tax authorities in Latin America and the Caribbean; (iv) continue to seek synergies between the Bank's support for tax policy and revenue administration, with an appropriate mix of financial instruments; and (v) adapt Bank processes and procedures to facilitate longer-term and continuous support, even after the end of an IDB operation. The Bank has prepared an action plan to implement the recommendations over a four-year period.

4.4 With respect to recent CPEs[48] (approved since 2015), OVE highlights the Bank's support in the design of tax reforms (El Salvador, Guatemala, and the Dominican Republic); expenditure management (Bolivia, Suriname, and Trinidad and Tobago); capacity-building of fiscal institutions (Ecuador and Uruguay); progress in financial management (Nicaragua); and improvements in tax and customs administrations (Peru). OVE also highlights that there is room for the Bank to continue supporting countries in order to achieve progress toward more efficient, progressive tax systems (Ecuador); increase collection capacity (Guatemala); improve the quality, equity, and efficiency of public spending (Argentina, Ecuador, Guatemala, the Dominican Republic, and Nicaragua); support fiscal consolidation (El Salvador and Ecuador); and improve the efficiency and sustainability of public investment (Nicaragua).

4.5 Lastly, OVE underscores the role of policy-based loans (PBLs) as one of the major tools for supporting fiscal sustainability and achieving structural reforms in the region. OVE also emphasizes that the Bank should balance short-term fiscal needs with long-term support for significant fiscal, institutional, and regulatory reforms (IDB, 2015h).

B. Results of the development effectiveness matrix

4.6 The development effectiveness of Sector projects has continued to improve during the 2015-2017 period, achieving scores similar to those of the rest of Bank's portfolio

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[47] OVE also evaluated the Bank's role in the fiscal sector between 1990 and 2004, prior to the existence of a sector strategy and framework. The main achievements and recommendations are summarized in the first version of the SFD (IDB, 2015j) and in that evaluation (IDB, 2006b).

[48] The first version of the SFD (IDB, 2015j) summarized the conclusions and recommendations from the CPEs approved prior to 2015. The CPEs summarized in this SFD include: IDB, 2015l-n, 2016a-e, 2017a, 2018a-c.

and above the score for the Sector in 2014. This demonstrates an awareness of the actions needed to address the Sector's main challenges.

C. Lessons learned from experience with Bank operations

4.7 The Knowledge, Innovation, and Communication Department (KIC) and the Fiscal and Municipal Management Division (IFD/FMM) conducted a study to extract the lessons learned from a sample of 19 sovereign-guaranteed operations in the Sector portfolio for a majority of the Bank's countries, which have been approved since 2015.[49] It was based on documentation[50] from the selected projects[51] and interviews of Project Team Leaders.

1. Crosscutting lessons learned in the Sector:

4.8 **The Bank leads a consensus dialogue.** The Bank is a key partner for countries designing and implementing fiscal reforms and has engendered trust in embarking on this type of process, which tends to be politically and institutionally complex. In Peru, a tax reform program (4428/OC-PE) continued during a political transition, as a result of an ongoing technical dialogue. Reforms in Mexico (4071/CH-ME and 4074/OC-ME) and Argentina (4569/OC-AR) demonstrate the importance of having a solid political consensus, both at a national and subnational level, relying on the Bank's participation in forums and the preparation of diagnostic assessments to promote fiscal responsibility reforms. It has also been essential to promote dialogue with the private sector from early stages, since this facilitates an understanding of the long-term benefits of tax reform, enables reaching agreements with more political consensus, and limits risks to the sustainability of reforms. In Mexico, the Bank contributed to reaching a tax cooperation agreement with the private sector (3676/OC-ME). In Colombia (4552/OC-CO), the Bank provided technical support to the government that enabled the Comprehensive Structural Tax Reform Commission to achieve a consensus based on the tax reform approved in December 2016.

4.9 **Training activities to catalyze the sustainability of results.** The Bank has supported training activities customized to the institutional needs of the various executing agencies. In Honduras (operation 3541/BL-HO), the Bank supported the contracting of a temporary consultant-manager to strengthen human resources management at the Revenue Administration Service and financed staff training. In Mexico (operations 4071/CH-ME and 4074/OC-ME), the Bank facilitated training for high-level officials prior to fiscal regulatory reforms to prevent delays in the application of regulations. And in Argentina (operation 4500/OC-AR), since the Federal Administration of Public Revenue already had personnel with strong academic backgrounds, the Bank provided specialized training on advanced analytics tools to a selected group of staff from various areas of the tax administration.

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[49] For the prior SFD, 22 sovereign-guaranteed operations were analyzed, and the lessons learned were summarized in that version (IDB, 2015j).

[50] The analyzed documents include loan proposals and contracts, results matrices, risk matrices, Institutional Capacity Assessment System reports, operating regulations, multiyear execution plans and annual work plans, technical cooperation projects in support of loans, project monitoring reports, midterm and final evaluation reports, project completion reports (if available), and OVE evaluations.

[51] Operations 4460/OC-BR, 4459/OC-BR, 4458/OC-BR, 4436/OC-BR, 3452/OC-DR, 4114/OC-DR, 3541/BL-HO, 3511/OC-JA, 3880/OC-JA, 3676/OC-ME, 4071/CH-ME, 4072/OC-ME, 4428/OC-PE, 4500/OC-AR, 4552/OC-CO, 4554/OC-BR, 4569/OC-AR, BR-L1511, BR-L1512, and BR-L1513.

4.10 **Develop synergies with other Bank sectors.** From 2012 to 2017, the Bank approved 198 Sector loans using the double-booking mechanism (23% of the total sovereign-guaranteed operations approved). Using this mechanism for Sector loans reflects the cooperation efforts of Bank specialists, follows a proactive approach to resolving the challenges countries face, and smooths the path for future loans. IFD/FMM collaborated with: the Labor Markets Unit (SCL/LMK) in Jamaica for the Fiscal Structural Programme for Economic Growth III (operation 3880/OC-JA); the Competitiveness, Technology, and Innovation Division (IFD/CTI) (operation 4569/OC-AR), the Trade and Investment Division (INT/TIN) in Argentina (operation 4500/OC-AR); and the Innovation in Citizen Services Division (IFD/ICS) in Honduras (operation 3541/BL-HO).

2. Economic growth through sustainable fiscal measures:

4.11 **Fiscal reforms aimed at promoting economic growth.** Fiscal programs are designed with an integrated, comprehensive perspective, adopting a long-term vision and coordinating effective responses that favor economic growth in the country. The Fiscal Structural Programme for Economic Growth (operations 3148/OC-JA, 3511/OC-JA, and 3880/OC-JA) helped Jamaica achieve a sustainable fiscal path through various fiscal measures.[52] In Mexico (operations 4071/CH-ME and 4074/OC-ME), the support for the design and implementation of a Financial Discipline Law in federal entities and municipios responded to debt challenges at the state level to ensure the country's sustainability. In Argentina, a PBL (operation 4569/OC-AR) included a comprehensive package to address the country's economic imbalances.[53] In Colombia, a PBL (operation 4552/OC-CO) supported structural reforms[54] to address a negative economic scenario due to falling international oil prices.

4.12 **Elimination of distortions as a growth promotion measure.** Given the existence of distortionary taxes that adversely impact the productivity, foreign investment, and competitiveness of companies, the Bank is supporting the governments in creating fiscal headroom. Measures include a reform of the Fiscal Responsibility Law in Argentina (operation 4569/OC-AR)[55] and the elimination of energy subsidies due to their regressive nature in Mexico (operation 3676/OC-ME).

3. Specialization in other fiscal management areas:

4.13 **Centralized monitoring of State-owned enterprises as a tool to mitigate information asymmetries.** Evidence from operations in countries such as Peru, Chile, and Brazil indicates that establishing a supervision and monitoring unit in State-owned enterprises produces a significant reduction in operating deficits. In Argentina, the creation of a unit within the orbit of the Office of the Cabinet Chief to centralize monitoring and supervision of State-owned enterprises, along with the introduction of good governance guidelines approved as part of the Program to

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52 These include implementing tax reform, enhancing tax and customs administration effectiveness, enhancing control over budgetary expenditure, and improving the fiscal sustainability of the National Insurance Scheme.

53 These include measures to improve the investment climate, such as eliminating distortionary taxes, lowering transaction and financing costs for companies, and improving the efficiency of public investment (including investment by State-owned enterprises).

54 These include improving public expenditure and debt management, improving contingent liability management, and implementing an electronic invoicing model aligned with country needs.

55 Specifically, these are payroll and gross income taxes, and high marginal rates for income taxes.

Boost Growth (operation 4569/OC-AR), have been associated with a reduction in the operating deficits of these enterprises.

4.14 **Expansion of the various stages of the investment cycle.** The Bank's work in the public investment management area from 2000 to 2017 (Ardanaz, Briceño, and García, 2018) underscores the need to maintain a comprehensive vision of all stages in the project cycle. This includes introducing a proper balance in the influence of National Public Investment Systems, building capacity to manage public investment in its various stages, and incorporating investment into a country's medium-term development plans. In Peru (operation 4428/OC-PE), the Bank supports strengthening the institutional architecture for public investment, which includes: (i) improvement of the organizational framework; (ii) development of investment management models; and (iii) multiyear programming of public investment.

4. The role of digitalization in the Sector:

4.15 **Increased efficiency and transparency in fiscal management.** Using digital technologies and data analysis enables the reduction of inefficiencies in the execution of public resources. The Bank supported the use of digital technologies in Peru (operation 4428/OC-PE) and Colombia (operation 4552/OC-CO), seeking to: (i) establish benchmark prices for competitive bidding, based on data from electronic invoicing; and (ii) implement the Electronic Public Contracting System II, with pricing framework agreements linking major stores to the Tienda Virtual del Estado [Virtual Store of the State]. In Brazil, the Program to Support the Management and Integration of Finance Administrations II (PROFISCO II) (CCLIP BR-X1039) implemented data analysis through emerging technologies such as data mining tools, to provide further leverage from the Digital Public Accounting System and the Integrated Financial Management Systems.

