

# macroeconomía del desarrollo

## Tax structure and tax evasion in Latin America

Juan Carlos Gómez Sabaini  
Juan Pablo Jiménez



NACIONES UNIDAS

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Economic Development Division  
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NACIONES UNIDAS



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## Abstract

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When studying tax issues in Latin America, along with any regional perspective, individual country differences must be taken into account. Despite this regional diversity, the tax systems of the vast majority of Latin America's countries share certain key characteristics: the composition of their tax structures; the technical, economic, political and administrative constraints they face; current trends in tax policy and administration; and a high estimated level of tax evasion.

Today's globalized world calls for the need to align tax policies and administrations with those used in other countries more advanced in the subject. A task not exempt of profound changes, in the process of improving tax administration to eradicate some of the restrictions mentioned above, it is essential to institute tax reforms that promote convergence, among the region's countries, towards a tax structure system that facilitates increased tax collections.

The purpose of this paper was to study the evolution and major features of the typical level and structure of the tax burden in the region over the last 20 years, identifying important differences between the countries and highlighting the principal obstacles and constraints that most of the countries have encountered in attempting to increase their tax revenues and modify their tax structures.





## I. Introduction

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Studies on tax issues in Latin America generally offer a caveat before expressing conclusions on the region as a whole. For, regardless of the concept involved, the wide range of economic, social and geographical factors across the region inevitably requires that, along with any regional perspective, individual country differences be taken into account in order to avoid falling victim to meaningless generalizations.

Any analysis of Latin America's tax systems, therefore, requires this cautionary note, since there are significant differences from one country to another in the overall level of tax revenues currently being collected to fund the State's various public spending obligations, as well as in other aspects of individual tax systems. A country's tax burden is determined by its prevailing tax structure, the government's ability to effectively implement public policy, and the level of institutional development in place to allow for effective collection of legally established taxes.

Despite this regional diversity, the tax systems of the vast majority of Latin America's countries share certain key characteristics: the composition of their tax structures; the technical, economic, political and administrative constraints they face; current trends in tax policy and administration; and a high estimated level of tax evasion.

The typical Latin American tax structure is heavily biased towards indirect taxation, with the value added tax (VAT) constituting the main source of tax revenues. The second most important regional tax in terms of amounts collected—the income tax—is targeted to the corporate sector, where its redistributive effect is doubtful, given that it shifts the tax burden to natural persons by means of higher costs for goods and services. This issue is at the root of tax reform policies, which attempt to achieve greater balance not only between direct and indirect taxes, but also in how

the income tax is apportioned between individuals and corporations, with emphasis on the efficiency costs and impact that each type of tax has on income distribution.

However, the many failures and meagre results achieved by these reform efforts in various countries within the region highlight the severe and perennial constraints encountered, including: (i) the high degree of informality in markets for goods and factors; (ii) the scant institutional capacity to manage and monitor payment of taxes; (iii) the low level of tax morale (willingness to pay taxes) and a perception, in many of the countries, that the State lacks legitimacy; and, as a consequence of the foregoing factors, (iv) the high overall rate of evasion with regard to all taxes.

This regional pattern of taxation is occurring, moreover, alongside a new tax paradigm, one designed to increase trade openness and expand financial and trade operations internationally. This development has brought with it the need to align tax policies and administrations with those of countries in other regions of the world, a task requiring profound changes.

One example of this is the international trend, one of the major landmarks of the last two decades, towards separating tax administration from tax policy, making the two functions autonomous. And while it is widely believed that these dual functions are merely two sides of the same coin, a number of countries in the region have encountered difficulties in coordinating the two and still maintaining their independence. All too often, tax administration is driven exclusively by the goal of tax collection, neglecting the basic need to ensure an efficient and equitable tax system. Conversely, as Bird (2003) has stated, “the best tax policy in the world is worth little if it cannot be implemented effectively”.

Accordingly, in the process of improving tax administration to eliminate some of the constraints cited above, it is essential to establish viable methods of orchestrating tax reforms so that they promote convergence, among the region’s countries, towards a more efficient, equitable, more effectively administered and more credible (i.e. socially legitimate) tax structure—in short, a system that facilitates increased tax collections, while at the same time enhancing the “quality” of tax systems. One important step in this direction would be to develop and publish performance indicators for tax administration. This would improve the dissemination of information and heighten the transparency of the agencies involved, while also providing a basis for comparing results of different tax administrations.

The purpose of the present report is, first of all, to study the evolution and major features of the typical level and structure of the tax burden in the region over the last 20 years, identifying important differences between the countries and classifying them in three distinct groups. The second section has a dual purpose: on one hand, to highlight the principal obstacles and constraints that most of the countries have encountered in attempting to increase their tax revenues and modify their tax structures and, on the other, to detail the main tax policy alternatives adopted by these countries in recent years to increase their tax burdens.

The third section is devoted to various aspects of tax evasion (particularly the ways in which it harms the tax system), including methods generally used to estimate levels of evasion, available information on evasion in the region’s countries, and information on specific cases where there has been significant progress in making quantitative measurements of evasion. The fourth and fifth sections cover tax administration. In particular, they analyse strategies implemented to improve collection of the major taxes, following which they present a variety of performance indicators for Latin American tax administrations (taking account of methodological constraints), designed to measure efficiency, effectiveness and the availability of resources. The final section of the paper presents a summary of the study and its principal conclusions.

## II. Recent tax trends in Latin America

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The last 20 years have seen profound social, economic and institutional changes in Latin America, and these changes have had their effect on tax policy. Tax burden has increased considerably, driven by economic growth, efforts to achieve macroeconomic stability, increased commodity prices and the tax reforms of the early 1990s.

These reforms, directed at increasing fiscal revenues to deal with growing demands for spending, established the value added tax (VAT) as Latin America's principal tax. However, the bias towards indirect taxation, along with the narrow income tax base and high degree of non-compliance, have limited efforts of the region's tax systems to pursue objectives related to increased equity and greater stabilization.

This change in paradigm has also affected tax administration, covering issues such as the provision of differential treatment for different categories of taxpayers, simplifying tax systems by eliminating distortionary and less important taxes, incorporating information technologies, and dealing with the challenges of open—and consequently more interconnected—economies.

Despite these general trends, however, levels of tax revenue and recent changes to tax structures vary considerably from one country to another. Thus, while some countries, such as Brazil and Argentina, currently have tax burdens exceeding 30% of GDP, others, such as Ecuador, Guatemala and Paraguay, have tax burdens of no more than 14% of GDP. These latter countries also show slower growth rates than the former group.

Table 1 shows a notable regional phenomenon. Simple averages of tax revenue series, as a percentage of GDP and per capita GDP (in constant 2000 United States dollars) were calculated for 18 Latin American countries (ECLAC). The resulting figures were 16.3% and US\$ 3,252, respectively, for 1990-2009. Around these values were intermediate groups lying within +/- 20% of the averages. Thus, the countries with “high” tax burdens and “high” average per capita GDP for 1990-2009 can be considered to be those that exceed the regional average of each variable for the period by 20%, while those that are 20% below the averages can be considered to be “low” with regard to those variables.

One might suppose that countries with high income levels (as measured by per capita GDP) would be the ones with the highest levels of tax burden, pointing to adequate tax effort. However, there are countries in Latin America (such as the Plurinational State of Bolivia and Nicaragua) with tax revenues above the regional average but with very low GDP. There are also paradoxical cases such as Mexico, which has high per capita income in relation to the regional average but one of the region’s lowest tax burdens, a level inconsistent with its degree of development.

**TABLE 1**  
**CLASSIFICATION OF LATIN AMERICAN COUNTRIES BY LEVEL**  
**OF TAX BURDEN AND PER CAPITA GDP**

		Average per capita GDP 1990-2009 (Dollars at constant 2000 prices)		
		High (above US\$ 3,903)	Medium (US\$ 2,602-US\$ 3,903)	Low (below US\$ 2,602)
Average tax burden 1990-2009 (% of GDP)	High (greater than 19.5%)	Argentina, Uruguay	Brazil	----
	Medium (between 13.0% and 19.5%)	Chile, Costa Rica, Panama, Bolivarian Republic of Venezuela	Colombia	Plurinational State of Bolivia, Honduras, Nicaragua, Peru
	Low (less than 13.0%)	Mexico	Dominican Republic	Ecuador, El Salvador, Guatemala, Paraguay

Source: Authors, based on data from the Economic Commission for Latin America and the Caribbean (ECLAC).

Determining the reasons for the heterogeneity of the current situation requires that one examine the evolution of the tax burden in Latin America, in terms of both level and structure —a task undertaken in the following section.

## A. Changes in the level of tax burden in Latin America

The average tax burden in Latin America, including contributions to social security, has increased continuously over the last two decades. In absolute terms, the increase has been close to 5% of GDP, and in relation to the average for 1990-1992 it has grown 34.4%. In most of the region’s countries this increase is due to the greater preponderance of general taxes on goods and services, and to the expansion of tax bases as a result of three main factors: (a) strong and accelerating economic growth driven by rising prices for primary-sector goods; (b) the introduction of novel initiatives such as minimum taxes and taxes on financial transactions; and (c) reforms to tax structures and tax administration.

The succeeding sections analyse these factors. It should be borne in mind that providing a broad, overall analysis of the evolution of tax policy in Latin America is a complex undertaking, since the macroeconomic circumstances, as well as the efforts to improve the tax burden, have varied from

country to country. Table 2 summarizes tax burden averages by three-year periods for Latin American countries between 1990 and 2009.

The table shows profound inter-country differences with regard to the magnitude of the tax burden. For example, Brazil's figure was 34.1% of GDP for the 2008-2009 biennium (comparable to levels in developed countries), with Argentina ranking second behind Brazil, with 31.2% of GDP for the same period. These two countries have led the region in terms of increased tax burden over the last two decades. For most of the region's countries, however, the level of taxation is less than 20% of GDP, with figures in extreme cases, such as Mexico and Guatemala, at around 11% of GDP.

**TABLE 2**  
**CHANGING TAX BURDEN IN THE COUNTRIES OF LATIN AMERICA BETWEEN 1990 AND 2009**

*(Three-year averages and percentages of GDP)*

	1990- 1992	1993- 1995	1996- 1998	1999- 2001	2002- 2004	2005- 2007	2008- 2009	1990- 2009
<u>Group 1</u>								
Brazil	23.7	25.9	27.1	30.2	31.8	33.6	34.4	29.3
Argentina	18.5	21.1	20.5	21.2	23.2	27.8	31.2	23.0
Uruguay	22.5	22.5	22.7	23.0	21.9	23.3	24.6	22.8
<u>Group 2</u>								
Costa Rica	17.2	17.9	18.6	19.0	20.1	21.4	22.4	19.4
Chile	17.0	18.2	18.9	18.9	18.7	20.0	19.1	18.7
Nicaragua	11.7	13.6	15.7	16.8	18.3	21.4	22.1	16.8
Bolivia (Plurinational State of)	10.4	13.6	17.4	17.8	17.8	20.1	22.2	16.8
Panama	15.0	16.2	16.0	15.9	14.6	15.4	16.7	15.7
Colombia	10.9	13.2	15.2	15.5	16.8	18.2	17.8	15.2
Peru	13.1	14.9	15.9	14.3	14.3	16.3	16.2	15.0
Honduras	13.3	13.7	12.9	15.4	15.5	16.5	16.0	14.7
Venezuela (Bolivarian Republic of)	17.3	14.1	14.9	13.2	12.1	16.5	14.4	14.7
<u>Group 3</u>								
El Salvador	10.8	12.4	12.2	12.3	13.2	14.6	14.3	12.8
Paraguay	9.8	11.9	12.7	11.9	11.8	12.9	13.7	12.0
Mexico	12.7	12.8	11.3	12.4	12.4	11.1	10.7	12.0
Dominican Republic	8.6	10.6	11.2	12.2	12.6	15.2	14.1	12.0
Ecuador	10.1	9.5	9.6	11.5	13.3	13.8	16.9	11.9
Guatemala	8.8	8.6	10.1	10.9	12.0	12.0	11.1	10.5
Average Group 1	21.6	23.1	23.4	24.8	25.7	28.2	30.1	25.0
Average Group 2	14.0	15.0	16.2	16.3	16.5	18.4	18.5	16.3
Average Group 3	10.1	11.0	11.2	11.9	12.5	13.3	13.5	11.8
Simple average Latin America	14.0	15.0	15.7	16.2	16.7	18.3	18.8	16.3
Weighted average Latin America	18.0	19.4	20.2	19.7	19.6	22.0	23.3	20.2

Source: Authors, based on ECLAC data.

Note: The coverage applies to all levels of government in the cases of Argentina, the Plurinational State of Bolivia, Brazil, Chile, Costa Rica, Colombia and Mexico (for 2009, central government only). For the remaining countries, the data are for the central government. The last row in the table shows the tax burden for each country, weighted by the country's share of Latin America's GDP, based on the series in current dollars (ECLAC).

As can be seen, there are differences within the groups with regard to the actual change in tax burden during the period. In each group it is possible to identify countries that have led the growth in tax revenue and those in which change has been lower than the regional average, as well as countries that, in an exceptional manner, have moved in the opposite direction, such as Mexico and the Bolivarian Republic of Venezuela.

### BOX 1 BRIEF NOTE ON METHODOLOGY

The construction of tax revenue series that are comparable internationally and over time is an arduous and challenging task, particularly for Latin America. Among the issues that must be addressed are the level of government and collections system to be used for social security contributions. In addition, it is important to take into account the obligations to transfer a portion of what is collected to other entities or levels of government, as well as non-tax and quasi-tax revenues (Cetrángolo and Gómez-Sabaini, 2006, p. 44).

The information used in this report is derived primarily from central government data. The rationale for this is the greater availability of such information, as well as the fact that in both unitary and federal States, most of the revenue is collected at the central level. In more decentralized countries, however, coverage has been expanded to include information on general government (which includes subnational governments). This is justified by the role of intermediate governments (states and provinces) and/or local governments, which have differing degrees of tax autonomy and collect significant revenues. In Brazil, for example, these subnational governments account for 10% of total collections. The present study uses institutional coverage at the general-government level for Argentina, the Plurinational State of Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador and Mexico.

Collections for the social security system demand special attention. Public finance statistics separate these funds from tax collections, since "Compulsory social security contributions differ from taxes in that the payments entitle the contributors and other beneficiaries to certain social benefits if specified events should take place, such as sickness and old age". (IMF 2001, p. 45). Thus, unlike taxes, which are mandatory transfers received by the government and are not linked with specific services, payments to fund social security programmes must be viewed in conjunction with the benefits they confer.

Moreover, the last 20 years have produced profound changes in the scope of social security programmes in Latin America, as well as changes in the State's role and in the scheme for funding the systems. Given that the countries have not followed any single criterion for funding their social security systems, there are serious problems in including social security contributions as tax revenue when making international comparisons. With regard to pensions, for example, there are systems in which the role of the public sector is being replaced by private administrators of capitalizable funds (Plurinational State of Bolivia, Chile, El Salvador, Mexico). There are also systems in which the public and private sectors are present side by side, either because these are mixed systems (Argentina, Uruguay) or because they are parallel systems (Colombia, Peru) (Mesa Lago, 2000). Brazil, Costa Rica and Panama have completely public systems, which have had significant success in collecting social security contributions.

January 2010 saw the launch of a joint initiative involving ECLAC, the Inter-American Centre of Tax Administrations and the OECD, with the principal aim being to build a database containing internationally comparable tax data.<sup>a</sup>

With regard to tax collections, the present project seeks to provide data by type of tax and level of government. The principal task in designing the database focused on compiling tax information, categorizing each public revenue item according to the type of tax, and classifying budget items using a common methodology similar to that used in the OECD publication *Revenue Statistics*. Special emphasis was given to analysing the legislation and regulatory frameworks of the tax systems in the individual countries in order to determine whether or not a specific category of revenue constitutes tax revenue and, if it does, to classify it in terms of the corresponding tax base.

Source: Author's elaboration.

Note: Tax revenues (in national currency at current prices, and in percentages of GDP), by type of tax, for 1990-2009 are compiled, systematized and disseminated by ECLAC, and can be viewed on the CEPALSTAT web page: <http://www.cepal.org/estadisticas/> by selecting "Statistics and Indicators" – "Economics" – "Public Sector" – "Tax Revenues".

<sup>a</sup> Countries included in the initial project were Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Mexico, Peru, Uruguay and the Bolivarian Republic of Venezuela. The period examined was 1990 to the present.

Analysing the average tax burdens of the region's countries for different three-year periods between 1990 and 2009 shows that the growing tax burden in Latin America has been led principally by a small number of countries (Brazil, Argentina, Nicaragua, the Plurinational State of Bolivia, Costa Rica, Colombia, Ecuador and the Dominican Republic), while for the remaining countries there has not been significant progress, in absolute terms, in increasing tax revenues as a share of GDP (see table 3). In this latter group of countries, the average tax burden has actually declined from the levels of the 1990s.