4.16 **Improved performance of tax administrations.** In Brazil, PROFISCO I increased the efficiency of fiscal controls in the states and increased the collection of the tax on circulation of goods and services by implementing electronic invoicing, electronic tax receipts, digital fiscal registration, digital accounting registration, and the Digital Public Accounting System. In Colombia (operation 4552/OC-CO), the operation enabled a modification of the electronic invoicing model, which went from an asynchronous model without prevalidation from the National Tax and Customs Directorate to a real-time model that allows prevalidation.

4.17 **Innovative tools to improve execution.** PROFISCO II incorporated important lessons learned during the first stage, including: (i) the Fiscal Management Maturity and Performance Assessment methodology; and (ii) the Implementation Acceleration Plan, which complements formal instruments such as progress monitoring reports, supporting transparency and the achievement of results.

4.18 **Efficiency in customer service for taxpayers.** The Bank's work in Argentina, Chile, Ecuador, Mexico, Peru, and Brazil underscores that the use of new digital technologies in services for taxpayers increases voluntary compliance, resulting in increased tax collection. In Argentina (operation 4500/OC-AR), the use of data supported improvements in managing relationships with the public through the Institutional Assistance Management System, achieving increased efficiency and effectiveness.

5. Gender equity and effects of climate change on the Sector:

4.19 **An active role in including gender equity in Sector operations.** In the context of the limited literature available on incorporating a gender focus into fiscal policy, the Bank has followed a strategy that shows significant progress. For operations in the Sector, the Bank stepped up capacity and engaged gender specialists and consultants to support the design of projects that identify gaps, prevent additional distortions, and introduce corrective measures. Specifically, the gender components included in Sector operations involve training to heighten civil servants' awareness of gender issues and promote research to analyze labor disparities due to gender gaps (BID, 2018h). In the Dominican Republic (operation 4114/OC-DR), the Bank promoted a decrease in the gender gap in managing corporate relations at the country's Revenue Service by means of strengthening actions for human resources with a gender focus. In Peru (operation 4428/OC-PE), a multipurpose approach was included in project formulation, introducing variables such as equity, territorial coverage, and resilience to climate change.[56]

D. The Bank's comparative advantages in the fiscal sector

4.20 **Loans.** From 2007 to 2017,[57] the Bank approved a total of US$17.4 billion for Sector operations (177 loans),[58] accounting for roughly 14% of the total sovereign-guaranteed loans approved. In addition, 70% of those approved resources were in the form of PBLs. Through these projects, the Bank has supported the main fiscal management reforms and improvements in the region.

4.21 From 2015 to 2017, the Bank approved 24 loans totaling nearly US$3 billion, supporting the main Sector reforms in the region, including those in Argentina, Brazil, Colombia, Jamaica, and Mexico. In Argentina (operation 4569/OC-AR), the Fiscal Responsibility Law reform included promoting investment and employment by reducing the marginal rate of the corporate income tax. In Brazil, PROFISCO II (CCLIP BR-X1039) incorporated lessons learned from PROFISCO I and continues to support the fiscal sustainability of the states (Box 1). In Colombia (operation 4552/OC-CO), a PBL includes institutional and legal reforms and expands the use of electronic invoicing. In Jamaica, the Fiscal Structural Programme for Economic Growth (operations 3148/OC-JA, 3511/OC-JA, and 3880/OC-JA) supported: (i) strengthening revenue collection; (ii) enhancing tax and customs administration effectiveness; and (iii) enhancing control over budgetary expenditure. In Mexico (loans 4071/CH-ME and 4074/OC-ME), the Bank supported the design and implementation of a Financial Discipline Law in federal entities and municipios, in order to: (i) limit the contracting of new debt and growth in spending for federal entities and municipios; and (ii) record obligations in the Single Public Registry.

[56] In Uruguay, the Program for Development and Strengthening of Fiscal and Subnational Service Management (3792/OC-UR) has sought to strengthen the capacities of officials in environmental risk management, preparation of methodology guides for project formulation, and promotion of projects to prevent erosion in coasts and vulnerable areas, such as climate change adaptation measures.

[57] See Annex I, Table 3 for the historical evolution of Sector approvals.

[58] Includes all sovereign-guaranteed operations with at least one component related to the Sector.

Box 1. PROFISCO and PROCONFIS

In 2008, the Brazilian government requested support from the IDB for the Program to Support the Management and Integration of Finance Administrations in Brazil (PROFISCO), in the form of a conditional credit line for investment projects (CCLIP). The line was approved for US$500 million, but subsequently raised to US$700 million in 2013, facilitating the approval of 23 individual operations with the country's states and another with the same purpose for the Ministry of Finance. The program's overall objectives were to modernize the fiscal, financial, budgetary, and asset management of the tax authorities. Its specific objectives were to: (i) increase the states' own revenues; (ii) increase efficiency and effectiveness; and (iii) provide better services to citizens. PROFISCO has supported the implementation of a digital public accounting system (SPED) and electronic sales invoices (NF-e). The digital accounting supported by SPED captures taxpayers' fiscal and accounting data in digital format. The NF-e enables the tax administrations of the individual states and the federal government to record and access, in real time, all procurement and sales transactions between businesses (B2B) and sales to end-consumers, through electronic sales invoice to end-consumers (NFC-e).

PROFISCO has also supported the implementation of a real-time electronic bill of lading system through the documents "Conhecimento de Transporte Eletrônico (CT-e)" [Electronic Bill of Lading (CT-e) System] and "Manifesto Eletrônico de Documentos Fiscais (MD-e)" [Electronic Manifest (MD-e) System]. These systems, coupled with the NF-e and NFC-e, have facilitated greater control for reducing evasion of the Tax on the Circulation of Goods and Services (ICMS).[59] Not only have the data generated by these systems facilitated highly effective fiscal control, they have also fostered interregional trade, reduced transport costs (by implementing electronic inspection of freight, thereby reducing transit times), and improved freight transport safety. Lastly, some of the states have implemented the IFMS to improve budget planning and execution, enhancing control between the stages of accrued expenses, allocation, and execution, thus facilitating more efficient cash management and better use of public resources.

PROFISCO has had a positive impact by increasing ICMS revenue collection. In fact, most states with related projects in advanced stages of disbursement have seen ICMS collection grow by an average 1.1% of GDP, while the corresponding average growth for other states was only 0.3%. This increase was achieved despite the prolonged recession that has gripped Brazil since 2013, reducing its GDP by 10% over a period of four years. With the aim of deepening and consolidating the gains made and following through with the fiscal reforms under way in the states, the Ministry of Finance requested a new CCLIP from the Bank (PROFISCO II) in the amount of US$900 million, which was approved in 2017. The objective of PROFISCO II is to contribute to fiscal sustainability through modernization of fiscal management, improvement of tax administration, and improvement of public expenditure management by: (i) supplementing the SPED with electronic fiscal auditing invoicing, eliminating the 12 monthly tax returns; (ii) reducing public procurement processing times and costs by using the benchmark prices included on e-invoices; (iii) centralizing and automating tax payments associated with foreign trade transactions; and (iv) updating the IFMS technology platform. As of the publication date of this SFD, six individual operations had been approved, representing 30% of the aforementioned credit line and another five operations (26% of that line) were in preparation.

Through the Fiscal Stability Consolidation Program (PROCONFIS), the Bank is also supporting a number of Brazilian states with PBLs, as part of the Fiscal Restructuring and Adjustment Program that was agreed upon between the states and the federal government. The objectives of PROCONFIS are to: (i) expand public investment capacity; (ii) increase tax collection; (iii) limit public expenditure growth and optimize its efficiency; and (iv) improve the delivery of public services. To this end, PROCONFIS operations are based on a cross-sector approach with the aim of fostering greater interaction with the citizen security, transport, tourism, and water-resources management sectors. The policy measures used to contain public expenditure targeted, *inter alia*: (i) public procurement systems; (ii) payroll audits; (iii) and programs to review and streamline expenditure costing. Five PROCONFIS programs have been approved for a total of US$2.043 billion.[60]

A number of lessons have been gleaned from the experience with these two types of programs used by the IDB to support Brazil. First, digital technologies hold vast potential for improving tax administration, enhancing the quality of public services, and modernizing fiscal and financial management. The digital invoicing that Brazil successful implemented has become a new tax administration technology and is being replicated in other

[59] The ICMS is a VAT tax levied by the individual states of Brazil.

[60] These were seven projects in five states: (i) PROCONFIS Bahia I and II, for US$409 million and US$600 million, respectively; (ii) PROCONFIS Rio Grande do Sul I and II, each for US$200 million; (iii) PROCONFIS Pernambuco, for US$400 million; (iv) PROCONFIS Amazonas, for US$184 million; and (v) PROCONFIS Alagoas, for US$250 million.

countries of the region with promising results. Electronic control of cargo mobilization has also been a powerful tool for reducing contraband and the circulation of other illicit goods. Second, the combination of investment loans and PBLs help strike an optimal balance between reforms requiring legal and institutional changes and financing for the medium-term investments needed to modernize the public sector. Consequently, this helps maximize the effectiveness of policy reforms in the medium term. Third, collaboration between the federal government—or central government, as the case may be—and subnational governments is key for a program of shared objectives and benefits. This entails ongoing dialogue with the aim of sharing experiences and lessons learned and securing the commitment of all parties to help one another. This willingness to work together has been especially important for the implementation PROFISCO I. And lastly, ongoing Bank technical support is key to the program's success, especially support for strengthening the executing agencies. This has been particularly true with regard to the early execution of the program's projects and coordination among the various participants with the aim of sharing experiences and lessons learned.[61]

4.22 **Technical cooperation operations.** Technical cooperation operations are an important support instrument in the Sector, aimed at strengthening public entities, preparing analytical studies, facilitating database development, supporting the preparation of operations, fostering regional exchanges of good practices, and supporting the Bank's strategic knowledge and dissemination initiatives.[62] From 2015 to 2017, the Bank approved technical cooperation projects for the Sector totaling roughly US$42 million (91 projects), with an emphasis on promoting digital solutions for fiscal management,[63] including electronic invoicing.