**TABLE 3**  
**PERCENTAGE CHANGE IN TAX BURDEN IN LATIN AMERICA**  
*(Three-year averages)*

	1999-2001 / 1990-1992	2008-2009 / 1999-2001	2008-2009 / 1990-1992
<u>Group 1</u>			
Brazil	27.6%	17.3%	45.0%
Argentina	14.6%	54.0%	68.6%
Uruguay	2.0%	7.4%	9.4%
<u>Group 2</u>			
Costa Rica	10.9%	19.6%	30.5%
Chile	10.9%	1.6%	12.4%
Nicaragua	44.3%	45.4%	89.7%
Bolivia (Plurinational State of)	71.2%	41.6%	112.8%
Panama	6.1%	5.1%	11.2%
Colombia	42.6%	20.5%	63.0%
Peru	9.1%	15.0%	24.2%
Honduras	16.2%	4.2%	20.3%
Venezuela (Bolivarian Republic of)	-23.9%	7.0%	-17.0%
<u>Group 3</u>			
El Salvador	13.4%	19.1%	32.5%
Paraguay	21.1%	18.2%	39.4%
Mexico	-1.9%	-13.4%	-15.3%
Dominican Republic	41.2%	21.9%	63.1%
Ecuador	14.2%	54.2%	68.4%
Guatemala	24.2%	2.5%	26.7%
Average Group 1	15.0%	24.3%	39.3%
Average Group 2	16.7%	15.9%	32.6%
Average Group 3	17.1%	16.0%	33.1%
Simple average LA	16.4%	18.1%	34.4%
Weighted average LA	9.5%	20.3%	29.8%

Source: ECLAC.

Note: Coverage is for central government except in the cases of Argentina, the Plurinational State of Bolivia, Brazil, Chile, Colombia and Costa Rica, where figures are for general government (including tax revenues of subnational governments).

Table 3 shows that, though the generally positive trend in tax burden was quite similar in the last two decades (+16.4% in the 1990s and +18.1% in the most recent decade), the behaviour of this variable is unique to each of the countries. On one hand, the growing tax burden between the 1990-92 and 1999-2001 triennia shows that only some countries —Brazil, Guatemala, Nicaragua, the Plurinational State of Bolivia, Colombia, Paraguay and the Dominican Republic— increased their tax burdens (as a percentage of GDP) above the regional average. However, only some of these countries maintained an above-average pace of growth during the most recent decade, with Nicaragua and the Plurinational State of Bolivia being notable for the magnitude of percentage increase. At the same time, other countries in the region emerged as leaders in the accelerating change in tax burden (for example, Argentina, Costa Rica and Ecuador).



The change in tax burden in the region's countries has been linked to changes in per capita GDP. After the Asian financial crisis of 1997, many of Latin America's countries experienced recessionary periods that produced moderate growth, both in per capita GDP and in tax burden. However, strong and rapid economic growth since 2002, driven by the rising prices for exports of primary good, accelerated the growth in tax revenues in nearly all of the region's countries.

Given these contrasting circumstances, the priority assigned to the various tasks at hand will depend, for a given country, on the level of tax burden. In countries where collections remain low in relative terms, efforts should be directed at strengthening the fiscal revenues from taxes. In cases where collection levels are adequate, the emphasis could reasonably be placed on improving the quality of the resources obtained and on achieving more equitable distribution of the tax burden, as well as on reducing inefficiencies caused by poorly designed systems and improving controls and compliance—the last of these in view of the fact that, as will be seen below, rates of tax evasion continue to be extremely high throughout most of the region.

A heavier or lighter tax burden does not always represent better or worse conditions in public finance, since revenues from other sources—such as extraction of natural resources, as in the case of Argentina, the Plurinational State of Bolivia, Chile, Colombia, Ecuador, Mexico, Peru and the Bolivarian Republic of Venezuela, or, in the case of Panama, fees charged for use of the Panama Canal—may come into play. To a lesser extent, bilateral and multilateral donations also contribute to raising government revenues, as in the cases of Haiti, Honduras and Nicaragua. Although these resources work together to fund public spending and services, the “tax bases” they draw on tend to be more volatile than traditional tax bases, and in the case of revenues derived from finite non-renewable resources, there are inevitably issues of sustainability and intergenerational equity.

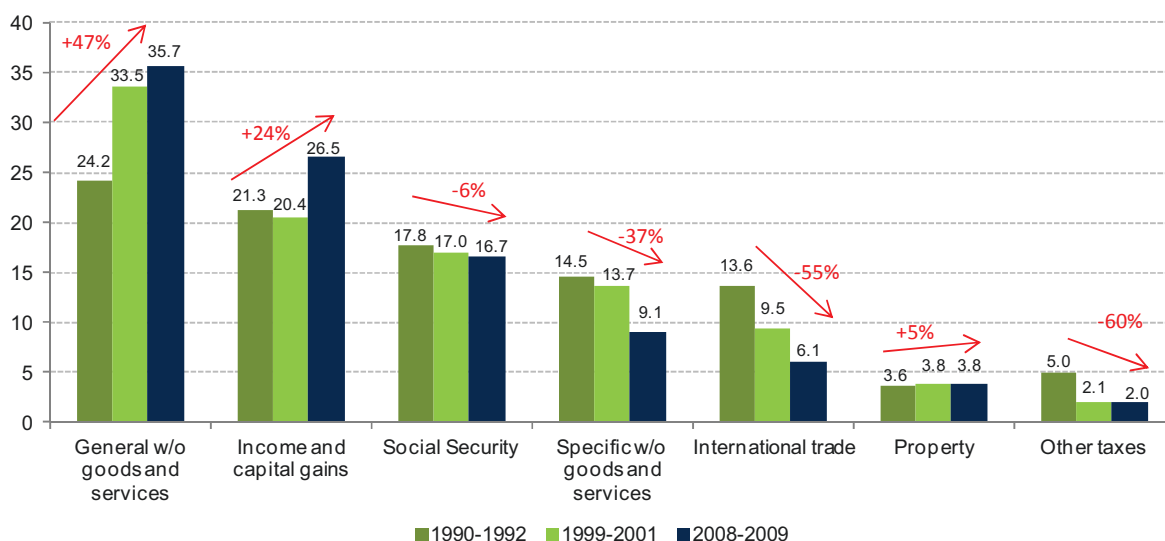
Very low tax burdens tend to place significant constraints on fiscal policy, thereby reducing the capacity to provide public services or limiting the quality of the services offered in basic areas such as education, health, social assistance, housing and infrastructure. Given that the lower-income population depends more heavily on government policies and action, this is the population group most impacted by the reduction in public services.

## **B. Principal changes to the tax structures**

The design of reforms to the tax structure over the last two decades was based on an effort to achieve greater fiscal solvency, with little attention given to other key tax policy objectives. One of the most significant tax policy phenomena in Latin American countries during this period has been the significantly increased role of general taxes on goods and services (value added taxes and other similar taxes) as a proportion of all tax revenues in the region. Figure 1 shows an average 47% rise in the relative weight of these taxes within the tax structure at the regional level. As can also be seen, nearly the entire increase in the weight (percentage) of taxes of this type occurred during the 1990s, in the wake of tax reforms that broadened tax bases and increased the legal rates of taxation.

In addition to the reduction in income tax rates for businesses, the collection of income and capital gains taxes are a further cause of the increase in the regional tax burden during the last two decades. As percentage of all tax revenues, these taxes increased by 24%—from an average increase of 21.3% in the 1990-1992 triennium to 26.5% between 2008 and 2009. The largest rises occurred in the last decade, due to certain increases in tax bases that rely on taxing services, the implementation of distortionary taxes or contributions, better monitoring of the universe of taxpayers and, in some countries, greater reliance on revenues from production and from exports of goods.

**FIGURE 1**  
**CHANGE IN MAIN TAXES AS A SHARE OF THE TYPICAL TAX STRUCTURE IN LATIN AMERICA**  
*(Percentages of all tax revenues)*



Source: Authors, based on ECLAC data.

Note: The percentages in red represent relative changes in the percentage of the region's typical tax structure represented by each group of taxes.

**TABLE 4**  
**CHANGES IN LATIN AMERICA'S TAX STRUCTURE**  
*(Three-year averages and percentages of GDP)*

Type of tax	Latin America			Group 1			Group 2			Group 3		
	1990-1992	1999-2001	2008-2009	1990-1992	1999-2001	2008-2009	1990-1992	1999-2001	2008-2009	1990-1992	1999-2001	2008-2009
Income and capital gains	3.0	3.3	5.0	2.2	4.0	5.9	3.7	3.4	5.4	2.3	2.8	3.9
Property	0.5	0.6	0.7	1.5	1.9	2.1	0.3	0.5	0.5	0.3	0.1	0.3
General tax on goods and services (VAT)	3.4	5.4	6.7	7.0	9.1	10.7	2.9	5.0	6.3	2.3	4.3	5.2
Specific taxes on goods and services	2.0	2.2	1.7	2.8	2.3	1.6	2.2	2.7	2.0	1.3	1.4	1.3
International trade	1.9	1.5	1.1	1.3	0.8	1.8	2.1	1.6	0.9	1.9	1.9	1.1
Other taxes	0.7	0.3	0.4	0.4	0.5	0.7	0.6	0.4	0.4	1.0	0.2	0.2
Social Security	2.5	2.8	3.1	6.4	6.2	7.1	2.1	2.7	2.9	1.1	1.2	1.5
Total tax revenues	14.0	16.2	18.8	21.6	24.8	30.1	14.0	16.3	18.5	10.1	11.9	13.5

Source: Authors, based on ECLAC data.

As table 4 shows, the strengthening of the two categories of taxes mentioned above has been a common feature of the tax structures of the three groups of countries cited, which are categorized according to their average tax burden for 1990-2009. Thus, for example, for group 1 —Brazil, Argentina and Uruguay— these taxes rose from an average of 9.2% of GDP in 1990-1992 to 16.6% of GDP in 2008-2009. As a percentage of GDP, the average tax burden for the period, represented primarily by the VAT and income taxes, increased by 4.9% in the case of group 2, and by 4.5% for group 3.

**TABLE 5**  
**CHANGE IN LATIN AMERICA'S TAX STRUCTURE**  
(Three-year averages and percentages of total collections)

Type of tax	Latin America			Group 1			Group 2			Group 3		
	1990-1992	1999-2001	2008-2009	1990-1992	1999-2001	2008-2009	1990-1992	1999-2001	2008-2009	1990-1992	1999-2001	2008-2009
Income and capital gains	21.3	20.5	26.5	10.1	16.3	19.7	26.5	21.0	29.2	22.6	23.7	29.2
Property	3.6	3.8	3.8	7.0	7.6	7.0	2.2	3.2	2.8	2.6	1.2	2.0
General tax on goods and services (VAT)	24.2	33.5	35.7	32.3	36.5	35.7	21.0	30.7	34.1	22.5	36.1	38.6
Specific taxes on goods and services	14.5	13.7	9.1	13.0	9.4	5.3	16.0	16.6	10.9	13.1	12.0	9.9
International trade	13.6	9.4	6.1	5.9	3.3	6.1	15.2	9.6	5.0	18.4	15.6	8.1
Other taxes	5.0	2.1	2.0	2.0	2.0	2.4	4.3	2.5	2.1	9.6	1.4	1.5
Social Security	17.8	17.0	16.7	29.6	24.9	23.8	14.8	16.5	15.7	11.3	9.9	11.0
Total tax revenues	100	100	100	100	100	100	100	100	100	100	100	100

Source: Authors, based on ECLAC data.

Analysis of the typical tax structures for each group, however, in terms of totals collected (table 5), shows that the relative magnitude of these two taxes is greater in groups 2 and 3 than in group-1, largely because of the dominant role of social security contributions in the tax systems of the group-1 countries.

Moreover, as a consequence of increased economic openness in the region, taxes on foreign trade fell 55% as a proportion of total revenues in most of the region's countries —from an average of 13.6% in the 1990-1992 triennium to 6.1% in 2008-2009. The decline was sharpest in the 1990s. This general trend resulted from changes in the tax structures of the countries in the group with lower tax burdens (2 and 3), while for the group-1 countries the share of this type of tax has remained at around 6% of total collections.

Similarly, due to the simplification of the region's tax schemes, taxes on specific consumption of goods and services (selective taxes) also lost ground in terms of relative weight within the region's typical tax structure, falling from 14.5% in 1990-1992 to 9.1% in 2008-2009 —a decline, over the last two decades, of 37% of total collections. However, most of this reduction occurred during the last decade, with the widespread implementation of general taxes on consumption— a trend seen in all of the groups of countries examined.

For the region as a whole, social security contributions represent a substantial percentage of tax revenues, and their weight in Latin America's tax structures as a whole has remained relatively stable, at around 17% of the total. In relation to GDP, this has meant an increase from 2.5% to 3.1% of GDP in the periods considered here. In this segment, the group-1 countries are notable for their heavier tax burden, as discussed earlier. These countries collect up to 3 or 4 times more than do the group-2 and group-3 countries, in terms of the percentages of GDP, and up to twice as much in terms of total amounts collected.

Lastly, taxes on wealth were nearly constant, in relative terms, between 1990-1992 and 2008-2009, with only a slight increase from 0.5% to 0.7% of GDP —a 5% rise in terms of their weight in the average tax scheme. Thus, in most of the region's countries, the historically meagre yield from these taxes, in terms of their share of overall tax revenues, remained nearly constant (figure 1). What little change occurred is attributable almost entirely to the group-1 countries, where there were slight increases in these taxes as a percentage of GDP. As a general matter, taxes on wealth play a negligible role in the tax systems of Latin American countries.



### **III. Constraints on achieving the desired objectives of tax systems**

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Beyond the improvements noted regarding the level of the tax burden, the region's tax systems have had problems meeting the objectives of allocational efficiency, distributive equity and economic stabilization.

These problems are related to a series of factors (examined in greater detail further on), which share the following characteristics:

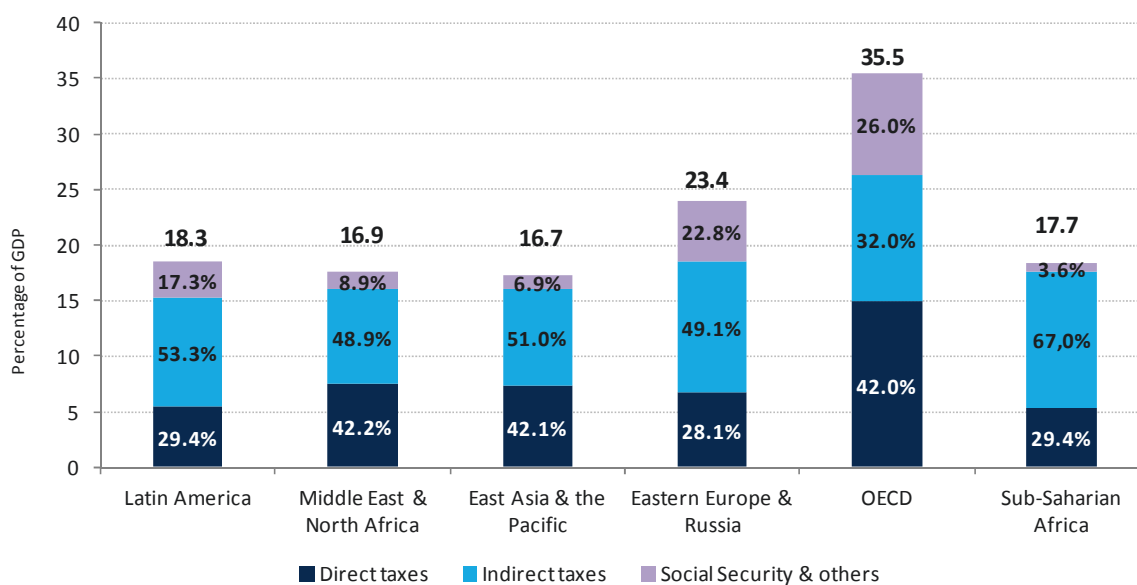
- Insufficient and volatile tax burden, both in comparison with other regions of the world with comparable levels of development and in relation to the potential for revenue, given current income levels.
- Unbalanced tax structure biased in favor of indirect taxes, diminishing the redistributive effect of the tax system, making it (in many of the region's countries) regressive in nature.
- Reduced tax bases, resulting from numerous tax exemptions and tax-related expenditures.
- High level of non-compliance and tax delinquency, further increasing and distorting the observed results.

#### **A. Insufficient, unequal and volatile tax burden**

Although the average tax burden in Latin America has seen an upward trend in the last two decades, most of the countries have lower tax burdens than do countries in other regions of the world with similar levels of development.

**FIGURE 2**  
**TAX BURDEN AND STRUCTURE IN LATIN AMERICA AS COMPARED**  
**WITH OTHER GROUPS OF COUNTRIES, 2006**

(Percentages of GDP and of total)



Source: ECLAC (Latin America), Government Finance Statistics (IMF); International Financial Statistics (IMF) and World Economic Outlook (IMF).

Note: The percentages shown represent each group of taxes as a percentage of all tax revenue (average for each region). Direct taxes include income and wealth taxes. Indirect taxes include taxes on goods and services (general and selective) and on international trade. The remainder represents social security contributions and other, relatively insignificant, taxes.

One manifestation of Latin America's low average tax burden (18.3% of GDP in 2006) is to compare it with other world regions. As seen in figure 2, the average tax burden in the region's countries is practically half that of the OECD countries (where it averages 35.5%), though slightly above levels in other developing regions, such as Africa, the Middle East and the Asia-Pacific region, where the figure is around 17% of GDP.

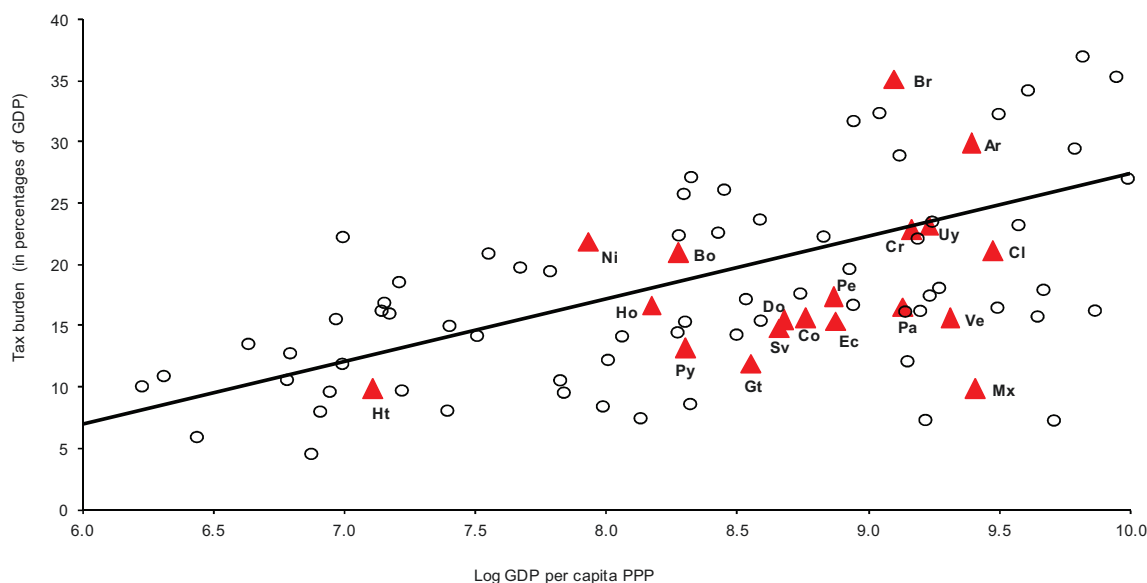
This statistic also highlights certain characteristics particular to Latin America's tax systems. For example, despite the inter-regional differences in the tax burden, the composition of that burden has been highly heterogeneous. The ratio of direct to indirect taxes in Latin America is 0.55, in line with values for Eastern Europe (plus the Russian Federation) and Sub-Saharan Africa. However, these figures are in sharp contrast with those of other regions, such as Asia (0.85 on average) and, even more pronounced, the OECD countries, where the ratio of direct to indirect taxes is 1.31.

This stark imbalance in the region's tax structure is even more pronounced if one considers only the two main Latin American taxes, the income tax and the value added tax, which together have accounted for approximately 60% of average tax revenues in recent years. The ratio of income tax to VAT is 0.7 for Latin America (an indicator that most likely has declined further in recent years, given the increase in economic activity), placing it below the figures for the other regions considered, where values range from 0.8 (Eastern Europe) to 1.9 (OECD).

A second analytical approach (figure 3) consists of a cross-sectional regression analysis, which examines, for 121 countries, the relation between the tax burden and the logarithm of the per capita GDP (ECLAC, 2010). In countries that are above the regression line, of which there are only four in the region (Brazil, Argentina, the Plurinational State of Bolivia and Nicaragua), the tax burden is high in comparison with per capita GDP. On the other hand, the remaining countries show levels of tax burden clearly lower than would be expected based on their level of development. Thus, there is margin for

increasing the tax burden, given that potential revenues in the region's countries is considerably higher than actual collections.

**FIGURE 3**  
**COMPARISON BETWEEN TAX BURDEN AND PER CAPITA GDP (PPP)**  
*(Percentages of GDP and logarithms)*



Source: J. P. Jiménez, Gómez Sabaíni and Podestá (2010).

**BOX 2**  
**TAX EFFORT IN LATIN AMERICA**

In order to fund development, countries must increase their ability to mobilize domestic resources. The countries of Latin America, like other developing countries, need to increase their spending on infrastructure, education, health and services, to cite but a few areas. In order for the countries to set tax policy, it is important to determine tax effort, since this signals the degree to which countries have room to increase revenue through taxation.

Tax effort is customarily defined as the ratio between actual collections and tax capacity. Tax capacity is the maximum tax revenue that a country can obtain, given its economic, social, institutional and demographic characteristics.

There are few studies analysing and estimating tax effort in Latin America, though analytical studies that focus on developing countries more generally, and that therefore include Latin America, can be found.<sup>3</sup> Most of these studies use cross-sectional methods, and their explanatory variables include factors relating to supply: level of development; trade, agriculture or mining as a share of the economy; level of foreign aid, etc. Other, more recent studies incorporate demand variables, such as indicators related to corruption, participation and accountability, with an emphasis on the role of institutions and governance.

The findings from two studies, focusing on Latin America, are given below. The first (Piancastelli, 2001) examines a sample of 75 countries, and concludes that the most important variables in explaining differences in tax effort are the shares of the economy represented by trade and agriculture. The second study (Pessino and Fenochietto, 2010) constructs a stochastic tax frontier using data from 96 countries. Its findings corroborate the significant and positive relationship between tax burden and several factors: level of development (per capita GDP), trade (imports and exports as a percentage of GDP) and education (public educational spending as a percentage of GDP). At the same time, it points to a negative relationship between tax burden and: price levels, income distribution (Gini index), ease of collecting taxes (value added of the agricultural sector as a percentage of GDP) and corruption.

As the table shows, the findings of Pessino and Fenochietto (2010) point to less tax effort in the region than do the findings of Piancastelli (2001). Nevertheless, considering even the most optimistic findings, only five of the region's countries would be close to their tax capacity, with the median falling below that of other regions. Like nearly all of the studies mentioned above, these analyses document and demonstrate that the region features a low level of tax effort in comparison with other regions, and that many of the countries have ample room to increase their tax burden.

(continued)



## Box 2 (concluded)

	Piancastelli (2001) *			Pessino and Fenochietto (2010) **				
	Effective tax rate (a)	Adjusted tax rate (b)	Index of tax effort (a/b)	Effective tax rate (a)	Tax effort(b)		Tax capacity (a/b)	
					Truncated model	Normal truncated heterogeneous model	Truncated model	Normal truncated heterogeneous model
Argentina	11.40	17.43	0.65	27.40	63.90	61.40	42.90	44.60
Belize	21.65	18.69	1.16					
Bolivia (Plurinational State of)	9.45	14.62	0.65	26.60	67.80	62.50	39.20	42.50
Brazil	17.10	16.27	1.05	32.40	95.80	92.20	33.90	35.20
Chile	18.80	19.45	0.97					
Colombia	11.90	15.43	0.77	19.60	73.60	69.20	26.60	28.30
Costa Rica	20.90	17.91	1.17	22.20	67.90	66.30	32.60	33.40
Ecuador	14.84	16.82	0.88					
El Salvador	12.27	15.98	0.77	15.30	54.30	50.80	28.10	30.00
Guatemala	8.02	14.27	0.56	10.70	38.70	35.80	27.60	29.90
Honduras				17.90	65.30	59.00	27.40	30.30
Jamaica				32.40	95.80	92.20	33.90	35.20
Mexico	13.75	18.43	0.75		50.50	49.20	39.40	40.50
Nicaragua				21.50	67.30	56.90	31.90	37.80
Panama	17.88	22.20	0.81	14.30	46.80	47.10	30.60	30.40
Paraguay	9.14	15.75	0.58	15.30	63.70	59.30	24.00	25.80
Peru	10.73	12.22	0.88	15.30	56.90	53.40	26.90	28.70
Dominican Republic	12.68	16.43	0.77	14.20	48.50	45.30	29.30	31.30
Trinidad and Tobago				29.30	65.80	66.30	44.50	44.10
Uruguay	25.52	18.09	1.41					
Venezuela (Bolivarian Republic of)	16.12	23.68	0.68	16.20	44.60	44.70	36.30	36.20
Latin America (average)	14.83	17.28	0.86	20.62	62.78	59.51	32.65	34.36
Europe/OECD (average)	29.22	25.82	1.13					
Africa (average)	17.09	13.34	1.28					
Asia/Middle East (average)	15.33	16.23	0.94					

Source: Author's elaboration based on Piancastelli (2001) and Pessino and Fenochietto (2010).

Note: \* Total tax revenue/GDP; \*\* includes social security contributions.

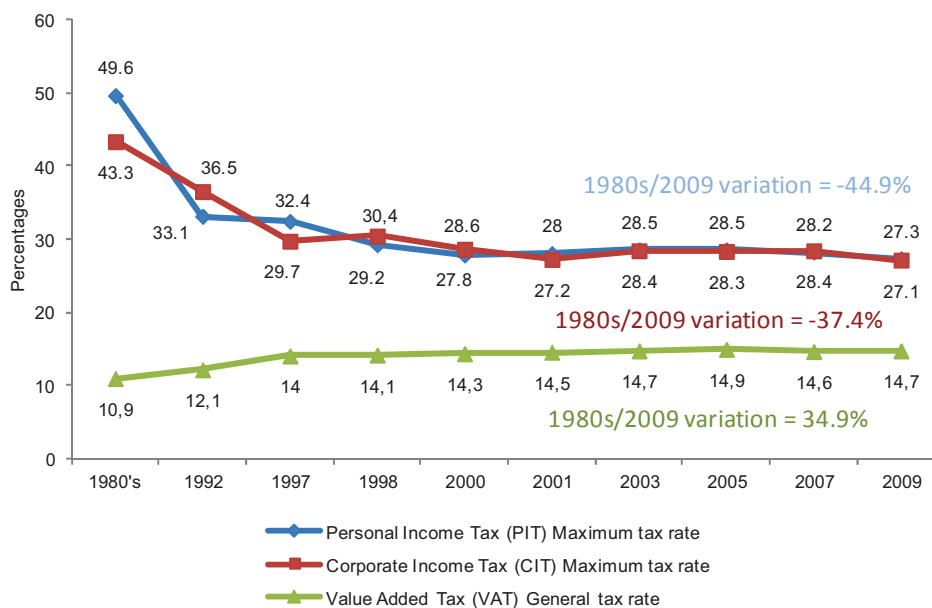
<sup>a</sup> See, among others, Lotz, J. and E. Morris (1967), "Measuring 'Tax Effort' in Developing Countries", Staff Papers, International Monetary Fund, Vol. 14, pp. 478-499, Washington, DC; Chelliah, Raja J. (1971), "Trends in Taxation in Developing Countries", Staff Papers, International Monetary Fund, Vol. 18, pp. 254-0331, Washington, DC; Chelliah, Raja J., Hessel J. Baas, and Margaret R. Kelly (1975), "Tax Ratios and Tax Effort in Developing Countries, 1969-71", Staff papers, International Monetary Fund, Vol. 22, pp. 187-205, Washington, DC; Tait, Alan A., Barry J. Eichengreen, and Wilfrid L.M. Grätz (1979), "International Comparisons of Taxation for Selected Developing Countries, 1972-76", Staff Papers, International Monetary Fund, Vol. 26, pp. 123-156, Washington, DC; Piancastelli, M. (2001), "Measuring the tax effort of developed and developing countries. Cross country panel data analysis - 1985/95", Discussion paper, Instituto de Pesquisa Economica Aplicada, IPEA, Rio de Janeiro, September; Bird, R.M., J. Martinez-Vazquez, and B. Torgler (2004), "Societal Institutions and Tax Effort in Developing Countries", International Studies Program Working Paper 04-06; Bird, R.M., J. Martinez-Vazquez, and B. Torgler (2008), "Tax effort in developing countries and high income countries: The impact of corruption, voice and accountability", Economic Analysis and Policy, Vol. 38 No. 1; Gupta, A. (2007), "Determinants of Tax Revenue Efforts in Developing Countries", IMF Working Paper; and Pessino, C. and R. Fenochietto (2010), "Determining countries' tax effort", *Revista de Economía Pública*, 195-(4/2010): 65-87, Department of Finance of Spain.

## B. An unbalanced structure biased towards indirect taxes

Macroeconomic changes in recent years, along with tax policy reforms, have led to numerous changes in tax structures. The following descriptions briefly summarize some of the more notable changes:

- *Declining revenues from taxes on trade and international transactions.* As a consequence of reduced tariff protections and the elimination of export taxes in nearly all the region's countries, there has been a visible decline in taxes on foreign trade as a percentage of total revenue.
- *Significant increases in general taxation of goods and services.* The ongoing and constant expansion of rates and of the value added tax base has made the VAT the principal source of revenue in the region, replacing the declining revenues from foreign trade. The spread and strengthening of the VAT continued a trend already in evidence in the 1980s. Rates increased from 10.9% in the mid-eighties to an average of 14.7% in 2009 (figure 4).

**FIGURE 4**  
CHANGES IN LEGAL RATES FOR INCOME TAX AND VAT IN LATIN AMERICA, 1980s TO 2009  
(Percentages)



Source: Gómez Sabaini, J.C. (2006) and official data from the countries.

- *Reduced number of selective taxes.* The region's countries have reduced the number of selective taxes, limiting themselves to taxing the consumption of certain goods and services with low price elasticities, such as tobacco, alcoholic beverages and soft drinks, fuels and telecommunications, while at the same time eliminating taxes on goods with high income elasticity (luxuries).
- *Simplification of taxes on small firms.* The large size of the informal economy, in terms of both labor and microenterprises, has led to the use of presumed-tax mechanisms for small taxpayers. To facilitate compliance with tax requirements, there has been a shift from a tax system based on formal accounting to one that relies on a single tax on the possible income of small firms. The presence of a large number of microenterprises, in response to the difficulty of obtaining formal work, has led most of the region's countries to institute tax policies

designed to address the difficulty of maintaining control over taxation of small firms. Thus, some countries have opted for alternative systems to deal with this group of taxpayers as a whole. Examples of this are Brazil's "Simples" system and Argentina's "Monotributo" (single tax). Other countries have chosen to exclude from taxation taxpayers considered by the tax administration not to merit the effort required, while in yet other cases one sees high levels of non-compliance—cases in which countries have simply opted to live with the problem.

- *Strengthening of the corporate income tax in the wake of privatization policies, thus making taxable the profits of many public enterprises taxable, accompanied by an expansion of the tax base of these fast-growing sectors, as a consequence of increased prices for commodities and natural resources.* As a result of this combination of factors, businesses bore a greater weight from imposition of the income tax, while natural or physical persons shouldered less of the load, thus creating a bias in the application of the income tax.
- *Decreased role for wage-based charges in funding social security systems.* The total or partial privatization of social security systems in some countries has kept social security contributions constant at around 17% of total tax revenues.
- *Reduced maximum marginal personal income tax rates.* In keeping with the international situation, including the gradual deregulation of capital movements, the Latin American region as a whole reduced income tax rates for both natural persons and businesses, while neglecting to simultaneously broaden the relevant tax bases. Between the mid-1980s and 2009, the average maximum marginal rates declined by 45%, from 49.6% (for businesses) and 43.3% (for natural persons) to values of around 27% for both groups (figure 4). The reduction in the maximum personal income tax rates in Latin America has been much greater than the average reduction in OECD countries, where personal tax rates have remained above 40% (table 6). At the same time, the increase in the minimum rates has been relatively insignificant.

**TABLE 6**  
**LEGAL INCOME TAX RATES (AVERAGE) IN LATIN AMERICA**  
**AND THE OECD (2007)**

(Percentages)

	Latin America	OECD
Individuals	28.2	40.6
Corporations	28.4	27.7

Source: Authors, based on data from ECLAC and OECD.

A number of the trends cited above have undoubtedly been reactions to the high levels of evasion for the various taxes. For example, the significant increase in indirect taxation, through the expansion of the value added tax base, as well as the increase in the rates for the VAT, is the result not only of ideology, but also of the greater ease of collection and reduced opportunity for evasion.

A similar rationale can be advanced with regard to simplifying the tax system, both in general and, specifically, for small businesses, which are more difficult to monitor, and where informality is more common and evasion more pervasive. The reduction of maximum marginal income tax rates seeks to discourage tax avoidance—in other words, abuse of tax laws—generally involving taxpayers with significant capital and the resources to hire consultants and other tax professionals to help reduce their tax payments. Extraordinary or spurious taxes have also been used, and in some cases export taxes and taxes on the exploitation of natural resources have been increased, since these are easy to collect and harder to evade.

Consequently, in a trend contrary to that indicated above with regard to simplifying tax systems, there has been an emergence of extraordinary or spurious taxes, such as taxes on bank debits and credits, taxes on financial transactions, and other “heterodox” taxes designed to ensure some minimum collection of the principal taxes.

As González (2009) states, the importance and currency of these taxes in the region’s tax systems can be seen in recent tax reforms, which have not only retained taxes of this type —often instituted as temporary measures— but have reinstated and refined them, boosting them by means of rate increases or by expanding the base, at times even creating new heterodox taxes.

The problem of tax evasion, and the nature of the tax structures in most Latin American countries, which are strongly biased towards indirect taxation, give the various tax systems in the region scant redistributive impact; in fact, in many cases the systems are regressive in comparison with market distribution of income. Concomitantly, redistributive policy is forced to rely almost entirely on public spending.

This contrasts sharply with the situation in the developed countries, where the redistributive effect of transfers is far greater than any such effect from taxes (table 7). The estimated average of the redistributive impact of taxes in the OECD is 13 times greater than corresponding estimates for Latin America, while this ratio drops to 3.5 with regard to the impact of redistribution through transfers.