4.23 **The Sector's knowledge products.** The Bank has developed a broad range of knowledge products in the Sector, which have bolstered its reputation in fiscal matters and positioned it as a trusted advisor to the countries (IDB, 2017d). The Bank's experience and specialized knowledge were key in adapting the different financing instruments to the specific needs of the region's countries. Some recent publications include: updated tax statistics (IDB/CIAT/ECLAC/OECD, 2015; IDB/CIAT, 2017; Barreix et al., 2017); structural fiscal balances (Ardanaz et al., 2015); and studies on electronic invoicing (Ramírez et al., 2018; Bérgolo et al., 2018; Templado and Artana, 2018) and on taxes (Barreix, Roca, and Velayos, 2017; Barreix, Benítez, and Pecho, 2017). In addition, the Bank has published several books: Public Financial Management in Latin America: The Key to Efficiency and Transparency (IDB, 2015f); Government at a Glance: Latin America and the Caribbean 2017 (OECD/IDB, 2017); and Bringing PPPs into the Sunlight: Synergies Now and Pitfalls Later? (Reyes-Tagle, 2018). The Bank has also published reports on: (i) State-owned enterprises (Musacchio, Pineda, and García, 2015; Kaufmann, 2017; Wagner, 2017; Ter-Minassian, 2017); (ii) public-private partnerships (Reyes-Tagle, 2018; Reyes-Tagle and Tejada, 2015; Reyes-Tagle and Garbacik, 2016); (iii) various working documents on the Sector, many of them financed with resources from Economic and Sector Work; and (iv) diagnostic assessments aimed at addressing the Sector's challenges in the region's countries that are included in country strategies.

4.24 Under the leadership of IFD/FMM, jointly with other departments (IFD, RES, and SCL), the Bank conducted multidisciplinary studies of the quality and efficiency of public spending, including aspects such as the quantification and analysis of the

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[61] For more information, see IDB (2018e), Section IV.

[62] Several technical cooperation operations mentioned in this section have been financed thanks to the contributions of the Public Capacity Building Korea Fund, the Fund for Institutional Capacity Building, the Special Program for Institutional Development, and the Transparency Fund.

[63] For example, this includes ATN/OC-15893-RG, ATN/AA-16486-RG, ATN/OC-16249-RG, and ATN/OC-16403-RG.

sustainability of pension systems' actuarial liabilities in Latin American and Caribbean countries, and the long-term impacts of population aging on fiscal sustainability. These studies were inputs for *Development in the Americas* (technical-cooperation projects ATN/AA-14695-RG and ATN/FI-14694-RG). Lastly, in the past two years the Bank has spearheaded significant knowledge and dissemination activities aimed at underscoring the importance of incorporating the impacts of gender equity into fiscal policy decisions (Aguirre, 2016; Orjuela, 2018).

4.25 **The Sector's dissemination work.** The Bank has worked intensively to promote the exchange of Sector knowledge between the region's countries and generate learning opportunities in the preparation and execution of its programs. This included: (i) blogs (*Recaudando Bienestar* has more than 100 articles from 2015 to date and more than 48,000 subscribers); (ii) regional workshops and dialogues; (iii) field visits; and (iv) organization of and participation in international conferences, presentations, and seminars. The Bank has actively participated in several networks, including the International Tax Dialogue;[64] cosponsorship with ECLAC of the Regional Seminar on Fiscal Policy;[65] cosponsorship of the Regional Policy Dialogue on Public Financial Management, Treasury, and Public Accounting, together with the Latin American Treasury Forum; cosponsorship of the Inter-American Network on Government Procurement, along with the Organization of American States and the International Development Research Center; and cosponsorship of the Latin American and Caribbean Public-Private Partnership Network, together with the IMF and the OECD. With respect to the gender perspective on fiscal issues, along with other multilateral organizations, the Bank promotes studies and tools for the inclusive participation of women in the public market. In 2015, with the Inter-American Network on Government Procurement, it created a workgroup to promote the inclusion of women in public procurement.

4.26 **Sector collaboration and complementarity with other international organizations.** The Bank actively participates in a variety of activities and initiatives promoted by other international organizations. These include: the Base Erosion and Profit Shifting (BEPS) initiative promoted by the OECD; the IMF's Tax Administration Diagnostic Assessment Tool (TADAT); the World Bank's Public Expenditure and Financial Analysis (PEFA); the implementation of the new Fiscal Transparency Handbook, under IMF leadership; and the Revenue Statistics in Latin America and the Caribbean, promoted by the IDB in collaboration with CIAT, the OECD, and ECLAC.

4.27 The Bank's work in the Sector is complemented by the efforts of the aforementioned institutions, through its lending and technical cooperation instruments which finance the implementation of tax reforms and institutional capacity-building programs that result from the analysis of the various initiatives mentioned in the preceding paragraph, since—with the exception of the World Bank—these institutions lack these kinds of financial instruments. The Bank has ongoing dialogue with the World Bank to avoid the duplication of efforts and to coordinate technical assistance and financing of joint programs.

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[64] The International Tax Dialogue is a joint initiative of the European Commission, the Bank, the IMF, the OECD, the World Bank Group, and CIAT.

[65] In addition to the Bank, cosponsors of this event include the IMF, the World Bank, the OECD under the auspices of the *Deutsche Gesellschaft für Technische Zusammenarbeit* (GTZ), and the Chilean Ministry of Finance.

4.28 All of this has been possible due to the Bank's leadership capacity in conducting dialogues with countries, adapting financial and technical-cooperation instruments to country needs, and creating synergies with other sectors, based on: (i) providing specialists on a variety of fiscal matters, with broad coverage on the ground; (ii) cohesively using different instruments; and (iii) adapting to the heterogeneity among and within the countries.

V. GOAL, PRINCIPLES, DIMENSIONS OF SUCCESS, AND LINES OF ACTION GUIDING THE BANK'S OPERATIONAL AND RESEARCH ACTIVITIES IN THE SECTOR

A. Goal and principles underlying work in the Sector

5.1 The Bank's main goal in the Sector is to promote fiscal policy management that fosters robust, stable, sustainable, and equitable growth. To achieve this goal, the proposed lines of action and operational activities respond to the diagnostic assessment in Section III, and to the Bank's comparative advantages identified in Section IV. The SFD also presents knowledge and dissemination activities, which are the foundation for the generation of future innovations in the Sector. The Bank will design interventions on the basis of the specific conditions prevailing in each country, in accordance with the principles for work in the Sector. These principles, arising from the analysis of international evidence (Section II) and from the lessons learned (Section IV), include:

a. **Institutional capacity-building in the public sector.** The Sector will promote the development of public sector capacity for more effective and efficient fiscal management with a view to raising productivity and economic efficiency, including efficiency and transparency in public resource management, and enhancing the impacts on equity.

b. **Consideration of the multidimensional nature of fiscal policy.** Fiscal policy and management action has macroeconomic and microeconomic (multidimensional) impacts. Policy and fiscal management objectives and decisions often give rise to tradeoffs in the short, medium, and long terms. Consequently, decisions should aim at general equilibrium, and be informed by a dynamic and intertemporal vision to evaluate the entire range of impacts and design appropriate mitigation measures.

c. **Recognition of the political economy constraints and dynamics imposed on Sector decisions.** Given their multiple and crosscutting effects on the interests of various stakeholders (parliaments; executive branches of government, including national and subnational; trade unions; communications media; and civil society) and factors (labor unions, businesspersons, trade partners, etc.), fiscal policy and management decisions are conditioned by political economy constraints. The lessons learned from the Bank's work in the Sector lead to the conclusion that these political economy constraints can be mitigated or reduced by: (i) engaging political and social sectors in the dialogue to further the reforms, including those sectors impacted in the short and medium term; (ii) increasing the transparency and accountability accompanying the reforms, reducing the resistance to many reform measures; and (iii) accompanying tax measures or spending restrictions with offsetting measures targeting low-income sectors of the population.

d. **Adaptation of fiscal policy management recommendations to the heterogeneity of countries.** The region is highly diverse in terms of economic development, institutional strength, and availability of resources. The recommendations for the Sector will incorporate this diversity so as to lead to the best possible feasible outcomes.

B. Dimensions of success, lines of action, and activities[66]

5.2 **Dimension of success 1. Fiscal policies will seek to reinforce sustained growth in a context of fiscal sustainability and macroeconomic stability.** The interventions will promote the use of rules with quantitative targets that ensure a commitment to medium- and long-term fiscal sustainability and annual targets for cycle-adjusted primary balances. The Sector will promote joint activities with other Bank sectors to communicate the need to include the effects of population aging on medium- and long-term fiscal sustainability. The Sector will also promote measures that improve the effectiveness and quality of countercyclical policies. These will emphasize the quality of discretionary countercyclical policy decisions to protect infrastructure investment expenditure and reduce the use of instruments that create permanent expenditure commitments and discourage labor effort. The SFD proposes the following lines of action:

5.3 **Lines of action:** (i) consolidate fiscal policy sustainability by means of rules that contain a clear definition of the intertemporal budgetary restriction, including three pillars: contingent liabilities, actuarial cost of pension systems, and fiscal pressures from population aging; (ii) improve the fiscal risk management instruments, including actual and contingent liabilities arising from PPPs and State-owned enterprises; (iii) reinforce macroeconomic stability by strengthening countercyclical fiscal policy instruments, with a special emphasis on the composition of discretionary policy measures to protect investment in physical infrastructure and avoid creating permanent expenditure commitments; (iv) promote economic growth by strengthening institutional frameworks for public investment and PPPs; and (v) enhance the credibility of fiscal policy to facilitate the access and cost of long-term financing. To fulfill these lines of action, the SFD proposes that financing be provided for the following operational and knowledge and dissemination activities:

a. **Operational activities:** (i) support the processes to reform fiscal and procedural rules to ensure the fiscal sustainability of the consolidated public sector, using cycle-adjusted quantitative targets whenever possible; (ii) promote the use of stabilization funds and intergenerational savings funds in countries with abundant nonrenewable natural resources; (iii) improve the management of public investment and public-private partnerships through the institutional strengthening of governments for planning, identification, design, and implementation of public investment and PPPs; (iv) strengthen the management of fiscal risks and contingent liabilities to ensure fiscal sustainability; (v) improve MTFFs with a clear and explicit definition of the intertemporal budgetary restriction; (vi) strengthen the effectiveness of automatic stabilizers and fiscal multipliers; and (vii) support the establishment of independent fiscal boards.

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[66] The lines of action and activities to be financed by the Bank should follow the guidelines contained in this SFD and any other SFDs that are applicable to specific interventions.

b. **Knowledge and dissemination activities:** generate and expand knowledge regarding: (i) the measurement of fiscal sustainability under the abovementioned pillars, with special emphasis on the impact of population aging on intertemporal budget constraints, and based on designing fiscal rules; (ii) fiscal risks and contingent liabilities and the implementation of fiscal management models for these risks; (iii) the determinants and measurement of the effectiveness of automatic stabilizers and fiscal multipliers; (iv) the asymmetrical cyclical behavior of various public expenditure components; (v) the implementation and management of MTFFs and MTEFs; (vi) the implementation and management of public investment and PPPs; and (vii) the determinants of public savings and their inclusion in the MTFFs as desirable objectives.

5.4 **Dimension of success 2. Governments build the public sector's institutional capacities to design and implement fiscal policies that improve efficient mobilization and allocation of resources.** The interventions in the Sector will promote the design of tax and public expenditure management policies aimed at incentivizing savings, investment, and labor, as well as to ensuring that productive resources are utilized as efficiently as possible. To achieve these objectives, the SFD proposes the following lines of action:

5.5 **Lines of action.** Improve the following: (i) tax systems, placing particular emphasis on their neutrality, adequacy, simplicity, and progressivity; (ii) the quality, effectiveness, and efficiency of public expenditure;[67] and (iii) coordination in the allocation and demarcation of functions among the various levels of government regarding taxation powers and expenditure responsibilities.[68] To fulfill these lines of action, the SFD proposes that financing be provided for the following operational and knowledge and dissemination activities:

a. **Operational activities:** support the following: (i) improvements in resource mobilization and allocation; (ii) actions to reduce highly distortionary taxes and fiscal incentives that undermine productivity and growth; (iii) reforms to diminish the bias against the labor factor;[69] (iv) environmental taxes that reduce the use of fossil fuels and carbon emissions; (v) improvements in the quality, effectiveness, and efficiency of expenditures, particularly in public infrastructure and human capital investments; (vi) institutional strengthening for the design and management of public investment projects; (vii) improvements in the targeting of expenditures and subsidies; and (viii) policies aimed at promoting business and labor formality.

b. **Knowledge and dissemination activities:** generate and expand knowledge regarding: (i) impacts of the tax system on private savings and investment; (ii) impacts of the tax burden on work and formal employment; (iii) efficient mobilization of fiscal resources, eliminating tax expenditures that erode revenues; (iv) factors that limit the quality and efficiency of public spending, with a particular emphasis on social spending and investment in public infrastructure; (v) instruments to develop quantitative and qualitative indicators to measure the quality and efficiency of expenditure; (vi) the efficiency of public

[67] These activities will be coordinated with the actions provided in other SFDs.

[68] This dimension will be designed and implemented in coordination with the guidelines set out in Dimension of Success 1 of the Decentralization and Subnational Governments SFD (IDB, 2018e).

[69] This activity will be coordinated with the actions planned in the Labor SFD (IDB, 2017c).

investment and the development of maintenance cost instruments and preinvestment methodologies for project formulation; (vii) the effects of policies targeting small businesses, including special tax regimes; and (viii) the impacts of the digital economy, especially those associated with robotics, process automation, and machine learning on tax revenue collection, through quantitative and qualitative changes in the future of work.

5.6 **Dimension of success 3. Governments promote fiscal policies that improve equity and social inclusion, consistent with the efficient allocation of resources.** The interventions in the Sector will seek to strengthen spending programs that have a greater impact on equity through improvements in quality, effectiveness, and targeting aimed at the lower-income population,[70] particularly focused on gender equity. To achieve these objectives, the SFD proposes the following lines of action:

5.7 **Lines of action:** improve the following: (i) the quality and effectiveness of the expenditure programs that have a greater impact on equity, reducing the social and human capital gaps, as well as the targeting of subsidies; and (ii) the evaluation of subsidies and transfers that create disincentives to work and to formalization for workers or small businesses. To fulfill these lines of action, the SFD proposes that financing be provided for the following operational and knowledge and dissemination activities:

a. **Operational activities:** support the following: (i) comprehensive reviews of public expenditure, including efficiency as well as equity considerations; (ii) operations to incorporate indicators derived from studies on the impact of fiscal policy on equity; (iii) comprehensive reforms to improve fiscal correspondence and a clear allocation of specific expenditure responsibilities to the subnational and national governments; and (iv) medium- and long-term reforms aimed at reducing the distortions fostered by fiscal policies in terms of efficiency and equity.

b. **Knowledge and dissemination activities:** generate and expand knowledge regarding: (i) the impact of fiscal policy on poverty, inequality, and gender equity; (ii) models for periodic public expenditure reviews that integrate efficiency, equity, and fiscal stability considerations; and (iii) spending programs with disincentives to formal employment.

5.8 **Dimension of success 4. Governments promote strengthening the efficiency of tax administrations, financial management, and use of public resources.** The interventions in the Sector will promote strengthening tax administrations and public financial management (PFM) with a view to boosting effectiveness and efficiency in revenue collection and the use of public resources by adopting, improving, and modernizing generally applicable practices and instruments, such as: (i) electronic invoices; tax inbox; payroll and employment contribution spreadsheets; mass data cross-referencing with public service enterprises and institutions and property registries; evasion-risk management models and systems; emerging digital technologies such as apps and application program interfaces; electronic processes for fiscal and appeals administrative systems, which will facilitate and reduce transaction costs in fulfilling the tax obligations of taxpayers; (ii) treasury single

[70] This activity will be coordinated with the actions planned in the Social Protection and Poverty SFD (IDB, 2017b) and with the EDU, SPH, and LMK Divisions of the SCL Department.

accounts (TSAs), Integrated Financial Management Systems (IFMSs), International Public Sector Accounting Standards (IPSAS), and e-procurement portals with analytical properties and distributed records for procurement of public goods and services. The SFD will promote adopting managing for results, with policy instruments and practices designed to enhance the quality, effectiveness, and efficiency of public expenditure. Special emphasis will be placed on encouraging greater results-based public transparency; efficient use of resources; compilation and dissemination of economic, social, and fiscal statistics; and public accounting (revenues, public spending, results-based budgeting, concealed and contingent liabilities, with greater potential coverage of the public sector) with smart portals. To achieve these objectives, the SFD proposes the following lines of action:

5.9 **Lines of action:** promote the following: (i) institutionally and technologically modernize the tax administrations; (ii) build institutional capacity in international taxation matters; (iii) use technologies for administration and cross-referencing of mass data with analytical and predictive features; (iv) modernize and upgrade the IFMSs, and the use of digital technologies; (v) expand TSA coverage; (vi) adopt IPSAS, e-procurement portals, and price catalogues for generic goods and services; and (vii) implement initiatives aimed at enhancing the compilation and dissemination of fiscal and public accounting statistics in the broadest possible sense. To fulfill these lines of action, the SFD proposes that financing be provided for the following operational and knowledge and dissemination activities:

a. **Operational activities:** t**ax administration:** promote the following: (i) mandatory use of comprehensive electronic invoices and of payroll spreadsheets by companies; (ii) mass use of information technologies; (iii) digitalization of the property registries with the assistance of the tax administrations at the national level; (iv) use of mass databases; (v) the practice of sending import shipment manifests in advance to customs in electronic format; (vi) capacity-building of tax administrations; (vii) use of risk identification models and systems; and (viii) strengthening of the international taxation and information exchange units.

b. **Operational activities: public financial management:** Promote the following: (i) transparency in the public sector and managing for results; (ii) PFM modernization by technologically and functionally strengthening the IFMSs; integrating the budget, treasury, public debt management, procurement, and accounting functions; and using data from these systems to increase efficiency in financial and budget execution; (iii) expanded coverage of the TSAs, including coordination between cash management and public debt management; (iv) public-sector adoption, harmonization, and coverage of the IPSAS; (v) comprehensive management of public investment; and (vi) implementation, reinforcement, and coverage of the government procurement systems under principles of transparency, effectiveness, and efficiency.

c. **Knowledge and dissemination activities:** generate and expand knowledge regarding the benefits of transparency and managing for results. Promote the following: (i) events for the dissemination and exchange of information and international best practices on the use of digital technologies, including electronic invoices; (ii) events for exchange of experiences on international taxation matters; (iii) the IPSAS; (iv) the various instruments used in the government procurement processes, with a particular emphasis on e-procurement portals, reverse auctions, and price catalogues for generic goods procurement; and (v) fiscal instruments and indicators, including the compilation and dissemination of fiscal and public accounting statistics.