**TABLE 7**  
**DISTRIBUTIVE IMPACT OF TAX POLICY IN LATIN AMERICA AND THE OECD**

Regions	Gini Coefficient		Redistribution through fiscal policy		
	Before fiscal policy	After fiscal policy	Total	Taxes	Transfers
Latin America	0.515	0.476	0.038	0.003	0.036
OECD	0.450	0.284	0.167	0.040	0.127

Source: Goñi, López and Servén (2008), Jesuit and Mahler (2008) and Cubero and Hollar (2010).

### **C. Tax distortions in the income tax and the bias towards corporate taxation**

Changes in the region’s tax structures have led to a highly unequal relation between direct and indirect taxation. Tax policy has not only strengthened consumption taxation, but has also tilted the income tax primarily towards the corporate sector, with far less emphasis on the income of physical persons. On average, the income tax in Latin American countries produces revenues equivalent to a mere 1.5% of GDP. This comes primarily from taxing formal workers, while wealth taxes represent 0.6% to 0.7% of GDP.

Thus, a characteristic feature of taxation in Latin America is the distorted structure of the income tax, relying heavily on corporate taxes, a system in which the effects of tax shifting and tax incidence are uncertain, as they depend on market conditions. Corporations account for an average of 3.6% of GDP, representing over 70% of the tax revenue generated by the income tax and, in most of the countries of the region, over twice the revenue from physical persons (table 8). In the OECD countries, on the other hand, individual income tax revenue represents 70% of the total, with corporate income taxes accounting for the remaining 30%.

**TABLE 8**  
**STRUCTURE OF INCOME TAX REVENUE IN LATIN AMERICA BY COUNTRY**  
*(Percentages of GDP and absolute)*

Country (year)	Corporations (% of GDP)	Individuals (% of GDP)	Total (% of GDP)	Corp./Indiv. Ratio (%)
Argentina (2007)	3.6	1.6	5.4	2.3
Bolivia (Plurinational State of) (2007)	3.0	0.2	3.3	15.0
Brazil (2007)	5.1	2.6	7.7	2.0
Chile (2007)	7.3	1.2	8.4	6.1
Dominican Republic (2007)	2.9	1.1	4.0	2.6
Ecuador (2006)	2.3	0.8	3.1	2.9
El Salvador (2007)	2.7	1.9	4.6	1.4
Guatemala (2007)	2.9	0.3	3.4	9.7
Honduras (2004)	3.7	1.6	5.3	2.3
Mexico (2005)	2.4	2.2	4.6	1.1
Panama (2006)	2.9	2.0	5.0	1.5
Peru (2007)	5.9	1.4	7.2	4.2
Uruguay (2007)	2.6	1.0	3.5	2.6
Latin America	3.6	1.4	5.0	2.6
OECD (2006)	3.9	9.2	13.0	0.4

Source: ECLAC and official sources in each country.

Note: Data from 13 of the region's countries were averaged, since detailed information was not available from other sources consulted.

Most of the individual income tax revenue comes from income of formal workers who are employees, with a smaller percentage derived from professional incomes, financial rents and corporate profits. Unfortunately, as the result of a variety of factors prevalent in these countries, there is limited opportunity for collecting personal income taxes in significant amounts. These factors include levels of poverty, increased income concentration and a high degree of informality in economic activities. Such conditions limit the ability to generate public resources, and underline the need to implement distributive policies to break the vicious circle of low tax collections, lack of tax legitimacy and limited social investment.

A further element in this equation is the fact that capital gains receive generous preferential treatment in the vast majority of the region's countries, where these earnings are either totally exempt from taxation or are subject to extremely low tax rates, thus explaining the nearly non-existent taxation of non-wage income.

Given this set of factors, the narrow tax base necessarily consists of the compensation received by wage workers in the formal labour market—a small proportion of Latin America's total value added. Moreover, a large proportion of wage earners receive income below the threshold for paying income tax. Thus, only a minority group—no more than 10% of the economically active population—is taxed. Adding to this situation is a high level of non-compliance and evasion on the part of independent or own-account workers.

Wage-worker compensation represents only a small proportion of Latin America's total value added; hence the region's reliance on indirect taxes. Undoubtedly the failure of the personal income tax to become an important source of revenue is due to the fact that there is little or no taxation of non-wage income, which is largely composed of return on capital (rents, interest, dividends and capital gains). As a

result of this combination of factors, taxes on personal income and capital gains generate a mere 1.4% of GDP, on average, far below the average level in OECD countries, where the figure exceeds 9% of GDP.

## D. Narrow tax bases for all taxes

An additional element that has impeded the ability of tax systems to achieve their objectives of solvency, efficiency and equity is the narrow tax bases on which the region's tax systems are built. As indicated in the foregoing section's analysis of the income tax structure, a range of factors accounts for the narrowness of the tax bases. The analysis in this section will focus on the increasing use of tax exemption mechanisms ("tax expenditures") in the region.

So-called "tax expenditures" are revenues that, as a result of preferential tax treatment designed to favour or stimulate certain sectors, activities, regions or economic agents, the government fails to receive. During recent decades, the implementation of such incentives has eroded the tax bases of Latin America's main taxes.

The promotion of tax exemptions and other tax benefits began in the 1950s, based on the idea that the most important driver of development was investment. Public investment was furthered by means of increases in the tax burden, while private investment was encouraged through tax incentives for "necessary" or "essential" activities. At present, tax expenditure is being justified not only by economic growth and the consequent reduction in unemployment, but also by the need to provide incentives for foreign capital to settle in the region's countries and to promote exports of exportable goods.

The results obtained show that in many cases these instruments not only have failed to increase levels of investment and economic activity in the countries concerned, but have also, in some cases, encouraged corruption. In many instances, the instruments have been exploited opportunistically by businesses, which used them to increase their profitability by reducing the costs of paying certain taxes. While these incentives have generally succeeded in modifying the regional or sectoral allocation of investment within the country, they have not substantially altered the rate of domestic investment.

Tax expenditure has a negative effect on equity, as well as on efficiency. Foregoing potential tax revenue limits the room for fiscal manoeuvring and, hence, for social investment. Moreover, granting benefits to a specific group of taxpayers or activities has led to a loss of horizontal equity. In terms of efficiency, tax expenditure has created problems in terms of inter-jurisdictional tax authority and has led to other distortions in decisions about industrial siting and production.

**TABLE 9**  
**SELECTED COUNTRIES: TAX EXPENDITURE, 2000-2009**  
(Percentages of GDP)

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Argentina	-	3.01	2.71	2.41	2.01	2.21	2.11	2.20	2.14	2.08
Brazil	1.58	1.51	1.78	1.70	1.40	1.69	1.99	2.29	2.77	3.20
Chile	-	4.43	4.22	3.87	3.45	4.38	4.05	4.88	3.96	3.96
Colombia	-	-	-	-	-	3.70	3.96	3.52	-	-
Guatemala	12.00	12.30	12.70	12.50	12.30	8.40	8.50	8.60	-	-
Mexico	-	-	5.26	6.05	5.28	6.32	5.59	5.38	-	-
Peru	-	-	-	-	1.83	2.07	2.24	2.22	2.05	1.81

Source: L. Villela, A. Lemgruber, M. Jorrat (2009), based on official reports from the countries.

Table 9 shows a compilation of findings on tax expenditure for selected countries (Jorrat, 2008). These findings highlight the significant loss of revenue (over two percentage points of GDP in most

cases) as a result of tax expenditure. In terms of tax expenditure patterns over time, no clear trend is detectable in the countries examined, with the exception of Brazil, which has seen major increases in recent years, and Argentina, which has experienced a slight but sustained decline.

Jiménez and Podestá (2009) point out the importance of the relation between tax expenditure and tax burden in the region's countries, and group countries in three categories: (i) Argentina, Brazil and Peru, where tax expenditure plays a relatively minor role (approximately 10%); (ii) Chile, Colombia and Ecuador, categorized as mid-level; and (iii) Guatemala and Mexico, where the figure is over 50%.

Major methodological differences in estimating the amount of tax expenditure in the countries involved, however, limit the ability to make meaningful comparative analyses; caution must therefore be exercised in advancing any general conclusions on the matter.<sup>1</sup> There has been a growing awareness, within Latin America, of the need to develop methods for identifying and estimating tax expenditure that allow for inter-country comparability (with sufficient disaggregation by type of activity, region, level of government and income decile), so that the effectiveness of the expenditure can be assessed and incorporated in the budget cycle.

Lastly, it should be borne in mind that tax expenditure provides major opportunities to manipulate the tax system, and encourages evasion and avoidance. Slemrod (1989) attributes this to four factors: (i) there is increased uncertainty about the correct interpretation of legal rules; (ii) the greater complexity of rules, which demands more rigorous auditing, decreases the taxation capacities of the tax administration; (iii) as a result of the increased complexity of the system, taxpayers tend to fail to honour some of their tax obligations, either out of ignorance or in order to compensate for the costs imposed by the system; and (iv) the use of tax expenditures increases the complexity of the tax rules, creating more room for evasion and avoidance (Jorrat, 2010).

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<sup>1</sup> In 2007, for example, Chile's tax expenditures were more than double those of Argentina. Unlike Argentina, however, Chile's estimation process takes into account variances resulting from the difference between the marginal tax rate paid by corporations and the maximum marginal rate for the same tax applying to dividends distributed to individuals. Absent that measure, tax expenditure would drop by 1.64%, below the Argentine level. In Guatemala, where tax expenditure is calculated as the minimum non-taxable amount for income tax (an exception to the generally accepted rule), there is a sharp drop in the estimate for 2005, due to methodological changes rather than elimination of benefits.

## **IV. Effects of evasion on the tax structure**

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The analysis thus far has covered the principal trends in taxation seen in Latin America and the constraints on making the necessary changes, as well as alternative schemes that the region's countries have adopted in recent years.

The high levels of evasion found in the individual countries require detailed analysis, since their negative effects go beyond the merely technical realm. In addition to resulting in actual revenues below the potential levels, lack of compliance can work against efforts to encourage responsible individual tax compliance, since the concept of responsible compliance has a subjective element based on a reciprocal relationship between the taxpayer and the taxing authority (the entity responsible for administering the taxation process)—in short, between the citizens and the State.

### **A. The importance of measuring evasion of the principal taxes**

Evasion hinders development and balanced growth, and undermines the overall sense of fairness on which the tax system should be based (Carrasco, 2010). According to Carrasco, efforts to estimate evasion are important not only because such estimates assist in designing an economic system that guarantees a minimum level of well-being to its citizens, but also because the data obtained serve as a fundamental input for tax administration.

By reducing the amount of taxes collected by the State, evasion reduces the available fiscal space, giving the State fewer resources to carry out its customary functions of fiscal policy: stabilization, provision of public goods and income redistribution.



Evasion affects the population's well-being, in that it can alter the distributive impact sought by tax legislation, thus affecting both horizontal equity ("equal treatment for those in similar circumstances") and vertical equity ("appropriately disparate treatment for those in differing circumstances"). With regard to horizontal equity, evasion can mean that individuals with the same capacity to pay face unequal tax burdens, since evaders end up paying less tax than those who meet their tax obligations. In terms of vertical equity, people with greater capacity to contribute to the system generally have more opportunities to benefit from professional advice, and thus develop strategies to avoid taxes or to reduce the risks of non-compliance.

A tax system with high levels of evasion also undermines the intended impact of the system, not only with regard to equity, but also in terms of fostering social cohesion, since evasion corrodes the society's confidence in the State and reduces the likelihood of achieving the "fiscal covenant" so necessary in the region. In this respect, many of the tax policies examined in the foregoing section take evasion as a given in all of Latin America and, more important still, demonstrate the difficulties that tax administrations face in dealing with the problem.

Traditionally, the orthodox schools of thought have attributed tax compliance to the taxpayer's fear of being caught and punished by the authorities (Allingham and Sandmo, 1972). However, these explanations fail to account for the paradoxical case of countries in which, while the likelihood of audits and sanctions is very low, compliance levels are very high. Thus, tax compliance is a phenomenon which, though largely dependent on the taxing capacity of the State, is also influenced by numerous other factors, including subjective ones.

It is worth noting that improving tax administration and strengthening the mechanisms for monitoring and enforcing compliance are not in themselves sufficient solutions to solve the problem of tax evasion; tax administration must also take into account how attitudes affect individual behaviour. Specifically, it is important to determine whether there is a correlation between tax morale and levels of tax compliance (Torgler, 2007).

Tax administration should take a leading role in making citizens aware of their social responsibility to pay taxes established by the State. The legitimacy of the State and of its institutions is vital in determining individuals' acceptance of the need to honour their tax obligations. Unless societies succeed in establishing the obligation to pay taxes as an accepted reality (high tax morale), the functioning of the State becomes subject to a high degree of volatility and it is forced to rely on the goodwill of those who honour their tax obligations (Bergman, 2009).

The most recent information from the *Latinobarómetro* survey shows that the combination of confidence in State spending and a willingness to pay more taxes has little support within the societies. This "hostility to taxation" is a problem that must be addressed through greater transparency in the use of taxes, as well as through "palpable" progress in using taxes to advance people's well-being (ECLAC, 2010).

Few of the region's countries measure evasion on a consistent and periodic basis. This makes it difficult to monitor the situation, and provides scant input for establishing goals to reduce non-compliance and to assess the efficacy and efficiency of tax administrations. The few instances in which periodic measurements are made are generally limited to the VAT. Such is the case in Chile, for example, where the tax administration measures evasion of the VAT on an annual basis and sets ambitious goals for reducing non-compliance. Noteworthy is the case of Mexico, where a law was passed in 2003 requiring the publication of studies of tax evasion, for both direct and indirect taxes. The numerous studies published by Mexico since then have provided significant input for measuring and monitoring evasion.

### BOX 3 EXISTING METHODS OF MEASURING EVASION

There are many methods for calculating and estimating evasion. Among specific approaches, Tanzi and Shome (1993) emphasize the use of national accounts, direct controls, methods based on surveys of household budgets, and direct taxpayer surveys. The OECD (2001) classifies the methods for measuring evasion as: those based on audits; those based on taxpayers' tax statements; indirect methods based on cross-referencing different sources of information; survey-based methods; direct observation; methods based on analytical models; and methods based on laboratory experiments.

Jorrat and Podestá (2010) classify the different methods in two major groups. First are the comprehensive systems, macro measurements and indirect approaches. These include methods based on economic aggregates (national accounts), methods using information from household surveys, and those linking revenue collections with the use of specific physical inputs for producing a good or service. Second are the partial systems, micro-measurements and direct approaches. These entail special audit programs or targeted inspections. Based on measuring evasion by what is deemed to be a representative sample, they draw inferences concerning the behaviour of a given group of taxpayers.

The most common methods include estimating potential tax revenue based on national accounts. This consists of using data on national accounts to estimate potential revenues from a given tax, and then comparing that figure with the actual amounts collected. The gap between the two figures is considered to represent the value of evaded taxes. This method is useful for quantifying evasion for flat-rate taxes, where the tax base has some relation to a macroeconomic aggregate. Thus, it is the method most commonly used to estimate evasion of the value added tax and the corporate income tax. Advantages commonly cited for this method are ease of calculation, low cost, and the ability to measure evasion for annual series, thus permitting analysis of changes over a given time period. The limitation most often cited is the fact that the method's accuracy is dependent on the reliability of the data source.

For calculating evasion of the personal income tax, however, the methods most commonly used are those that estimate potential revenue on the basis of household surveys. Because of the progressive nature of these taxes, it is more appropriate to use household surveys for which it is possible to apply different rates to different groups of individuals. The method consists of calculating the tax obligation of each individual surveyed and, as a function of annualized declared income, determining whether the corresponding rate has been applied. The amounts collected are then grouped according to income percentiles and compared with the actual revenues obtained by the tax administration in those income percentiles. The principal advantages of this method include simplicity and low cost, while a commonly cited limitation is the fact that those surveyed frequently omit information or under-declare income.

With regard to the VAT, Escobar (2008) and Carrasco (2010) emphasize the use of the VAT productivity index as a possible indicator of the changing level of tax evasion over time. This index is usually defined as the VAT revenue (as a percentage of GDP) divided by the VAT rate. The higher the index, the greater the tax's yield, signalling a high degree of tax compliance and a broad tax base. Although it is not useful for quantifying evasion, it provides a low-cost analysis of changes in the level of evasion over a defined period.

Other, more direct approaches include fixed-point sampling methods. This involves auditing a sample of taxpayers, and provides the tax administration specific information on the rate of evasion. Although its principal advantage is that it can draw on all types of statistical techniques, its effectiveness depends to a considerable extent on the experience of those performing the audits. However, it is difficult to draw conclusions on the rest of the population based on these findings. One of the reasons commonly cited for the bias in evasion figures is the fact that tax administrations normally audit those taxpayers deemed most likely to be evading taxes.

## B. Levels of VAT and income tax evasion in Latin America

One of the constraints in analysing evasion in the region is the scarcity of studies on evasion employing a common methodology, thus making comparison between countries difficult. Although it is easier to find comparisons based on studies of the VAT (since such studies share a common methodology), comparing evasion of the income tax poses greater difficulties.

Below are data on evasion of the income tax from a comparative study supported by ECLAC. The study made estimates for seven countries, using a common methodology, thus allowing comparisons between the countries and providing a method that can be used in other studies. The findings on evasion of the VAT are taken from different studies, and were compiled by Gómez Sabaini (2011) in a subsequent work.

**TABLE 10**  
**COMPARISON OF RATES OF VAT AND INCOME TAX EVASION**  
*(Percentages)*

Países	Value Added Tax		Income Tax			
	Estimated Evasion Rate	Year	Estimated Evasion Rate			Year
			Total	Individuals	Corporations	
Argentina	21.2	2006	49.7	--	--	2005
Bolivia (Plurinational State of)	29.0	2004	--	--	--	--
Chile	11.0	2005	47.4	46.0	48.4	2003
Costa Rica	28.7	2002	--	--	--	--
Colombia	23.5	2006	--	--	--	--
Ecuador	21.2	2001	63.8	58.1	65.3	2005
El Salvador	27.8	2006	45.3	36.3	51.0	2005
Guatemala	37.5	2006	63.7	69.9	62.8	2006
Mexico	20.0	2006	41.6	38.0	46.2	2004
Nicaragua	38.1	2006	--	--	--	--
Panama	33.8	2006	--	--	--	--
Peru	37.7		48.5	32.6	51.3	2006
Dominican Republic	31.2	2006	--	--	--	--
Uruguay	26.3	2006	--	--	--	--

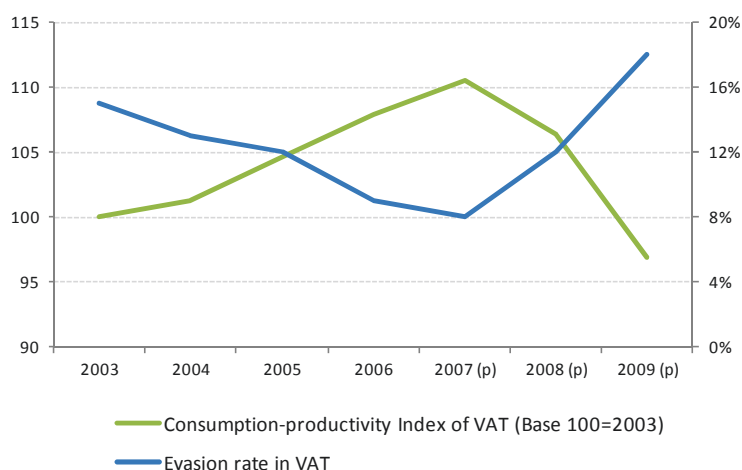
Source: Gómez Sabaini, Jiménez and Podestá (2010) and Gómez Sabaini (2011).

Available estimates of tax evasion show that evasion is far more extensive in the case of the income tax—both personal and corporate—than for the value added tax, despite the fact that the two are substantially interrelated. As shown in table 10, while evasion rates for the VAT, calculated for the Latin American countries, range from 11% (Chile) to 38.1% (Nicaragua), averaging around 27%, rates of non-compliance for the income tax range from 41.6% (Mexico) and 47.4% (Chile) to 63.8% (Ecuador), for an average of 51.4%. Evasion of the corporate income tax is more extensive in most of the countries than evasion of taxes on income of physical persons.

As mentioned above, both Chile and Mexico make official estimates of tax evasion. In Chile, the Department of Research at the Internal Revenue Service publishes a series of estimates on the VAT covering the years 2003 to 2009. The method employed consists of using sectoral inter-relations derived from the input-output matrix to estimate what fraction of transactions should be considered as the potential base, according to the tax law. The estimate is based on aggregate consumption figures linking the potential VAT base to three factors: private consumption, intermediate consumption by exempt sectors, and investment by exempt sectors. The study also publishes an estimate of the so-called “VAT productivity-consumption index”, proposing that since this is a tax paid by the final consumer, the tax base for the VAT should be more closely aligned with that macroeconomic aggregate than would be a calculation based on productivity-GDP.

Figure 5 shows the findings, suggesting evidence of a relationship between general down and up cycles of the productivity-consumption index and changes in the rate of evasion.

**FIGURE 5**  
**RATE OF VAT EVASION AND VAT PRODUCTIVITY-CONSUMPTION INDEX**  
*(Baseline 100=2003)*

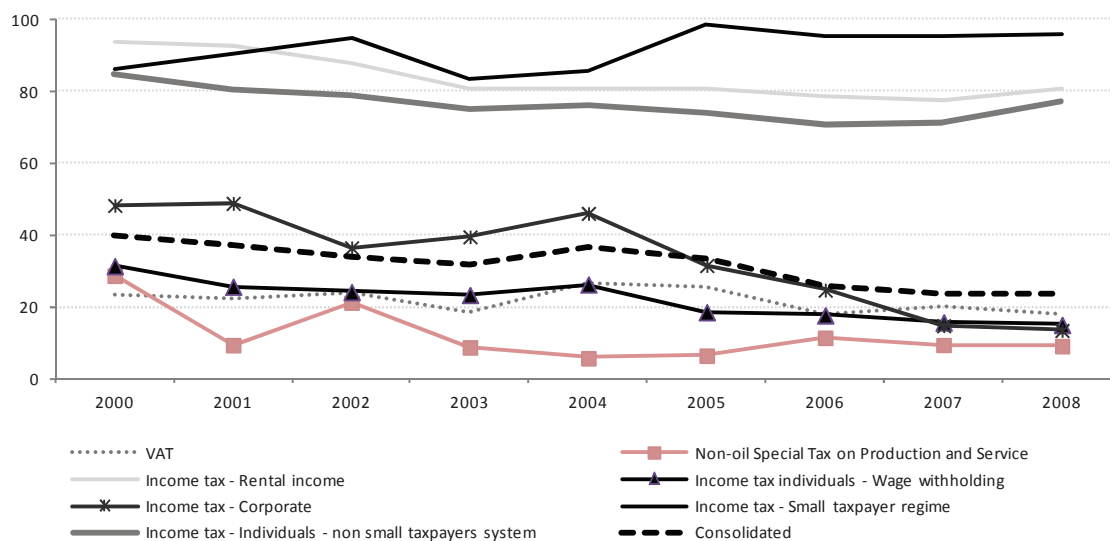


Source: Internal Revenue Service of Chile

In the case of Mexico, a study published in 2010 by the Instituto Tecnológico de Monterrey at the request of the Tax Administration Service estimates tax evasion for different types of taxes for 2000-2008. For nearly all types of taxes, the methodology uses information from the System of National Accounts, supplemented by secondary information from various surveys, censuses and the input-output matrix.

Figure 6 shows the high level of income tax evasion, principally with regard to income from rentals, REPECOS (small taxpayer regimes) and non-REPECOS; and lower and declining rates of evasion of the VAT and of the income tax on employed physical persons. The consolidated rate has fallen remarkably in the period examined, from 39.61% in 2000 to 23.36% in 2008, with the decline due primarily to a drop in income tax evasion by juridical persons.

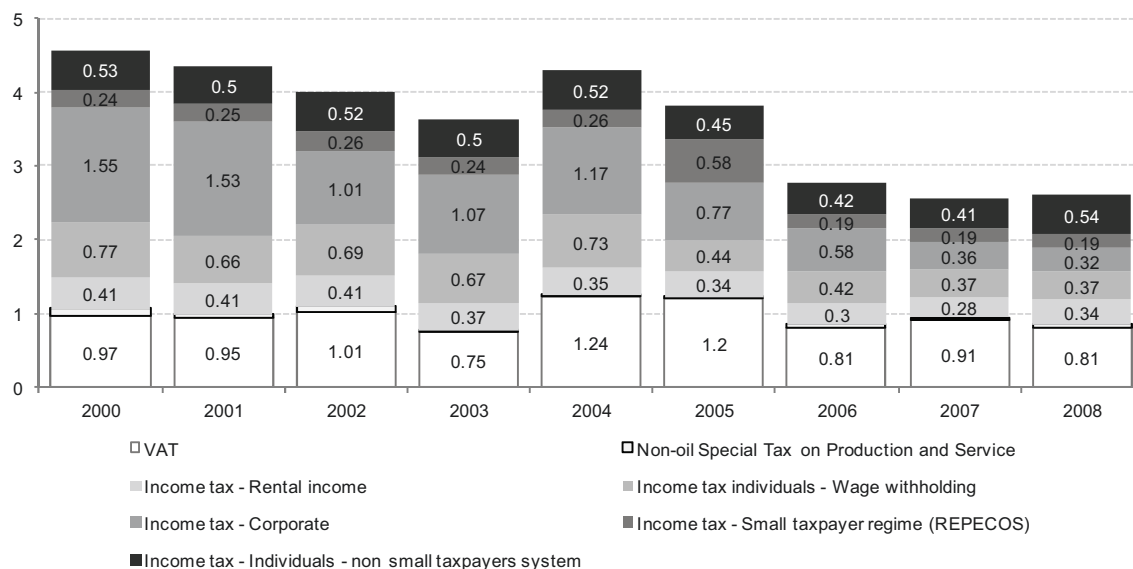
**FIGURE 6**  
**TAX EVASION IN MEXICO**  
*(Evasion rates)*



Source: Fuentes Castro (2010).

Evasion in Mexico, as a percentage of GDP, has declined considerably, from 4.57% of GDP in 2004 to 2.62% of GDP in 2008 (figure 7). Though the VAT evasion rate is among the lowest of all the taxes, it is fairly significant in GDP terms, representing approximately 1% of GDP throughout the period studied.

**FIGURE 7**  
**TAX EVASION IN MEXICO**  
*(As a percentage of GDP)*



Source: Fuentes Castro (2010).

A number of conclusions can be drawn from the existing studies on tax evasion in the region. First, rates of evasion are high overall, for both the income tax and the VAT, though there are differences between countries. Except for the VAT evasion rate in Chile, all figures represent at least 20% of the revenue potential. Second, according to the data, income tax evasion is greater than VAT evasion. The rate of evasion of the VAT averages 25.9% in the region, as compared with 51.4% for the income tax. Third, corporations evade more, in percentage terms, than do physical persons. Evasion of the income tax among juridical persons is 7% higher than the rate for physical persons (54% versus 47%).

At the country level, Guatemala is an exception, in that evasion of the income tax by physical persons is greater than evasion by juridical persons. Gómez Sabaini, Jiménez and Podestá (2010) consider this an atypical finding, and propose two explanations. The first is that there may be an overestimation of evasion by juridical persons who, because they have more ability to use legal means to report greater costs and lower profits, avoid more taxes, thus representing a potentially important component in the findings. The second hypothesis is that evasion by natural persons may be underestimated, since the lack of information on under-statement of non-labour earnings reported in household surveys makes it impossible to make the appropriate adjustment, and because the income tax on physical persons in the region is essentially a tax on labour, captured at the source and therefore more difficult to evade. Lastly, in line with the above argument, according to the study conducted in Mexico by Fuentes Castro (2010), evasion among individuals is lower in the case of employees' income, since part of their wages is withheld. These features of the evasion phenomenon have implications for the region's tax structure. For example, the lower evasion of the VAT and the greater ease of monitoring this type of tax revenue have facilitated and promoted emphasis on this tax within the region.

## **V. Alternatives chosen to increase the tax burden in the region's countries**

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### **A. Taxes on financial transactions**

In recent decades, the growing tax burden has been insufficient to finance public spending needs, particularly for social spending, thus leading to persisting problems with solvency and leaving little latitude for fiscal policy.

In attempting to deal with these circumstances, Latin American tax policy has tried to fill the gap in the tax burden by creating unorthodox taxes that generate significant revenue, are easy to administer, and are difficult to evade. Given the advantages of such taxes and the consequent increases in revenues, relatively little importance has been attached to the resulting distortionary effects and the impact of these taxes on the efficiency of the tax system.

Some of these taxes have been designed to tax gross assets of firms, but the most commonly used types have been taxes on financial activities involving debits and/or credits in bank accounts and in other financial institutions.

Taxes on financial activities, adopted under different names by different countries, have grown significantly in the last two decades, as seen in table 11, which shows that in 1999 they were used in only one Asian country, while they were used by a total of 13 countries in 2005, replacing more traditional taxes (Coelho, 2009). In Latin America, the cases of Argentina, Brazil, Colombia and Peru are cited as the most significant.

**TABLE 11**  
**NUMBER OF COUNTRIES WITH TAXES ON FINANCIAL TRANSACTIONS**  
**IN LATIN AMERICA AND THE ASIA-PACIFIC REGION**

Year	Latin America	Asia-Pacific	Total
1996	1	0	1
1997	1	1	2
1998	1	1	2
1999	1	4	5
2000	1	3	4
2001	1	3	4
2002	2	4	6
2003	3	4	7
2004	4	6	10
2005	5	8	13
2006	4	7	11
2007	4	7	11
2008	3	6	9
2009	2	6	8

Source: Authors, based on Coelho (2009).

The arguments for using the tax on financial transactions as an “easy” source of revenue are: i) it can be put in place relatively quickly, since it is based on withholding by financial intermediaries, and requires little preparatory work and no cooperation from the taxpayer; and ii) a low tax rate can produce significant revenue, since bank debits are a multiple of GDP, particularly if the rate is low and the tax is not permanent.

This type of tax is currently used in six of the region’s countries and, according to the tax information analysed, can be classified in two groups (González, 2009): i) taxes on financial debit transactions (as in Colombia, the Dominican Republic and the Bolivarian Republic of Venezuela); and ii) taxes on debits and credits in checking accounts and other financial system transactions (as in Argentina, the Plurinational State of Bolivia, Brazil and Peru). Moreover, in order to prevent manoeuvres to avoid the tax, Argentina, Brazil, Peru and the Bolivarian Republic of Venezuela also tax movements of funds constituting organized forms of payment not conducted through financial institutions.

Tax revenues collected through the tax on financial transactions have contributed significantly to overall revenues. As shown in table 12, these revenues amounted to over 7% of all tax revenues in Argentina, and more than 5% in the Bolivarian Republic of Venezuela, Brazil and Colombia.

As a mechanism for generating tax revenue, however, the tax has a negative effect on economic efficiency in two respects: i) on the production side, it serves as an incentive to vertical integration (encouraging intra-firm transactions in order to avoid paying the tax); and ii) on the consumption side, it increases the relative price of goods that involve multiple stages of production—in other words, goods that are intensive in their use of intermediate goods or that require greater turnover of financial resources. Furthermore, since this tax can also be seen as a tax on liquidity and financial intermediation, it reduces an economy’s dynamism. In addition, when it is used for long periods, its productivity decreases due to the fact that the tax base tends to contract as opportunities for financial disintermediation and mechanisms for evasion emerge.

**TABLE 12**  
**REVENUES FROM TAXES ON FINANCIAL TRANSACTIONS**  
*(Percentages of GDP and of total revenue)*

Country	Year	Tax revenue	
		Percentage of GDP	Percentage of total
Argentina <sup>a</sup>	2008	1.89	7.15
Bolivia (Plurinational State of)	2008	0.28	1.20
Brazil <sup>a b</sup>	2007	1.40	5.75
Colombia <sup>c</sup>	2008	0.67	5.01
Peru	2008	0.31	1.95
Venezuela (Bolivarian Republic of)	2008	0.91	6.74

Source: Authors, based on Coelho (2009).

<sup>a</sup> Central government only.

<sup>b</sup> The provisional tax on financial movements (CPMF) was re-instituted in 2011, after having been rescinded on 1 January 2008.

<sup>c</sup> A gradual rate reduction in the tax on financial transactions was recently introduced, with a complete phase-out by 2014.

## B. Minimums or substitute taxes to replace the income tax

The strategy of adopting taxes that are the easiest to implement and monitor, that encounter least taxpayer resistance, that are hardest to evade and that have the lowest enforcement costs also led to further reforms to the corporate income tax.

This included the use of taxes that act as a “floor” and are based on the value of a company’s assets or on its gross sales or receipts. This type of tax establishes a minimum amount to be paid; thus, when the tax owed —calculated based on net profits— is higher than the “floor”, the taxpayer adds an additional amount to the minimum figure; if instead the calculation results in a figure below the “floor”, the amount of tax owed is the minimum figure calculated on the basis of the company’s assets or gross sales. In most countries in the region where this type of tax is used, corporate assets constitute the tax base (table 13).

Clearly, these alternatives take little account of the economic consequences, representing merely an implicit recognition of the ineffectiveness of tax administrations in enforcement with regard to the traditional taxes.