5.10 The four dimensions of success that will guide the Sector's operational and analytical activities will enable the Bank to respond to the demands of both public and private sector stakeholders in its 26 borrowing member countries. Under the working principles for the Sector presented in this SFD, the Bank will coordinate the lines of action through the country strategies, regional policy dialogues, dissemination activities of the Sector in different forums and international events, and will orient them toward the specific needs of each country to which it provides support.

ANNEX I

Table 1. IMF's Fiscal Transparency Code

	Principle	Practices: Basic	Practices: Good	Practices: Advanced
Guarantees	The government's guarantee exposure is regularly disclosed and authorized by law.	All government guarantees, their beneficiaries, and the exposure created by them are published on at least an annual basis.	All government guarantees, their beneficiaries, and the exposure created by them are published on at least an annual basis. The maximum value of new guarantees or their stock is authorized by law.	All government guarantees, their beneficiaries, the exposure created by them, and their probability of being called are published on at least an annual basis. The maximum value of new guarantees or their stock is authorized by law.
Public-private partnerships	Obligations under public-private partnerships are regularly disclosed and actively managed in coordination with the various areas involved.	The government publishes, on at least on an annual basis, its rights, obligations, and other exposures under public-private partnership contracts.	The government publishes, on at least on an annual basis, its rights, obligations, exposures, and the expected annual receipts and payments over the life of public-private partnership contracts.	The government publishes, on at least on an annual basis, its rights, obligations, exposures, and the expected annual receipts and payments over the life of public-private partnership contracts. A legal limit is also placed on accumulated obligations.

Source: Adapted from the IMF's Fiscal Transparency Code (IMF, 2014e).

Table 2. Special tax regimes in selected countries

Country	Regime	Description	Revenue from special tax regime as % of GDP*	Revenue from special tax regime as % of total government revenue
Argentina	**Monotributo [Simplified regime for small taxpayers]**	Requirements: income of less than Arg$1,050,000 for retail or Arg$700,000 for services. Payment of the flat tax replacing VAT, corporate income tax, and own contributions to social security. Amount varies between Arg$787 and Arg$5,922.10 per month, depending on income, surface area of the business, energy consumed, rent, number of employees, and economic sector.	0.0314%	0.30%
Bolivia	**Simplified tax regime**	Regime for individuals with economic activities for which the recorded capital does not surpass Bs 18,800. Consolidates payments of VAT, corporate income tax, and transactions tax. Progressive bimonthly payments based on the company's registered stock.	0.2757%	1.10%
Brazil	**SIMPLES [Integrated System for the Payment of Taxes and Social Security Contributions of Micro and Small Enterprises]**	Regime for companies in services, manufacturing, and retail. Annual income should be less than R$4.8 million or R$9.6 million if company exports. Single tax covers sales, payroll, and corporate income tax. Progressive tax rates depending on sector and income.	0.7597%	2.52%
Colombia	**Monotributo [Simplified regime for small taxpayers]**	Individuals in retail with income of less than Col$111,506,500 and fixed business establishments of less than 50 square meters. Progressive monthly payments between Col$43,000 and Col$85,000. Individuals might be eligible for a subsidized pension as well as an insurance for job-related risks.	-	
Costa Rica	**Simplified tax regime**	Regime for small taxpayers with annual purchases of less than 150 base salaries. Fixed assets used may not exceed 350 base salaries. Number of employees for a business may not exceed five. Taxes paid as a proportion of earnings and sales. Proportion varies depending on the sector.	0.0084%	0.06%
Ecuador	**RISE [Simplified tax regime]**	Only for individuals with incomes below US$60,000. Single monthly tax payment, depending on income and economic activity sector.	0.0200%	0.12%

Country	Regime	Description	Revenue from special tax regime as % of GDP*	Revenue from special tax regime as % of total government revenue
Mexico	**RIF [Tax inclusion regime]**	Only for individuals in activities that do not require a college degree. Annual income should be less than Mex$2,000,000. Progressive tax rates set as a proportion to business earnings.	0.0299%	0.19%
Nicaragua	**Simplified regime with fixed amounts**	Individuals with annual incomes of less than C$100,000. Taxpayers pay a progressive monthly rate, depending on monthly income.	0.1419%	0.86%
Peru	**RER [Special tax regime]**	Annual income of less than S/. 525,000. Flat tax of 1.5% on net sales replaces corporate income tax rate.	0.0298%	0.19%
Uruguay	**Literal E [Subparagraph E]**	Individuals or companies with income of less than Ur$305,000. Pays only tax equivalent to “Minimum VAT amount” which, for 2016, was Ur$2,950.	0.0540%	0.28%

Source: IDB (2018d) based on: Argentina: Administración Federal de Ingresos Públicos, official sources for 2016; Brazil: Receita Federal, 2016; Ecuador: IDB/CIAT, 2017, percentages are for 2015; Mexico: Servicio de Administración Tributaria, percentages are for 2016; Peru: Superintendencia Nacional de Aduanas y de Administración Tributaria, percentages are for 2016; Uruguay: Dirección General Impositiva, percentages are for 2016; the Monotributo system was implemented in Colombia as of 2017 and information is not yet available; Nicaragua: percentages are for 2014. Source: Instituto de Estudios Estratégicos y Políticas Públicas. 2017.

Table 3. Evolution of the Bank's portfolio in the Sector, 1990-2017

Country	1990-1997		1998-2006		2007-2017		1990-2017	
	Number of projects	Total amount	Number of projects	Total amount	Number of projects	Total amount	Number of projects	Total amount
Argentina	6	701	5	3,418	8	314	19	4,433
Bahamas	0	0	0	0	2	49.5	2	49.5
Barbados	2	15	1	4	2	15	5	34
Belize	0	0	1	25	1	15	2	40
Bolivia	4	13	11	316.6	6	275	21	604.6
Brazil	2	524	5	449	46	3,667.8	53	4,640.8
Chile	1	10	5	368	2	98	8	476
Colombia	5	241	4	983	9	1.19	18	2,414
Costa Rica	2	92	1	65	0	0	3	157
Ecuador	4	48	1	5	4	440	9	493
El Salvador	2	89	0	0	4	435	6	524
Guatemala	1	1	2	120	6	1,242.5	9	1,363.5
Guyana	1	30	3	48	0	0	4	78
Haiti	0	0	4	65	4	100	8	165
Honduras	4	74	5	75	6	202.9	15	351.9
Jamaica	2	125	1	16	13	1.08	16	1,221
Mexico	2	450	5	1,900	8	4,155	15	6,505
Nicaragua	3	36	5	105	6	203	14	344
Panama	4	90	2	18	7	1,300	13	1,408
Paraguay	3	95	3	20	8	422.6	14	537.6
Peru	7	461	12	1,219	11	330	30	2.01
Dominican Republic	0	0	4	204	8	1,129.5	12	1,333.5
Suriname	0	0	3	40	5	113.5	8	153.5
Trinidad and Tobago	3	105	0	0	2	140	5	245
Uruguay	6	197	8	521.9	9	476.5	23	1,195.4
Venezuela	5	115	2	218	0	0	7	333
Total	**69**	**3512**	**93**	**10,203.5**	**177**	**17,394.8**	**339**	**31,110.3**

Source: IDB (2006b) and an analysis by the authors based on OPS data.

Note: Includes all projects with components and conditions for at least one of the issues identified as challenges for the region.

ANNEX II

Public financial management as a tool for fiscal transparency

1.1 **Public financial management (PFM)**. Public financial management refers to a set of rules, processes, systems, and institutions used by governments to administer and manage public resources in the short and medium terms to achieve their public policy objectives, while producing the information necessary to provide support for fiscal policy decisions and providing the instruments needed to implement those decisions (North, 1991; Andrews et al., 2014; IMF, 2013a). Although fiscal policy refers to how to achieve certain policy objectives, PFM includes areas such as budgeting, treasury, accounting, debt management, public investment systems, procurement, administration and payroll payments for public administration, Integrated Financial Management Systems (IFMSs), and audit and control. In recent years, the implementation and monitoring of fiscal rules and medium-term fiscal frameworks (MTFFs) started being considered part of PFM.

1.2 In the past two decades, PFM has become a very significant area of fiscal policy action in virtually all countries. This leading role for PFM includes four basic pillars or areas of action: (i) macroeconomic sustainability and stability, including fiscal risk management; (ii) effectiveness and efficiency in the use of government resources to properly deliver public services; (iii) allocation and evaluation of resources among the various sectors for growth, productivity, and social policy; and (iv) transparency and accountability.

1.3 The first pillar includes management of budgetary policy and fiscal rules, strategic planning, and MTFFs. The second pillar includes management of public resources through treasury and public debt management, accounting and recording of financial and budgetary transactions, payroll management, procurement processes, and management of the National Public Investment Systems and the Integrated Financial Management Systems, aimed at improving the decision-making process in the area of resource management and expenditure execution with a view to effectively and efficiently deliver public services. The third pillar includes evaluation of the technical allocation of expenditures, monitoring and evaluation of budget execution, and evaluation of the various short- and medium-term budget programs. The fourth pillar includes aggregating and reporting fiscal and budget information (including fiscal results and public balance sheets), information on the composition and financial structure of public debt and the fiscal risks and contingent liabilities of the public sector, transparency and accountability, and the public expenditure and resource audit and control processes.