**TABLE 13**  
**MINIMUMS OR SUBSTITUTES FOR THE INCOME TAX IN LATIN AMERICA (1992-2010)**

Country	1992	1997	2000	2006	2010
ARG	2% of gross assets	1% of gross assets	1% of gross assets	1% of gross assets	1% of gross assets <sup>a</sup>
BOL	Yes	No	No	No	No
BRA	No	No	No	No	No
CHL	No	No	No	No	No
COL	7% of net wealth constitutes the minimum taxable income	5% of net wealth or 1.5% of gross wealth constitutes the minimum taxable income	5% of net wealth constitutes the minimum taxable income	6% of net wealth constitutes the minimum taxable income	3% of net wealth constitutes the minimum taxable income <sup>a</sup>

(continued)



Table 13 (concluded)

Country	1992	1997	2000	2006	2010
CRI	0.36%-1.17% of fixed assets	1% of assets	1% of assets	No	No
ECU	0.15% of net wealth	0.15% of net wealth	0.15% of net wealth	0.15% of net wealth	0.15% of net wealth <sup>b</sup>
SLV	0.9-2% of assets	No	No	No	No
GTM	0.3%-0.9% tax on real estate <sup>c</sup>	0.2%-0.9% tax on real estate	1.5% of assets	Rescinded previously and replaced by a 1% tax on 25% of net assets or 25% of gross income, whichever is greater	1% tax on 25% of net assets or 25% of gross income, whichever is greater (solidarity tax)
HND	No	No	0.75% of assets	1% of assets	1% of assets
MEX	2% of gross assets <sup>a</sup>	1.8% of assets <sup>a</sup>	1.8% of assets	1.8% of assets	17.5% of taxable income (cash flow) <sup>a</sup>
NIC	1.5%-2.5% of net wealth	1% tax on real estate	1% tax on real estate	1% of assets	1% of gross income
PAN	1% of net wealth <sup>d</sup>	1% of net wealth	1% of net wealth	2% of net wealth + 30% on net taxable income if less than 4.67% of taxable income (1.4% of gross income)	Alternate calculation of tax: 25% of whichever is greater between net taxable income or 4.67% of gross taxable income (1.4% of gross income)
PRY	No	No	No	No	No
PER	2% of net wealth	0.5% of net wealth	Rescinded	0.6% of net assets	0.4% of net assets <sup>e</sup>
DOM	No	No	No	1% of assets	1.0% of assets
URY	2% of net wealth	1.5%-3.5% of net wealth	1.5%-3.5% of net wealth	Rescinded	1.5%-3.5% of net wealth
VEN	No	No	1.0% of assets <sup>a</sup>	No	No

Source: Authors, based on data from O. Cetrángolo and J.C. Gómez Sabaini (2007) for 1992 to 2006, and International Bureau of Fiscal Documentation (2010) for 2010.

<sup>a</sup> Minimum tax on profit of juridical persons: applicable as a credit against tax on profits.

<sup>b</sup> Consists of 1% of assets as advance payment of tax on profits.

<sup>c</sup> The base consisted of real estate; however the tax was not conceived as a tax on property, but rather as an additional tax on corporate profits.

<sup>d</sup> This tax took the form of a license to do business, with the maximum amount set at 20,000 balboas/year.

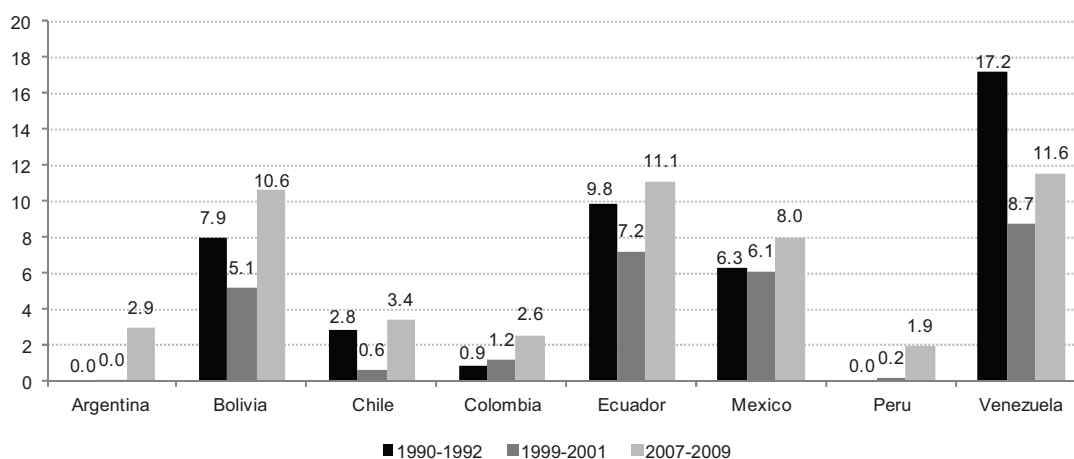
<sup>e</sup> Although the Temporary Net Asset Tax (ITAN) is not a permanent minimum tax, it does apply during the current fiscal year, with overpayments refundable as tax credits.

### C. The role of revenues from taxes on natural resources

A third point regarding the alternatives adopted by various countries' efforts to improve the tax burden concerns the importance, within the region, of revenues from the production and export of goods that rely on intensive use of natural resources. In these countries, the additional revenues—both tax revenues and others—from these sources have made it possible to meet public spending needs without creating greater burden on the tax structure, and have given rise to a certain “tax laziness” that often leads to a failure to implement needed reforms to tax levels and to the structure of the tax system.

Latin America is a major producer of primary goods, both mineral and agricultural. The revenues from the exploitation of primary products in all of the countries that specialize in these goods has increased as a percentage of GDP since the 1990-1992 triennium, and particularly since the early years of the 2000 decade, when all of the countries under consideration had minimal fiscal revenue from these sources. Venezuela, despite a decline in revenues during the 1990s, is an exception, and continues to lead Latin America with the highest fiscal revenues as a percentage of GDP (11.6%) from the exploitation of natural resources (figure 8).

**FIGURE 8**  
**FISCAL REVENUE FROM PRIMARY PRODUCTS**  
(Percentages of GDP)



Source: Authors, based on ECLAC data.

In countries with major non-renewable natural resources (gas, petroleum, minerals), the most direct method used to obtain fiscal resources from the export of primary products has been through participation in their exploitation, either through public enterprises or by having ownership positions in the firms involved. Governments have various additional mechanisms, such as levying royalties, usually based on production, thus ensuring a certain minimum yield from the resources. In many cases, the traditional income tax is applied with differential rates for firms involved in exploiting non-renewable resources. The table below shows some of the revenue instruments used by the region's countries.

**TABLE 14**  
**FEATURES OF THE TAX REGIMES RELATED TO NON-RENEWABLE PRODUCTS**

Country and product	Royalties (rates)	Income tax (rates)	Tax on profits (rates)	Other taxes	Public sector participation
Argentina (grains)	0-3%	35%		Withholding on exports (25%-45%-100%) (Provincial tax)	
Bolivia (Plurinational State of) (hydrocarbons)	Departmental royalties: 11% Compensatory royalties: 1% National royalties (National Treasury): 6%	Direct tax on hydrocarbons (IDH): 32% on production of hydrocarbons	Tax on corporate profits (IUE): 25% and 12.5% for remittances abroad Surtax: 25% on extraordinary profits	Special tax on hydrocarbons and their derivatives (IEHD) Tax on marketing Special tax (fixed margin) Supplementary mining tax (ICM)	Yes <sup>a</sup>
Chile (copper)		Tax on category-1 income (on profits received or accrued): 17% (2010). Temporarily in wake of 2010 earthquake: 20.0% (2011) and 18.5% (2012)	Additional tax on remittance of profits: 35% and 4% on remittance of interest For public enterprises: special 40% tax on profits	Specific tax on mining activity: if annual sales > 12,000 and < 50,000 metric tons of fine copper: progressive rate ranges from 0.5% to 4.5%	Yes
Colombia (oil)	8-25%	33%	Tax on exported profits: 7%	Transport Oil pipelines	Yes
Ecuador (oil)	25% (since 2010, previously 12.5-18.5%)	25%	Profits distributed: 25% Profits reinvested in machinery and new equipment: 15%	Tax on extraordinary profits for companies with contracts with State: 70%	Yes
Mexico (oil)		Income tax: 30% Single-rate tax on corporations: 17.5% Tax on PEMEX income: 30%	7.7%	Special tax on production and services (IEPS)	Yes
Peru (oil)	1-3%	30%	Tax on corporate profits (in practice, a 25% royalty on production)		
Trinidad and Tobago (oil)	10% on "onshore" sales and 12.5% on "offshore" sales Additional tax on sales of crude (rate varies with price of oil)		Tax on profits: 35-42% of profits from oil production Unemployment tax: 5% of profits from oil production		

(continued)

Table 14 (concluded)

Country and product	Royalties (rates)	Income tax (rates)	Tax on profits (rates)	Other taxes	Public sector participation
Venezuela, (Bolivarian Republic of) (oil)	30%	Tax on oil profits (ISLR): 50%	No	Tax on extraordinary market prices in the international hydrocarbons market: - If oil prices exceed US\$ 70: 80% on the difference - If oil prices are between US\$ 90 and US\$ 100: 90% - Above US\$ 100: 95%.	Yes

Source: Brosio and Jiménez (2010), updated from various official sources.

<sup>a</sup> Supreme Decree of 1 May 2006: nationalization of hydrocarbons.

The rapid rise in international prices for commodities during the last decade led governments to strengthen taxation in order to obtain greater revenues. For example, the Plurinational State of Bolivia, Chile and the Bolivarian Republic of Venezuela established new taxes on the sale of these products. Argentina, taking advantage of the increased profitability of sectors exporting natural products, owing to the currency devaluation that followed adoption of the convertibility regime, decided to generate fiscal resources by imposing export taxes on primary products.

This phenomenon has allowed some of the countries to substantially increase public revenues in the last decade without implementing tax reforms, which are always politically costly. Notwithstanding the consequent windfall in available resources, this type of fiscal revenue must be viewed in light of the following factors: (i) where the taxation involves non-renewable resources, consideration must be given to what measures will be taken once these resources are exhausted, since the resulting revenue vacuum will require either a sharp adjustment in spending levels or an increase in other taxes; (ii) countries must deal with the volatility in public revenues that results from cyclic variations in the export prices for primary goods.

The first of these two factors raises questions about intergenerational equity, since the revenue caused by reduced tax revenues will impact the succeeding generation, either through lower spending capacity or higher taxes. In terms of the second factor, the significant fluctuation in tax revenues resulting from changes in the prices of primary goods jeopardizes the soundness of the tax system, making it even more difficult for countries to determine the most appropriate tax structure.

In order to reduce fluctuations in revenues and provide governments with a continuous flow of resources, some of the region's countries have established stabilization funds, as in the case of Chile, with its surpluses from copper exports, and Colombia, Ecuador, Mexico and the Bolivarian Republic of Venezuela, which rely heavily on oil profits.



## **VI. The role of tax administrations and strategies in combating evasion in Latin America**

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Tax evasion in Latin American countries is a widespread phenomenon. The magnitude of the problem distorts the objectives sought by tax rules, and calls into question the design of the reforms to be adopted. The findings of studies of the income tax in seven Latin American countries (ECLAC), as well as other data on the VAT, leave little doubt as to the scope of the problem.

In analysing the evasion phenomenon, a comprehensive approach must be adopted, one that takes account of the design of the tax system, the efficiency of the tax-collection agencies in ensuring taxpayer compliance, the fundamental role of the judiciary in exacting appropriate punishments for evaders, and the State's responsibility to its citizens.

Although tax policy is the responsibility of the ministries of finance, there is broad recognition that to achieve the desired objectives it is necessary to have an efficient tax administration, and that the results that can be obtained depend on the tax administration's capacity to implement the necessary measures.

As was pointed out in the preceding sections, tax reform measures have relied heavily on widespread use of the VAT, simplification of tax systems, tariff reduction and, to a lesser extent, strengthening of the income tax, particularly in the region's larger countries. However, in addition to these measures, which have been in place since the 1980s, countries have continued to use tax administration and management practices which have produced varying results—in some cases significant, in others negligible.

To determine the relative success of various reforms and, even more importantly, to properly assess the functioning of tax collection agencies in each country, there has been increased interest, in the last several years, in using benchmarking techniques to establish both quantitative and qualitative frames of reference, in order to provide a basis for adopting modern practices widely considered to be more effective and efficient. These analytical approaches, which are described in Box 4, provide a background for exploring the various dimensions of tax administration in the countries of the region.

Beyond increasing actual tax collections, as required by law, experience in various countries shows that strengthening tax administrations provides the following benefits:

- Improved yield from the various taxes
- More equitable distribution of the tax burden
- Enhanced ability to implement new and more sophisticated tax reforms
- Reduced compliance costs for both the administration and taxpayers
- Increase in the number of registered taxpayers as a percentage of the universe of potential taxpayers
- Improved handling of delinquent cases
- Better taxpayer services, based on viewing taxpayers as clients
- Increased transparency and integrity of tax administration operations
- Reduced tax fraud and evasion

Realizing these benefits requires that there be: political commitment to reforming the system; sufficient funds and strong human resources leadership; a willingness to abandon old administrative practices; and the establishment of a formal program that sets realistic goals, costs and timeframes, while ensuring the durability and continuity of future measures.

#### **BOX 4 EVALUATING TAX ADMINISTRATIONS: DIFFERENT APPROACHES**

Economists and governments have become increasingly interested in establishing a frame of reference for evaluating and comparing the performance of tax collection agencies (i.e. benchmarking). Although this approach has recognized limitations—most notably its inability to offer clear explanations of the underlying problems in tax administration and to provide ideal solutions—the analytical technique involved makes it possible to identify areas where the adoption of best practices has a likelihood of producing improvements, through either imitation or adaptation, based on experiences in other countries that have successfully implemented such measures to achieve commonly accepted strategic goals.

In the literature, and in practice, three broad benchmarking techniques are used to assess tax administration. First is the quantitative technique, which uses numerical indicators to measure the relative success of tax collection agencies, based on their effectiveness in implementing a collection process consistent with the country's formal tax system (i.e. the tax burden established by legislation). This method also evaluates an agency's efficiency, i.e. its rational use of available resources at minimum possible cost. Though this approach is not without its difficulties, it has gained momentum. In recent times, there has been a trend towards greater sharing of information among the various national agencies involved in tax collection, in order to meet the challenges of monitoring and inspection in an increasingly globalized world—an effort which, though showing progress, leaves considerable room for improvement in the developing countries.

Second is an evaluation of tax administrations based on a qualitative approach, in which the existence of certain characteristics in modern tax systems can be seen as, in themselves, positive. Just as, in light of current trends, having in place a unit devoted exclusively to large taxpayers can be desirable for tax administrations, a qualitative analysis can also be useful. However, it suffers from a high degree of subjectivity in regard to establishing parameters for comparison.

In addition to operational practices, the performance of tax administrations reflects, in reality, a variety of underlying determining factors, such as the public sector context in which the agency operates, the macroeconomic situation, the political and regulatory structures. Using a simple assessment of quantitative indicators or a subjective understanding of certain institutional features of a tax administration to make comparisons at the international level or to attempt to identify "leaders" in relation to an established norm has its limitations: it is unable to detect specific problems at any particular agency, due to the fact that it fails to consider the broader context.

(continued)

## Box 4 (concluded)

In this regard, Vázquez-Caro and Bird (2011) propose the possibility of benchmarking, using a systemic approach designed to identify practices and trends that distinguish the world's most advanced tax administrations (i.e. their ability to ensure a high level of tax compliance at low operational cost), and then using available quantitative and qualitative analyses, taking due account of the specific context and national realities of the tax system being considered. In short, the current trends in tax administration, as evidenced in many developed countries, provide a multi-dimensional frame of reference for examining a broad range of tax administrations.

As the above study points out, in order for countries to improve their tax administrations, there need to first be changes in the underlying social, political and economic environment – prerequisites to implementing real changes in tax administration. However, it is also true that, in these situations, the ability to bring about change depends on how the tax system is designed and implemented.

Indeed, a systemic approach to assessing tax administrations requires that full consideration be given to an entire set of factors: the agencies' operational and institutional characteristics, their contribution to the tax systems' efficiency and equity, the relationship of the taxpayers to the State, the influence exerted by political and economic forces and, above all, the link between these various factors which, in combination, determine the results obtained.

Source: Vázquez-Caro and Bird (2011), "Benchmarking Tax Administrations in Developing Countries: A Systemic Approach".

Experience with tax reform in Latin America in the last twenty years shows that changes in tax policy can achieve the hoped-for results only when sufficient and parallel attention has also been given to implementing an efficient tax administration. It is equally clear that most of the failed attempts at reform are attributable to a lack of coordination between these two elements.

This poses a difficult problem: while reforms can be approved with relative dispatch by legislatures, improving the efficiency and effectiveness of tax administrations —and realizing the consequent gains— is a far longer process.

A number of Latin American countries, in past decades, have approached tax reform in a highly biased way, without giving proper consideration to the intrinsic weaknesses of their tax administrations. As a result, they have assigned lower priority, and devoted less attention, to tax policy objectives related to distributive equity and long-term efficiency and growth.

Tax administration plays a crucial role in determining whether a tax system is "effective", well beyond the question of the legally established tax policy. However, these two "faces of the same coin" are most often shaped by differing objectives; without coordination between the two, it becomes difficult, at best, to achieve the multiple objectives cited above. It is a widely recognized reality that the best tax policy in the world is of little use if it cannot be implemented effectively. Moreover, even the best tax administration in the world becomes ineffective unless there is a high degree of tax morale among the citizens, i.e. a mind-set that causes taxpayers to meet their obligations, independent of government controls or sanctions for non-compliance.

## A. Changes in efforts to combat evasion

A listing of the most common and most frequently cited elements in the strategies to combat tax evasion over the past decades—in terms of both tax policies and tax administration— would include the following.

First, with regard to tax structures, the emphasis has been, above all, on replacing inefficient taxes that are difficult to monitor (e.g. "cascading" sales taxes) with taxes such as VAT, which are determined by the debits-minus-credits method and are most easily controlled through billing systems.

The VAT that has been implemented in the region relies on a broad base, reduces exemptions to a minimum, and excludes small players by means of substitute regimes—all as a means drawing on VAT's potential as a central source of tax revenues for funding the State.

Second, low-producing taxes, whether for goods, services or specific activities, have been eliminated. This was done to simplify tax systems and eliminate costs to the government, focusing the scant human and capital resources of tax administrations on the taxes that produce the most revenue.