1.4 International experience is extremely broad with regard to the relation between the quality and effectiveness of fiscal policy and the quality of public financial management, since a good PFM framework is a required, although not a sufficient, condition for good fiscal policy. For developing countries, several studies attempt to demonstrate that the quality of PFM is associated with economic growth (Andrews, 2010; Andrews et al., 2014; World Bank, 2007; Wescott, 2008; and Dabla-Norris et al., 2011), even though PFM quality also depends on income per capita (World Bank, 2017), a country’s degree of institutional development, and the size of its population. Evidence also shows that, when PFM is deficient in one or more of its basic pillars, the magnitude and impact of economic shocks, particularly adverse shocks, become significantly greater. This is because various implicit or explicit fiscal risks materialize, and the absence of adequate records for these risks makes it impossible to quantify them and implement mitigation policies in response (Kopits, 2014; Allen et al., 2013; Irwin, 2012). Even though the findings of the studies are statistically significant, the effects appear to be minor. In any event, they face serious methodological difficulties and significant information limitations.

1.5 In recent years, PFM has made considerable strides, particularly in terms of adopting internationally standardized principles, practices, and systems. The institutional capacities of countries and the availability of human resources are determining factors in the speed and gradualness of this process (Andrews, 2014). In addition to having an adequate normative and institutional framework, adopting international standards is essential to achieving high-quality financial, budget, and accounting information that can be compared over time and across countries. A recent trend that is yet to be implemented and consolidated is the use of emerging technologies to take more and better advantage of data from federal IFMSs for management and decision-making by cross-tabulating this data with other sources of expenditure and statistical information, to promote increased efficiency in financial and budget execution. As with Singapore and its FI@Gov, other countries are envisioning using big data, data science, and artificial intelligence to prepare automated diagnostic assessments, data visualizations, and forecasts aimed at optimizing cash flow, improving financial planning and debt management, evaluating fiscal risks, and more.

1.6 The most commonly used tool for analyzing PFM quality in countries is the Public Expenditure and Financial Accountability (PEFA) Framework, which currently includes more than 500 assessments performed in 150 countries and on 136 subnational governments. The 31 PEFA indicators are comprised of the average of the scores of various variables or minimum requirements.[71] Between 2007 and 2016, PEFA assessments were published for 15 countries in Latin America and the Caribbean and, under a correlation of grades from D to A to a scale from 1 to 4, the region achieved an average score of 2.7 (67.5% of the highest possible score), showing that there is still ample room for improvement (Table 1 and Table 2). While the results are heterogeneous, all the Latin American and Caribbean countries evaluated showed strengths in terms of aggregate expenditure results in comparison to the originally approved budget, public access to key fiscal information, and the recording and management of cash balances, debt, and guarantees. However, the region lags behind, particularly with respect to a multiyear perspective in terms of fiscal planning, expenditure policy, and budgeting, as well as legislative scrutiny of the external auditor reports. For the countries evaluated in 2016 with the new methodology, there were strengths in terms of budget reliability and transparency of public finances, while there were significant gaps in the remaining pillars.

[71] The PEFA methodology changed in 2016, adding three new indicators and adjusting others.

Table 1. PEFA in Latin America and the Caribbean, 2007-2015

Dimensions	BE 2014	BO 2009	BR 2009	ES 2013	GU 2013	HA 2012	HO 2013	JA 2007	PA 2013	PE 2009	TT 2008	Average
1. Budget credibility	3.1	2.8	3.8	3.0	3.1	1.9	3.5	2.8	2.5	3.0	2.9	3.0
Aggregate expenditure results in comparison to the originally approved budget	4.0	3.0	3.0	4.0	4.0	3.0	3.0	3.0	4.0	3.0	3.0	3.4
Budget expenditure deviations from the originally approved budget	3.5	2.0	4.0	4.0	3.5	2.5	3.0	2.0	3.5	2.0	2.0	2.9
Total revenue deviations from the originally approved budget	4.0	4.0	4.0	4.0	3.0	1.0	4.0	4.0	1.0	4.0	4.0	3.4
Balance and monitoring of delays in expenditure payments	2.0	1.0	4.0	1.0	1.0	1.0	3.5	1.0	1.0	3.0	3.5	2.0
Budget classification	2.0	4.0	4.0	2.0	4.0	2.0	4.0	4.0	3.0	3.0	2.0	3.1
2. Itemization and transparency	2.3	2.7	3.7	2.9	2.7	1.5	3.2	2.7	2.4	3.9	3.5	2.9
Sufficiency of the information included in the budget documents	3.0	2.0	4.0	3.0	3.0	2.0	4.0	2.0	3.0	4.0	3.0	3.0
Size of the governmental transactions included in budget reports	2.5	4.0	4.0	3.0	2.0	1.0	4.0	2.0	1.0	4.0	4.0	2.9
Transparency of intergovernmental fiscal relations	2.0	2.3	3.7	3.3	2.7	2.3	2.0	2.3	2.0	4.0	3.3	2.7
Oversight of aggregate fiscal risk created by other public sector entities	2.0	2.0	3.0	2.0	2.0	1.0	3.0	4.0	2.0	3.5	4.0	2.6
Public access to key fiscal information	2.0	3.0	4.0	3.0	4.0	1.0	3.0	3.0	4.0	4.0	3.0	3.1
3. Policy-based budgeting	2.7	1.9	3.1	2.5	2.7	1.3	2.2	2.8	2.2	3.3	2.4	2.5
Orderliness and participation in the annual budget process	3.0	1.7	3.7	2.7	3.0	1.0	2.0	3.0	2.3	3.7	2.3	2.6
Multiyear perspective in terms of fiscal planning, expenditure policy, and budgeting	2.3	2.0	2.5	2.3	2.3	1.5	2.3	2.5	2.0	2.8	2.5	2.3
4. Predictability and control in budget execution	2.3	3.2	3.5	3.2	3.2	1.7	3.2	2.5	2.1	3.4	3.3	2.9
Transparency of taxpayer obligations and liabilities	2.7	3.3	3.7	3.3	3.3	2.3	2.7	3.0	2.0	3.3	3.3	3.0
Effectiveness of taxpayer registration and tax base estimation measures	1.9	3.4	3.4	2.4	3.4	1.6	2.1	2.1	1.0	3.1	2.9	2.5
Effectiveness of tax collection	2.5	3.0	4.0	3.5	3.5	1.5	4.0	2.5	1.0	4.0	2.5	2.9
Certainty as to the availability of funds for expenditure commitment purposes	2.0	2.7	2.7	3.7	3.0	1.7	3.7	1.7	2.3	3.3	3.7	2.8
Recording and management of cash balances, debt, and guarantees	2.3	3.7	3.7	3.0	3.0	1.3	3.7	3.3	4.0	3.3	4.0	3.2
5. Payroll, procurement, and internal controls	1.6	2.5	3.7	3.1	1.7	1.3	2.6	2.0	2.1	3.4	2.4	2.4
Effectiveness of payroll controls	2.0	3.0	3.5	3.5	1.5	1.5	2.8	2.0	2.8	3.8	3.3	2.7
Competition, reasonable prices, and controls in procurement	1.3	2.7	3.3	3.0	1.8	1.5	2.0	2.0	1.5	3.3	1.7	2.2
Effectiveness of internal controls of nonwage expenditures	2.0	2.3	4.0	3.0	1.7	1.3	2.7	2.0	2.3	3.7	2.7	2.5
Effectiveness of internal audits	1.0	2.0	4.0	2.7	1.7	1.0	2.7	2.0	1.7	2.7	2.0	2.1
6. Accounting, records, and reports	2.3	2.3	3.8	3.4	2.8	1.3	2.9	2.1	3.1	2.7	2.8	2.7
Timeliness and frequency of account reconciliation	2.0	3.0	4.0	3.5	3.5	1.0	4.0	1.5	2.5	3.5	3.0	2.9
Availability of information on funds received by the service units	2.0	1.0	4.0	3.0	2.0	1.0	3.0	2.0	4.0	1.0	1.0	2.2
Quality and timeliness of budget reports for the current year	3.3	3.0	4.0	3.3	3.3	1.0	2.7	3.3	2.7	2.3	4.0	3.0
Quality and timeliness of annual financial statements	1.7	2.0	3.3	3.7	2.3	2.0	2.0	1.7	3.0	4.0	3.0	2.6
7. External scrutiny and audit	1.4	1.9	2.7	2.3	2.2	1.7	3.1	2.8	1.7	3.1	2.3	2.3
Scope, nature, and monitoring of external audits	1.3	2.7	3.0	2.0	2.5	1.0	2.7	2.7	1.0	3.3	3.0	2.3
Legislative scrutiny of the annual budget law	1.8	2.0	4.0	3.8	2.8	3.0	3.8	3.3	2.8	3.8	2.3	3.0
Legislative scrutiny of the external auditor reports	1.0	1.0	1.0	1.0	1.3	1.0	2.7	2.3	1.3	2.3	1.7	1.5
Average	2.2	2.5	3.5	2.9	2.6	1.5	2.9	2.5	2.3	3.3	2.8	2.6

Source: PEFA Assessment Portal Data.

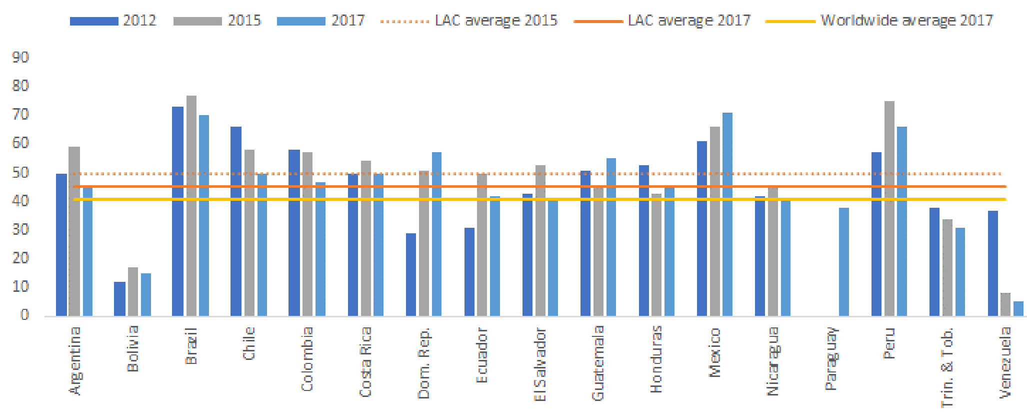
Table 2. PEFA in Latin America and the Caribbean, 2016

Dimensions	CO 2016	CR 2016	DR 2016	PR 2016	Average
1. Budget reliability	3.0	3.7	3.7	1.2	2.9
Aggregate expenditure results in comparison to the approved budget	3.0	4.0	4.0	1.0	3.0
Budget expenditure deviations from the originally approved budget	3.5	3.5	3.5	1.5	3.0
Total revenue deviations from the originally approved budget	2.5	3.5	3.5	1.0	2.6
2. Transparency of public finances	2.9	3.8	3.1	2.8	3.1
Budget classification is consistent with international standards	1.0	4.0	4.0	4.0	3.3
Comprehensive budget classification	4.0	4.0	3.0	4.0	3.8
Extent to which revenue and expenditure are reported outside central government reports	4.0	4.0	1.5	4.0	3.4
Transparency and timeliness of transfers to subnational governments	3.0	3.5	4.0	1.5	3.0
Information on service delivery performance	1.5	3.0	2.0	2.5	2.3
Public access to key fiscal information	4.0	4.0	4.0	1.0	3.3
3. Management of assets and liabilities	3.1	2.3	2.1	1.8	2.3
Fiscal risk reporting	2.5	1.5	1.0	1.0	1.5
Public investment management	3.0	2.0	2.5	1.5	2.3
Public asset management	3.0	2.5	1.5	1.5	2.1
Public debt management	4.0	3.0	3.5	3.0	3.4
4. Policy-based fiscal strategy and budgeting	3.3	2.3	2.0	2.5	2.5
Macroeconomic and fiscal forecasting	3.5	2.5	2.0	4.0	3.0
Fiscal strategy	4.0	1.5	2.0	1.5	2.3
Medium-term perspective in expenditure budgeting	2.5	1.0	2.0	1.5	1.8
Budget preparation process	3.0	3.0	2.5	3.0	2.9
Legislative scrutiny of budgets	3.5	3.5	1.5	2.5	2.8
5. Predictability and control in budget execution	2.6	2.2	2.4	2.8	2.5
Revenue administration	2.5	3.0	2.5	3.0	2.8
Accounting for revenue	2.5	1.5	2.5	2.5	2.3
Predictability of in-year resource allocation	3.5	4.0	3.5	3.5	3.6
Expenditure arrears	2.0	1.5	1.5	1.5	1.6
Payroll controls	1.5	1.5	2.5	2.5	2.0
Transparency and competitive procedures in procurement processes	2.0	1.0	3.0	4.0	2.5
Internal controls on nonsalary expenditure	4.0	3.5	3.0	3.5	3.5
Internal audit	2.5	1.5	1.0	1.5	1.6
6. Accounting and reporting	2.2	1.5	3.0	1.8	2.1
Financial data integrity	1.5	1.5	3.0	1.5	1.9
Comprehensiveness, accuracy, and timeliness of information on budget execution	2.5	1.5	2.5	1.5	2.0
Quality and timeliness of budget reports for the current year	2.5	1.5	3.5	2.5	2.5
7. External scrutiny and audit	2.0	1.5	1.3	1.3	1.5
Scope and independence of the external audit	2.5	1.5	1.5	1.5	1.8
Legislative scrutiny of audit reports	1.5	1.5	1.0	1.0	1.3
Average	2.8	2.6	2.7	2.1	2.6

Source: PEFA Assessment Portal Data.

1.7 Another tool for analyzing and assessing PFM quality is the Open Budget Index (OBI). The OBI makes it possible to monitor the management of public finances through indicators of the quantity and quality of published budget information in terms of: (i) transparency; (ii) participation; and (iii) budget monitoring. The coverage of countries by the OBI has been gradually expanding and the index now reports information for 102 countries, 17 of them in Latin America and the Caribbean. While the average available for 2017 for 17 Latin American and Caribbean countries was 45.3 points (from a maximum of 100), which is above the worldwide average of 40.7 (without Latin America and the Caribbean), the average score for Latin America and the Caribbean decreased compared to 2015, when it was 49.6 (Figure 1).

Figure 1. Budget transparency index



Source: Budget transparency index from the Open Budget Partnership.

1.8 In addition to PEFA and the OBI, several international organizations have developed tools to evaluate certain aspects of these systems and guide the design of the PFM reform programs being implemented in developing countries (OECD-Development Assistance Committee, 2011). For its part, the World Bank has designed the Debt Management Performance Assessment, which operates at the central government level in low-income countries and uses a scoring methodology similar to PEFA. The Fiscal Transparency Evaluation (FTE) from the IMF sets international standards for fiscal information disclosure, grouped into four pillars: (i) fiscal reporting; (ii) fiscal forecasting and budgeting; (iii) fiscal risk analysis and management; and (iv) fiscal resource management. The fiscal transparency reports supplement the assessments of the Reports on the Observance of Standards & Codes. Among other advances, the FTE includes a record of fiscal risks and contingent liabilities, in large measure as a lesson learned from the Great Recession. From 2013 to 2017, the IMF's FTE methodology was implemented in five Latin American and Caribbean countries and in 14 countries in other regions. The average progress for the Latin America and Caribbean region was 48%, while for the other 14 countries it was 51%, indicating that the region is slightly below the worldwide average.[72]

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[72] The progress level for each country was calculated based on an average of the scores for each principle (Advanced = 3 points, Good = 2 points, Basic = 1 point, and Not met = 0 points), weighted according to the country's rating for each level scored.

1.9 One of the most widely accepted specific set of PFM standards worldwide related to fiscal transparency for public accounting is the International Public Sector Accounting Standards (IPSAS). These standards provide the methodology for recording and valuing financial and accounting transactions in the public sector, as well as public assets and liabilities. Much of this recording is still being done on a cash basis, although a growing number of countries have been moving to an accrual-based accounting system. The true financial condition of a country's public sector cannot be fully known without consistent and comprehensive accounting records.

1.10 To date, no Latin American or Caribbean country has fully applied IPSAS or other wholly accrual-based accounting practices, although significant progress has been made. Most of the region's countries are implementing a mixed system that combines accounting regularization for certain elements and cash-based accounting for others. In some cases, the national legislation is consistent with the IPSAS, placing several countries in a better position for completing the reforms. For example, Mexico approved an IPSAS-based government accounting law with coverage throughout the public sector and reinforced it in 2012 through a reform that linked it to results-based budgeting; Ecuador enacted a law in 2010 that singles out accrual as the accounting principle that the nonfinancial public sector entities are required to follow; El Salvador, Guatemala, Nicaragua, and Panama are in the midst of an IPSAS-based accounting reform; Guatemala started the process of applying IPSAS in 2005 as part of a financial systems project; Colombia, the Dominican Republic, and Honduras have prepared a strategy for transition or announced their transition to IPSAS; and Brazil, Chile, Costa Rica, and Peru have approved a plan including legal authority to converge with IPSAS or wholly accrual-based accounting.

1.11 Transparency issues are exacerbated in some countries in the region by the failure to disseminate and publish financial and budget data in a timely manner—and exacerbated further still by failing to publish results-based data in this regard. This shortcoming prevents the population from knowing how public resources are used and how they perform, and limits evaluation of social and economic impacts, policy effectiveness, and fiscal management. This problem is particularly severe in the Caribbean nations, but it also impacts other countries that do not face the institutional capacity limitations affecting a number of countries in the Caribbean.

1.12 Expanding and improving the use of results-based budgeting has enabled the governments of several OECD countries to make increasing efforts to demonstrate better performance in the management of budget resources. This has also allowed supreme audit institutions (SAIs) to move from a more traditional focus on accounting and financial auditing to looking at aspects of effectiveness, performance, and efficiency in the use of resources (value for money). In this regard, the International Organization of Supreme Audit Institutions (INTOSAI) posits that performance auditing enriches public accountability and enables SAIs to make practical contributions to improving the efficiency and effectiveness of public administration (INTOSAI, 2010).

1.13 SAIs have the potential to contribute to a better design and use of management and budgeting systems linked to performance and improved public accountability. Of the 26 OECD countries, a little more than half conduct performance or value-for-money audits on a regular basis (including Australia, Austria, Japan, Mexico, Norway, and the United Kingdom), while nine countries (Estonia, Finland, France, Hungary, Korea, New Zealand, Slovenia, Sweden, and the Netherlands) do so sporadically, and three countries (Chile, Spain, and the Czech Republic) report not having conducted this type of audit to date (OECD, 2015b). Recently, the Tribunal de Contas da União in Brazil used artificial intelligence within the Information Control Laboratory (Labcontas, which features robots that include Alice, *Analise de Licitacões e Editais*) to read on a daily basis the large volume of tendering issued by various federal government agencies. It cross-tabulates data from the Comprasnet system, the Federal Register, and 77 databases to analyze and provide indications of potential diversion and irregularities in public procurement to account auditors (Dutra and Silva, 2016).