Third, there has been an attempt —albeit not highly successful— to limit exemptions and preferential treatments in all existing taxes. Such preferential mechanisms compromise revenue and undermine sound government management. Despite the good intentions, however, these provisions are difficult to eliminate, since they primarily affect powerful groups, which fight any attempt to deprive them of their privileges, despite the fact that they generate no social benefit to counterbalance the loss in revenue.

Fourth, there has been an emphasis on ensuring that tax laws, regulations and rules are simple, accessible and widely known, to the point that tax administrations often decided not to require information from taxpayers it considers to be an inefficient source of revenue.

Countries have adopted a further measure to “decompress” the immediate workload of the tax administrations, which has grown as a result of the widespread use of the VAT and the existence of a large informal sector within the economy. This involves establishing special treatment for small taxpayers (whether physical persons or firms), such that they are excluded from the general rules for calculating the VAT and/or income tax. In these cases, presumptive methods are used to determine taxes and/or lower rates are applied.

On this issue, González<sup>2</sup> states that “in most of the countries, the principal purpose of designing special tax regimes for small taxpayers has not been to increase revenue, but rather to solve the tax administration problem of bringing a large sector of what are, economically, relatively unimportant taxpayers into the formal economic system and to be able to efficiently monitor this large segment of taxpayers”.

These special regimes have been implemented primarily as a means of addressing the fact that tax administrations have had minimal, if any, control over this sector. Thus, 15 out of 18 countries in the region have adopted some type of simplified taxation system to deal with the problem, as shown in table 15.

**TABLE 15**  
**SPECIAL REGIMES FOR SMALL TAXPAYERS IN LATIN AMERICA**

Country	Name of regime	Year begun	Major features
Argentina	Simplified Regime for Small Taxpayers (“Monotributo”)	1998	Replaces national taxes (taxes on earnings and VAT) and pension contributions
Bolivia, (Plurinational State of)	Simplified Tax Regime (RTS) Integrated Tax Regime (STI) Unified Agricultural Regime(RAU)	RTS: 1997 STI: 1996 RAU: 1996	Replaces the VAT, the corporate profits tax and the tax on transactions
Brazil	Integrated System for the Payment of Taxes and Contributions (SIMPLES)	1997	Replaces all federal taxes (IRPJ, IPI, IE, Income tax, ITR, CPMF) and social security contributions (PIS/PASEP, COFINS, CSSL, etc.)
Chile	(1) Simplified Income Tax Regime (mining, trade, industry and fishing) (2) Presumed income regime (agriculture) (3) Simplified Tax Regime for Small Taxpayers (4) Regime Changing the Regulations regarding which Persons are Subject to the Value Added Tax	2007	The Simplified Regime and Presumed Income Regime replace only the income tax  The Simplified Tax Regime and the Regime Changing the Regulations regarding which Persons are Subject to the Value Added Tax replace only the VAT
Colombia	Simplified Regime	1983	Replaces the VAT

(continued)

<sup>2</sup> González, D. (2006), “Regímenes especiales de tributación para pequeños contribuyentes en América Latina”, IDB.

Table 15 (concluded)

Country	Name of regime	Year begun	Major features
Costa Rica	Simplified Tax Regime	1996	Replaces the General Sales Tax (a VAT-type tax) and the Income Tax
Ecuador	Simplified Regime (RISE)	2008	Replaces the VAT and the Income Tax
El Salvador	None	N/A	N/A
Guatemala	Simplified Tax Regime for Small Taxpayers	1997	Replaces the VAT and Income Tax
Honduras	Simplified Sales Tax Regime	2003	Replaces the Sales Tax
Mexico	(1) Small Taxpayers Regime (REPECOS) (2) Intermediate Regime (3) Simplified Regime (agriculture, fishing and road transportation)	2005	Replaces the VAT, Income Tax and Single-Rate Corporate Tax (IETU)
Nicaragua	Special Administrative Estimate Regime for Fixed-Rate Taxpayers	2003	Replaces the Value Added Tax and Income Tax
Panama	None	N/A	N/A
Paraguay	Income Tax for Small Taxpayers (IRPC)	2007	Replaces the Income Tax
Peru	(1) Simplified Single Regime (RUS) (2) Special Income Regime (RER)	2004	The RUS replaces the General Sales Tax (a VAT-type tax) and the Income Tax  The RER replaces only the Income Tax
Dominican Republic	Simple Estimate Regime (RES)	2004	Replaces the Income Tax
Uruguay	(1) Small Enterprise Tax (IPE) for SMEs (2) Single Tax for individuals	IPE in 1991 and Single Tax in 2007	The IPE replaces the Industry and Trade Income Tax (IRIC) and the VAT  The Monotributo replaces all national taxes in force except those on imports and those on pension contributions to the Banco de Previsión Social
Venezuela (Bolivarian Republic of)	None	N/A	N/A

Source: Authors, based on González, D. and others (EUROsociAL, 2009).

These simplified systems, however, produce low revenue collections—in some cases, revenues lower than the actual cost of collection. The average revenue from these regimes in the Latin American countries is currently around 1% of all tax revenues. According to González (2009), the extreme cases are Bolivia (Plurinational State of), which collects less than 0.1% in spite of having three special regimes, and Brazil, where the SIMPLES system produces 7% of total revenue. Peru, with 0.2% from the new RUS and 0.3% from the RER, ranks below the average, in contrast to Argentina's 2.13% and Costa Rica's 4%, both of which are above the average.

Some of the factors accounting for these low revenue levels are: 1) inclusion of small taxpayers of minimal economic significance; 2) application, in certain countries, of the “fixed rate” to low-income

taxpayers with high non-compliance rates;<sup>3</sup> and 3) high evasion levels in countries using income-based tax regimes.

Given these conditions, officials who are required to meet specific collection targets, under pre-established annual management plans, prefer to dedicate their scarce human resources to the economically more significant taxpayers, where there is greater potential tax revenue, since this boosts their performance ratings according to the management plan criteria.

One highly important issue is the legislative definition of which taxpayers are considered “small” and, therefore, eligible for special tax treatment. Although the laws in the region’s countries have historically based this classification on gross income only, in order to avoid “fiscal dwarfism”, i.e. the phenomenon of “big fish” fraudulently passing for “small fry” in order to take advantage of the simplified regimes, most countries look beyond sales figures or gross income, and consider physical size and other parameters that can easily be verified on site by inspectors (surface area occupied by the activity, electrical energy consumed, maximum sales price of a product, value of assets, number of employees, number of locations or facilities used, acreage, number of ships or vehicles, value of inventory, value of purchases made, telephone usage, etc.) (González 2009).

The main problem with the use of these special regimes is the tax administrations’ lack of control (or, at best, minimal control) under these scenarios. This is partly because small taxpayers in Latin America have formed associations or business groups to actively resist inspections. This resistance—which may take the form of “tax rebellions” in which long-standing establishments shut down, demonstrations are launched, streets and highways are blocked, etc.—has forced governments to suspend measures already in place.

## **B. Recent strategies adopted by tax agencies to address the new economic paradigms**

The reforms that were a feature of the region’s economies from the mid-1970s to the mid-1990s have had profound consequences, making it more expensive for the region’s tax administrations to carry out their strategies. Hence the need to strengthen and modernize tax administration in many of the countries in order to generate higher tax burdens.

Nearly all of the tax administrations in the region have implemented strategies to control evasion and improve voluntary compliance. The approaches focus on certain common elements: creating semi-autonomous revenue collection entities, incorporating more skilled human resources, forming “large-taxpayer units” specialized in dealing with large firms and large individual taxpayers, and making use of new computer technologies.

Faced with a new economic and tax environment, with declines in revenue from foreign trade and increased emphasis on taxing value added, tax administrations moved from a tax- and object-based approach to a “functional” or “subjective” approach (focusing on issues of management, technical aspects, legislation, inspection, collection and information technologies), in attempts to ensure that all taxpayers are covered, by linking each potential taxpayer with a specific agency responsible for collecting the taxes.

This system links taxpayers’ income tax obligations with their VAT obligations, which in turn are linked with any imports made by the taxpayer, as well as with any other tax for which the taxpayer may be legally liable, such as employment-related taxes.

<sup>3</sup> Among the presumptive techniques used, the “fixed rate” regime is based on the payment of a set amount that the law establishes by category, and the taxpayers to which this applies are generally required to pay on a monthly basis.

Along with the policy of segmenting taxpayers based on their relative importance as sources of tax revenue, there has been an increasing emphasis on differential treatment of large taxpayers, as a means of bolstering the resources available to tax administrations and maximizing revenues.

According to typical income distribution figures for firms, those paying the most taxes (less than 1% of the total number) normally account for over 70% of overall revenue, while mid-level firms (constituting between 10% and 20% of the total number) generally account for between 20% and 25% of the total.<sup>4</sup>

Establishing entities to oversee large taxpayers, involving a separate office staffed with specialized units to deal with the most critical sectors, is a key step towards implementing risk assessment techniques and providing for a more definitive segmentation of the taxpaying population.

Despite this stylized fact of concentrated revenue, the results of the approach must be interpreted cautiously: since the largest firms are used as withholding agents, some of the tax payments on their books are, in effect, advance payments of taxes owed by smaller firms.

Argentina and other countries in the region have advanced substantially in applying collection criteria based on establishing key nodes within the overall system. The result is a system of VAT prepayments, in which large firms are required to withhold the tax from smaller firms, be the latter input providers or end-product purchasers.

There are similar systems for income tax withholding based on amount of imports. These are designed to capture the tax at the points in the economic process where there is least evasion, or where the opportunities for control are greatest—for example, in customs operations. Since imports are highly concentrated in a small number of taxpayers, this is the focus of these monitoring efforts, particularly with regard to the VAT.

A further major landmark in modernizing the region's tax administrations has been the drive to integrate all agencies responsible for tax collections (domestic taxes, customs, social security) within a single centralised unit, following the Spanish model.

Along with this institutional unification process there have been initiatives to make the agencies self-governing or autonomous, in many cases with an operational budget linked to the amount of revenue they generate.

Table 16 outlines this situation as seen in the countries of Latin America. To date, only 3 of the 18 countries covered in this report have achieved complete integration of their tax administrations, while other countries have (to varying degrees) achieved partial integration, combining internal tax collections with collection of customs taxes.

Achievements in this field are still being evaluated, particularly in light of the fact that the institutional processes for unifying the various administrative entities are in varying stages. Thus, some countries have opted for physical integration (combining a range of functions in one building), while others have relied on virtual integration, in which information systems and databases of the different tax collection agencies have been merged (Zambrano, 2010).

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<sup>4</sup> International Tax Dialogue, Second Global Conference on Taxation of Small and Medium Enterprises, p. 9, October 2007, Buenos Aires.

**TABLE 16**  
**STRUCTURE OF LATIN AMERICAN TAX ADMINISTRATIONS**

Country	Institution	Acronym	Degree of autonomy	Domestic taxes	Customs taxes	Social Security Contributions
Argentina	Federal Administration of Public Revenue	AFIP	Self-governing	Yes	Yes	Yes
Bolivia (Plurinational State of)	National Tax Service	SIN	Self-governing	Yes	No (Overseen by the National Customs Service of Bolivia, Plurinational State of)	No
Brazil	Federal Secretariat of Revenue	RFB	Division of the Ministry of Finance	Yes (except for collection of debts, which is the responsibility of the National Treasury's Office of the Attorney General)	Yes	Yes (except for payroll and independent workers, handled by INSS)
Chile	Internal Revenue Service	SII	Division of the Ministry of Finance	Yes (except for collection of debts, which is the responsibility of the National Treasury)	No (overseen by the National Customs Service)	Yes
Colombia	National Directorate of Taxes and Customs	DIAN	Autonomous division of the Ministry of Finance and Public Credit	Yes	Yes	No (overseen by the Social Security Institute)
Costa Rica	General Tax Directorate	DGT	Division of the Vice-Ministry of Revenue within the Ministry of Finance	Yes (except for collection of debts, which is the responsibility of the Judicial Collections Office, DGH)	No (overseen by the General Directorate of Customs )	No (overseen by the National Treasury)
Ecuador	Internal Revenue Service	SRI	Autonomous entity	Yes	No (overseen by the Ecuadorian Customs Corporation)	No (overseen by other entities such as IESS, ISSFA and ISSPOL)

(continued)

Table 16 (continued)

Country	Institution	Acronym	Degree of autonomy	Domestic taxes	Customs taxes	Social Security Contributions
El Salvador	General Directorate of Internal Taxes	DGII	Division of the Ministry of Finance	Yes (except for collection of debts, which is the responsibility of the General Directorate of the Treasury)	No (overseen by the General Directorate of Customs)	No (overseen by the Salvadoran Social Security Institute)
Guatemala	Superintendency of Tax Administration	SAT	Autonomous entity	Yes	Yes	No (overseen by the Guatemalan Social Security Institute)
Honduras	Executive Directorate of Revenues	DEI	Autonomous deconcentrated division of the Secretariat of Finance (SEFIN)	Yes	Yes	No (overseen by the Honduran Social Security Institute)
Mexico	Tax Administration Service	SAT	Autonomous deconcentrated division of the Secretariat of Finance and Public Credit (SHCP)	Yes	Yes	No (overseen by the Mexican Social Security Institute and ISSSTE)
Nicaragua	General Directorate of Revenue	DGI	Autonomous deconcentrated division of the Secretariat of Finance (MHCP)	Yes	No (overseen by the General Directorate of Customs Services)	No (overseen by the Nicaraguan Social Security Institute)
Panama	General Directorate of Revenue	DGI	Division of the Ministry of Economy and Finance	Yes	No (National Customs Authority responsible)	No (overseen by the Social Security Administration)
Paraguay	Under Secretariat of State for Taxation	SET	Division of the Ministry of Finance (MH)	Yes (except for collection of debts, which is the responsibility of the Treasury Counsel at the Ministry of Finance)	No (overseen by the National Directorate of Customs)	No (overseen by the Social Welfare Institute)

(continued)

Table 16 (concluded)

Country	Institution	Acronym	Degree of autonomy	Domestic taxes	Customs taxes	Social Security Contributions
Peru	National Superintendency of Tax Administration	SUNAT	Autonomous deconcentrated division of the Ministry of Economy and Finance (MEF)	Yes	Yes	Yes
Dominican Republic	General Directorate of Internal Taxes	DGII	Autonomous deconcentrated division of the Ministry of Finance (MH)	Yes	No (overseen by the General Directorate of Customs)	No (overseen by the Social Security Treasury)
Uruguay	General Directorate of Revenues	DGI	Division of the Ministry of Economy and Finance	Yes	No (overseen by the National Directorate of Customs)	No (overseen by the Social Welfare Bank)
Venezuela (Bolivarian Republic of)	Integrated National Customs and Tax Administration Service	SENIAT	Autonomous deconcentrated division of the Ministry of the People's Department of Planning and Finance (MPPPF)	Yes (except for the Telecommunications Tax)	Yes	No (overseen by the Venezuelan Social Security Institute)

Source: Authors, based on the report, "Tributación y Administración Tributaria – América Latina" (CIAT, 2011).

The trend towards an integration of functions is also evident in representative OECD countries, though with a similar range, from one country to another, in the degree of integration and institutional unification with regard to tax administrations, as shown in table 17.

**TABLE 17**  
**STRUCTURE OF TAX ADMINISTRATIONS IN SOME OECD COUNTRIES**

Country	Institution	Acronym	Degree of autonomy	Domestic taxes	Customs taxes	Social Security Contributions
Germany	Federal Central Tax Office	FCTO	Division of the Ministry of Finance	Yes (federal taxes only)	No (overseen by the German Customs Administration)	No
Canada	Canada Revenue Agency	CRA	Autonomous division of the Department of Finance	Yes	No (overseen by the Canadian Border Services Agency, CBSA)	Yes
Spain	State Agency for Tax Administration	AEAT	Autonomous division of the Ministry of Economy and Finance (MEH)	Yes	Yes	No (overseen by the General Social Security Treasury)
United States	Internal Revenue Service	IRS	Autonomous division of the Treasury Department	Yes (except for alcohol and tobacco taxes)	No (overseen by the United States Customs and Border Protection Service)	Yes
France	General Directorate of Public Finance	DGFIP	Autonomous decentralized division of the Ministry of Budget, Public Accounts and State Reform	Yes	No (overseen by the General Directorate of Customs and Indirect Taxes)	No (overseen by the Social Security Administration)
Italy	Italian Revenue Agency	AE	Autonomous decentralized division of the Ministry of Economy and Finance	Yes	No (overseen by the Customs Agency)	Yes
Netherlands	Netherlands Tax and Customs Administration	DGB	Division of the Ministry of Finance	Yes	Yes	No (overseen by the Social Security Bank)
Portugal	General Directorate of Taxes	DGCI	Division of the Ministry of Finance and Public Administration	Yes	No (overseen by the General Directorate of Customs and Special Taxes)	No (overseen by the Social Security Institute)
United Kingdom	Her Majesty's Revenue & Customs	HMRC	Autonomous decentralized division of Her Majesty's Treasury	Yes	Yes	Yes

Source: Authors, based on CIAT (2010, 2011) and on the report, Tax Administration in OECD and Selected Non-OECD Countries: Comparative Information Series 2010 (OECD, 2011).



A final element that can be seen in the evolving strategies for tax administration is the tendency to transfer many of the collection responsibilities to financial institutions, making these into an extensive network of entities for receiving tax payments, either at their physical offices or online.