1.14 Another important advance in PFM is the implementation of the Treasury Single Account (TSA). Through the TSA, governments centralize financial resources and flows that were previously managed on a decentralized basis by the various expenditure units or line ministries. The TSA allows for better control and information on the execution of expenditures and the use of resources, and greater coordination and integration between cash management and public debt management. Establishment of a TSA system does away with the treasury's role as a mere payor, creating instead a modern PFM structure with proactive cash management (Fainboim and Pattanayak, 2011). A TSA system generates savings by reducing the need to issue short-term debt while maximizing the returns of temporary cash surpluses. In order to adopt the TSA, governments need to have in place an IFMS that enables management, monitoring, control, reconciliation, accounting, and reporting on budget execution and accounting movements as well as on the management of bank account balances. The Integrated Financial Management Systems and the TSA require integration and automation of government budget and financial management, thereby fostering the modernization of public management (Andrews et al., 2014).

1.15 Cash and treasury management are not fully integrated in Latin America and the Caribbean. The consolidation of a TSA system in the region, albeit with limited public sector coverage, has been made possible by the significant spread of IFMSs (IDB, 2015f). In 78.2% of Latin American and Caribbean countries, more than 75% of revenue and payment transactions go through the TSA, while only 56.5% of other countries have the same coverage level (World Bank, 2017). Nevertheless, there is still much room in the Latin American and Caribbean region to expand TSA coverage, mainly for the coverage of resources for decentralized agencies, social security, state universities, and other state powers (IDB, 2015f).

1.16 However, the IFMSs and public resource management systems in the region need to be modernized. Latin America and the Caribbean, where every country has an IFMS, is one of the world's regions with the most widespread use of this type of system. Nevertheless, IFMSs in Latin America and the Caribbean face four challenges: (i) technological modernization through the use of web platforms and systems that have lower maintenance costs and greater flexibility for specific adjustments; (ii) alignment of the public accounting modernization processes in several countries in the region toward convergence with international standards; (iii) contributing to the processes of integrating financial information with performance indicators in the context of results-based budgeting and cost accounting initiatives; and (iv) extending the use of IFMSs to subnational governments (IDB, 2015f). To complement the IFMSs, links to payroll (personnel payments), procurement, and planning systems are valuable for purposes of improving public resource management. Enterprise resource planning (ERP) systems, commonly used in the private sector, are an example of information systems that include the above-listed functions. The ERPs adapted for public sector use as a public resource management system are new to the region and are starting to be used in some countries (for example, Nicaragua and Panama; more recently, Ecuador began to implement an ERP).

1.17 In the public procurement area of PFM, the reforms implemented have been aimed at improving systems and procedures, using open, competitive, and transparent online systems. This has enabled the fulfillment of three fundamental principles or objectives: (i) effectiveness, for quick and timely procurement of the necessary works, goods, and services, including specialized services; (ii) efficiency, to obtain the best price-quality or cost-benefit ratio (value for money); and (iii) transparency, for the providers of goods and services through an open and competitive electronic environment that ensures transparency in the award process, as well as for the budget monitoring and evaluation entities, the supreme audit and control entities, and the general public (Schapper et al., 2006). In addition, systems can leverage the effectiveness of development. For example, the introduction of electronic public procurement systems in India and Indonesia yielded improvements in the quality of roads and in meeting project execution schedules (Lewis-Faupel et al., 2016).

1.18 The use of procurement systems has also made inroads in the region. Procurement is a significant component of public expenditure in Latin America and the Caribbean, accounting for 5% to 10% of the region’s GDP (depending on whether or not all levels of government and State-owned enterprises are included). Most countries have created national procurement agencies to develop policies and systems. Combined with advances in information technologies, the institutional and financial autonomy of these agencies has made it easier to promote significant reforms in the sector, including electronic procurement. For example, using Brazil’s procurement system as an initial benchmark, Paraguay adopted the use of reverse electronic auctions for public procurement in 2008. In addition to providing transparency, reverse electronic auctions gave rise to significant savings. For example, in 2011, auctions reduced final prices by almost 20% with respect to the initial bids and by 12% with respect to the amounts initially estimated in the invitations to bid.

1.19 Moreover, recent innovations use blockchain technology to improve the efficiency and transparency of public procurement, for the planning, tendering, awarding, contracting, and implementation stages. For example, in the United States, the “FASt Lane” system, developed as a “proof of concept” by the General Services Administration’s Federal Acquisition Service, is targeting certain purchases of information technology materials and services, and has reduced approximately 90% of the total processing time. In Mexico, as part of an open procurement standards initiative, specific data generated during the five stages of the cycle was published. There were a total of 282 contracting processes under open standards, with 189 suppliers and a total value of US$6.3 billion.

1.20 E-procurement systems in Latin America and the Caribbean have expanded and on average offer more extensive services than in OECD member countries. Of the 12 services most commonly offered by e-procurement systems in Latin American and Caribbean countries, 10 provide better coverage than in OECD member countries. On average, Latin American and Caribbean countries disclose a larger proportion of information on bidding processes at the central government level. For example, more than 70% of the surveyed Latin American countries disclose plans for early procurement, compared to 50% of OECD member countries; close to 90% of the surveyed Latin American countries provide general information to potential bidders, compared to 75% of OECD member countries; and more than 70% of the surveyed Latin American countries provide information on procurement expenditures, compared to approximately 20% of OECD member countries (OECD/IDB, 2014). In addition, recent digital innovations based on big data and data analytics boost the efficiency of public procurement. In Brazil, the states of Rio Grande do Sul and Amazonas use information from electronic invoices, which is more precise and available in real time, to set benchmark prices. In addition to speeding up the procurement process, this solution enabled the state of Amazonas to save up to 23% in its purchases.

1.21 Two specific considerations regarding the procurement area are worthy of note. First, this expenditure area affects all functional segments of the public sector (for example, education, health, and infrastructure) on a crosscutting basis. As a result, the quality, effectiveness, and efficiency of expenditures in each of these segments are largely determined by the effectiveness and efficiency of the government procurement systems. Second, a considerable portion of public expenditures take place through the procurement of goods and services and investment in fixed capital (carried out almost exclusively through bidding processes and contracts). Thus, in 2015, public procurement in OECD countries accounted on average for 29% of total general government expenditures, equivalent to 13% of GDP. As a result, in addition to effectiveness and efficiency considerations, open, competitive, and transparent online processes produce significant savings in expenditures by reducing not only the price of goods and services but also the incidence of fraud and corruption.

1.22 Efforts undertaken by the OECD, with the support of other multilateral organizations such as the IDB, the World Bank, and the Inter-American Center of Tax Administrations, have had a significant impact on international taxation, particularly in fostering fiscal transparency. The first advance was in the area of tax havens, in the form of a set of principles developed by the OECD with the collaboration and sponsorship of several developing countries, notably including some in Latin America. Subsequently, the OECD created the Global Forum, which currently has more than 125 member jurisdictions committed to fiscal transparency. The Global Forum conducts two-phase reviews of compliance with standards of tax transparency and exchange of information at the request of interested parties. Adding to this initiative is the U.S. Foreign Account Tax Compliance Act, which provides for the automatic exchange of financial information with the United States.

1.23 Latin American and Caribbean countries have actively participated in international cooperation forums on financial and tax transparency, combatting tax evasion, money laundering, and terrorism financing. There are two regional organizations affiliated with the Financial Action Task Force (FATF): the Financial Action Task Force of Latin America (GAFILAT) and the Caribbean Financial Action Task Force (CFATF). The IDB is also involved in these forums and has a technical assistance program to help its member countries comply with FATF standards, working in coordination with other multilateral organizations (IMF, World Bank) and bilateral agencies (U.S. Treasury, GIZ, etc.). The IDB is an observer at the FATF and its regional organizations, GAFILAT and CFATF. Latin American and Caribbean countries and the IDB have also actively participated in talks and the definition of 15 priority actions for the Base Erosion and Profit Shifting (BEPS) project[73] (OECD/G20, 2015), promoted by the G20 and led by the OECD. Several IDB borrowing member countries are implementing the new consensus-based rules within the new international tax context led by the OECD. In general, this process has helped developing countries, given their higher levels of evasion and smaller institutional capacity (collection, regulatory, and judicial entities), much lower degree of development, and very limited control powers. The IDB, in cooperation with other institutions (World Bank, CIAT, GIZ, Swiss Agency for Development and Cooperation, and OECD), is implementing a series of technical support initiatives to implement the principles of tax and financial transparency and of the BEPS project. This cooperation is undertaken by means of action plans agreed upon with the requesting country (14 countries), with support from nine Bank operations. It also includes periodic dissemination and training events, supplemented by specific professional publications.

1.24 Lastly, the application of advanced information technologies, both in tax administration and in financial management systems, in combination with legal frameworks that are more solid and favor results-based transparency, not only improve the effectiveness and efficiency of fiscal management and public spending, but also help reduce opportunities for corruption and illegal transactions. To illustrate the potential, projections show that by using big data and data analytics, nearly 20% of public revenue losses could be recovered, which at a worldwide level was estimated to be between US$4 million and US$5.5 million in 2015 (Cunningham, Davis, and Dohrmann, 2018). With respect to expenditures, based on evidence gathered in India, the implementation of payments using biometric identification and authentication (Smartcards) reduced leakage by 40%, increased access to social programs by 17%, and made payments more predictable over time (Muralidharan et al., 2016).

1.25 It is essential to more actively and effectively engage civil society groups in dialogue as an opportunity to promote budget transparency and results in terms of the effectiveness, efficiency, and targeting of public expenditure. This dialogue should also include the media and nongovernmental organizations. Independent fiscal boards are key to deepening this dialogue, as they are in a position to objectively present the well-documented studies and reports needed to channel the dialogue. Accordingly, fiscal boards should include these functions or obligations in their legal and regulatory frameworks.

[73] Significantly, the first action of the BEPS project features the digital economy.

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