This strategy has entailed major efforts to modernize data processing and information systems in all of the region's countries. Furthermore, it has focused on pursuing delinquent taxpayers who are registered in the administrations' databases, with a resulting increase in voluntary compliance. A number of the region's countries (including Argentina, Chile and Brazil) have made further progress in recent years by providing for online filing of digital income tax and VAT affidavits.

### C. Current challenges facing tax administrations

Three elements, in addition to those discussed above, are already in play in many cases, and are among the most significant challenges facing the region's tax administrations.

One is the increasing incorporation of NICTs (new information and communication technologies), which reduces costs by making more efficient use of taxpayer databases and by streamlining the handling of individual cases. Technological developments of this type create new opportunities for communicating with and reaching taxpayers.

The second element is a change of approach or institutional philosophy with regard to the relationship between tax authorities and taxpayers —a shift from the traditional adversarial relationship to one that views the taxpayers as “clients” who deserve to be served based on their needs and motivations, and who are to be provided new services and ways of interacting.

Third is the fact that tax borders have expanded in recent decades as a result of globalization and more open markets for goods, capital and labour. This has created the need to obtain information on taxpayers from beyond national borders, and has led to agreements between countries to prevent double taxation, as well to facilitate the sharing of information, at both the regional and international level.

Most —indeed, nearly all— double-taxation agreements have followed the OECD model and include standards for information exchange and mutual cooperation between signatory countries. This feature is pivotal to any strategy attempting to curtail tax havens.

As shown in table 18, however, the countries of Latin America are at varying stages with respect to implementing tax harmonization instruments of this type. The countries that currently have the greatest number of double-taxation agreements are also the countries with the region's highest levels of GDP, as well as being the largest exporters of goods and services (in terms of both volume and monetary value). Some of these, such as Mexico and Chile, are OECD members.

A second group of countries, which includes members of the Andean Community of Nations, has made encouraging progress in recent years on a range of issues involving international aspects of taxation. It is among the Central American countries that there has been the lowest level of acceptance and implementation of such agreements; there continues to be a lack of consensus on how to move towards adopting the measures already in place in developed countries with respect to international tax issues.

**TABLE 18**  
**DOUBLE-TAXATION AGREEMENTS IN THE COUNTRIES OF LATIN AMERICA**

Country	Agreements in force with:			Total number of agreements in force
	Countries in the region	OECD countries <sup>a</sup>	Other countries/blocs <sup>b</sup>	
Mexico	6	28	7	41
Venezuela (Bolivarian Republic of) <sup>c</sup>	5	17	11	33

(continued)

Table 18 (concluded)

Country	Agreements in force with:			Total number of agreements in force
	Countries in the region	OECD countries <sup>a</sup>	Other countries / blocs <sup>b</sup>	
Brazil	5	19	6	30
Chile	7	14	3	24
Argentina	3	14	0	17
Ecuador <sup>c</sup>	7	7	1	15
Bolivia (Plurinational State of) <sup>c</sup>	5	5	0	10
Peru <sup>c</sup>	6	1	0	7
Colombia <sup>c</sup>	5	1	0	6
Uruguay	1	2	0	3
Paraguay	1	0	1	2
Costa Rica	0	1	0	1
El Salvador	0	1	0	1
Panama	1	0	0	1
Dominican Republic	0	1	0	1
Guatemala	0	0	0	0
Honduras	0	0	0	0
Nicaragua	0	0	0	0
Total Latin America	52	111	29	192

Source: Authors, based on CIAT (2011).

<sup>a</sup> For practical purposes, Mexico and Chile are considered countries of the region, although they are also OECD members.

<sup>b</sup> China, Russian Federation and Malaysia, among others, are included.

<sup>c</sup> For each of the Andean Community (CAN) nations, the multilateral agreement in force since 2005 was counted as 4 individual agreements for each of the countries.

Among the outcomes of the OECD's *Forum on Tax Administration*, held in Istanbul in September 2010, which included representatives from 42 countries, was renewed support for strategies designed to improve tax compliance through new forms of cooperation among the countries. The objective of this effort has been to expand monitoring of offshore financial movements and identify taxpayers who are using these mechanisms to conceal assets. A second recommendation that emerged from the meeting was that of encouraging coordinated action to strengthen compliance at the international level through joint audits, which would reduce costs for taxpayers and tax administrations alike (OECD, 2010).

The rechanneling of profits from multinational firms is a growing, and increasingly important, concern in all of the countries. This is reflected not only in the imperative of establishing legal provisions on transfer prices,<sup>5</sup> but also in other key areas, such as regulations on under-capitalization, treatment of rents from tax havens, expansion of information-sharing agreements, modification of jurisdictional principles for taxing income, elimination of securities-market and financial confidentiality in cases where secrecy provisions are in force, and a set of other provisions that address the essential issues of international rents.

This phenomenon, which has gained significance in the last several decades, affecting both developing and developed countries, was first addressed in 1996 through legislation in Latin American countries involving specific provisions governing transfer prices.

<sup>5</sup> It is a known fact that the multinational firms have accounting mechanisms to channel profits from their central firm to their foreign subsidiaries via "transfer prices", in order to declare the profits in jurisdictions with lower corporate income taxes.

The income tax structures of many Latin American countries, for both individuals and corporations, still follow what is now an obsolete scheme based on closed economies. Today's economies have extensive movements of capital and goods; however, the laws needed to exercise the proper controls are inadequate. Except for the region's largest countries, there has been no effort to establish legal provisions to "screen" potential tax bases in light of current economic circumstances, particularly with regard to the corporate income tax, though developed countries have been doing so for a long time.

As of 1999, only five countries had explicitly adopted such legal provisions (Mexico, Brazil, Chile, Argentina and Venezuela (Bolivarian Republic of)); between 2000 and 2010, another six countries joined the ranks (Colombia in 2003, and Ecuador, Uruguay, El Salvador and Panama in 2004). The Dominican Republic, though it has passed legislation in this area, has not yet established corresponding regulations; thus, its legislation remains without practical effect (Arias, 2010).

In terms of the treatment of international rents and the technical assistance that international cooperation can provide the region's countries to address the issue, a recent project of the Inter-American Development Bank (IDB) is noteworthy. The IDB, with assistance from Spanish Cooperation, is providing support over a three-year period to the Central American countries and to the Dominican Republic to strengthen the capacity of their tax administrations to deal with this issue. The principal problem that has emerged in attempting to implement the relevant reforms is the absence of tax administration structures capable of effectively meeting the needs of modern-day tax policy.

Some of the most obvious obstacles in such an effort are: the lack of specialized units to record, monitor, administer and supervise the tax implications of operations involving flows of foreign direct investment; the scarcity of personnel trained to carry out critical tasks; the absence of legal instruments necessary for an international tax policy that is compatible with an open economy; and insufficient integration and coordination between different countries' tax administrations.

Moreover, individual countries have specific problems that hinder attempts to reach international tax agreements. Guatemala and Costa Rica, for example, are on the OECD list of non-collaborating/non-transparent countries, while El Salvador and the Dominican Republic have technical and administrative deficiencies that prevent them from adopting the procedures required to implement policies compatible with double-taxation agreements.

Faced with this challenging situation, it has been proposed that units be created specifically to deal with international taxation, and to address the deficiencies in tax policy and tax administration in the region brought about by trade liberalisation and subregional economic integration.

The proposal is to create an International Taxation Unit (ITU) for each country to centralise, implement and develop the competencies needed to address international taxation issues in coordination with the other ITUs, thus enabling them to address the region's international taxation issues in a comprehensive fashion.

The ITUs would be assigned specific activities, such as studying and designing international tax policy in the Central American countries, improving the handling and collection of non-resident taxes, and creating and implementing a tax inspection policy specific to international taxation, with emphasis on transfer prices and information exchange. The expectation is that this would significantly improve foreign investors' perception of the different tax administrations, and thereby ensure that foreign investment flows to the countries continue and grow, while at the same time increasing tax revenues, primarily through voluntary compliance and inspection measures.

## **VII. Evaluating the performance of tax administrations in Latin America: what do we currently know?**

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As a recent IMF document stated, “Improving revenue administration is essential for enhanced and fairer revenue mobilization and for wider governance improvement, though success is hard to evaluate (IMF, 2011).

The present section will examine the criteria that should be considered in assessing the progress of the region’s tax administrations, as well in attempts to quantify the relevant parameters. There is, at present, a conspicuous absence of information that could assist in making inter-country comparisons —information for public use, at least, though one would hope that that such information is available within the agencies themselves.

Since 2005, the OECD has made notable progress in this area on behalf of its member countries, as well as for certain non-OECD countries, through the Forum on Tax Administration.<sup>6</sup> The OECD has advocated for efforts to collect information and analyse central features of tax administration, as a means of generating comparable statistical data for a diverse group of countries, using a common methodology.

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<sup>6</sup> The most recent report is “Tax Administration in OECD and Selected Non-OECD Countries: Comparative Information Series 2010”, Centre for Tax Policy and Administration, OECD, Paris, 2011.

This project is the first systematic attempt to conduct a comparative study of the tax administrations of different countries by developing quantitative and qualitative indicators, with the ultimate purpose of identifying their strengths and weaknesses and implementing improvements based on successful cases.

Currently, the annual reports sponsored by the OECD draw on information from the annual reports of the tax collection agencies themselves, as well as from specialised private institutions such as the International Bureau of Fiscal Documentation (IBFD) and major publications on international taxation.

Following the methodological premises established by OECD, the International Tax Dialogue<sup>7</sup> (2010) recently issued the report “*Revenue Administration in Sub-Saharan Africa*”, which provides a substantial body of comparable statistics, based on surveys conducted by tax collection agencies of more than 20 African countries. The dimensions covered by this comparative study include institutional arrangements, the distribution of responsibilities, degrees of functional autonomy, budget management capacities, relative costs, human resources utilized, internal government structure and elements relating to taxpayers’ rights and services.

Another study, useful as a frame of reference for the comparative analysis of tax administrations, is that published in 2009 by the international consulting firm McKinsey. That study explores the tax administrations of 13 countries (in regard to direct taxation only) and points to considerable variability in carrying out the four basic functions of these organizations: processing of taxpayers’ sworn statements, inspection, collection of tax revenues and taxpayer services (Dohrmann and Pinshaw, 2009).

The McKinsey study suggests that there is a point of inflection in the curve where yields decrease, and past which any attempt to increase the effectiveness of tax administration would reduce efficiency. In other words, as a revenue collection agency approaches its total revenue potential (and evasion approaches zero), the marginal cost of collecting a given amount of a particular type of tax revenue increases. The estimates suggest that the potential gains from increasing efficacy (i.e. increasing revenue by reducing evasion) are far greater than the benefits of improved efficiency (that is, reducing the cost of collecting). However, the data presented reveal that there is ample opportunity to simultaneously increase efficiency and effectiveness without making sacrifices on either front.

In regard to Latin American tax administrations, this type of comparative inter-country research, using common methodologies, is still in its early stages. Two obvious and basic conditions are required for success in this area: first, institutional capacity to tackle the difficult job of collecting, processing and monitoring statistical information from the countries being studied; second, and even more essential, a willingness on the part of the tax administrations to provide the relevant information —thus contributing to institutional transparency and ensuring the reliability of any conclusions reached.

On the positive front is the fact that as of April 2011 the Inter-American Tax Administration Centre (CIAT), along with IDB and the Central America, Panama, Dominican Republic Technical Assistance Centre (CAPTAC/DR), are conducting a project on the “State of Tax Administration in Latin America”, with the aim of creating a knowledge base on the countries’ tax administrations. The information will be based on surveys recently sent to Latin America’s tax collection agencies, from which responses will be processed and used to establish quantitative indicators to guide comparative intraregional analyses. The hope is that this effort will produce concrete results by the end of 2011.

Efforts are also underway to identify new needs for technical assistance in tax administration, in order to establish at least a minimum degree of harmonization and institutional balance. A publication on the state of Latin American and Caribbean tax administrations is expected to be included in the report, *Development in the Americas (DIA)*, and in IDB support and modernization projects. It is also expected

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<sup>7</sup> The International Tax Dialogue (ITD) is an agreement for collaboration between the World Bank, IDB, European Commission, IMF, OECD and the United Kingdom’s Department for International Development designed to encourage and facilitate the discussion of tax issues among officials of national tax administrations and international organizations.

that, in October 2011, information will be available that can serve as a basis for comparative documents, to be prepared by the end of the year.

## A. Criteria for comparative evaluation of tax administrations

In conducting assessments of tax systems, a strategy commonly used is to compare a particular case with what can be observed at the regional or international level, in order to gain perspective on the situation being analysed. With the appropriate methodological safeguards, policy recommendations can then be developed. Based on assumptions about the constancy of macroeconomic conditions, it then becomes possible for a given country to replicate positive results achieved in other countries.

In the case of tax administrations, developing performance indicators continues to be a major challenge, requiring efforts beyond the usual tasks of inspection, tax collection and taxpayer services. If reliable comparisons are to be possible, there must also be agreement on a common methodology and on ongoing and transparent exchange of statistical information between countries.

Currently, inter-country comparisons of tax administrations are based on criteria of efficacy and efficiency in tax collections.

In this context, efficacy refers to the tax-collection agency's management capacity in matters within its mandate (e.g. identifying and registering taxpayers, monitoring compliance with basic income-declaration obligations, timely payment of taxes, inspection, collection of tax debts, overseeing legal procedures and providing taxpayer services).

When the relevant information is available, evasion rates (or the "compliance gap") are also used as a major indicator of collection efficacy. This is because the evasion rate relates directly to two different factors: i) the tax administration's ability to provide information and high-quality services to taxpayers, thus enabling them to meet their tax obligations; and ii) the administration's capacity to effectively monitor compliance.

Efficiency, in this context, generally refers to the tax administration's use of resources and to the costs it incurs. The more effectively available financial resources are used —i.e. the more favourable the cost-benefit ratio (the relation between operating costs and investment on one hand, and revenue generation on the other)— the more efficient the administration is.

Notwithstanding the above definitions, the term "collection efficiency" can also be used to refer to the levels of revenue obtained from a series of actions that a collection agency takes to encourage taxpayers to comply with the tax laws. These include services provided to taxpayers, registering people on the tax rolls, providing assistance in completing tax forms, carrying out inspections, conducting collection activities, and protecting the Government's interests (Samaniego Breach and others, 2009).

There is therefore a growing trend towards developing quantitative indicators for making inter-country comparative analyses in order to assess the efficacy and efficiency of countries' respective collections processes, along with comparisons of the other important aspects of tax administration detailed below.

### 1. Indicators related to efficiency (cost of collecting revenue)

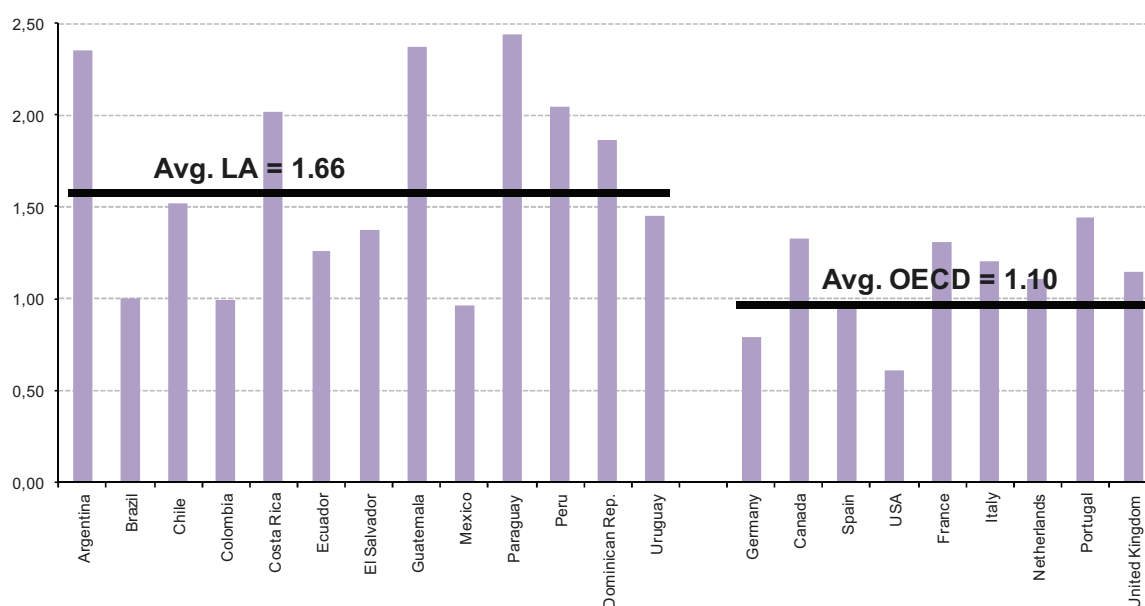
One of the variables used most frequently by economists for comparing tax administrations is what is generally termed "cost of collection". This indicator, generally used as an overall measure of an agency's efficiency, results from comparing a tax administration's total spending with the revenue it generates in a given period of time.<sup>8</sup>

<sup>8</sup> Cost of collection could also be thought of as a measure of the efficacy of the tax administration. But while this indicator takes account of tax revenues collected and not those that should be collected under the law, the elevated levels of evasion in most of the region's countries places severe limits on its explanatory value in making international comparisons.

This indicator has certain limitations, however. Although a descending curve would be evidence of a reduction in relative costs (or of an increase in efficiency), comparisons between countries have shown that cost of collection also depends on a number of factors that have no clear relation to overall efficacy or efficiency. Among these additional variables are: i) tax rates and structures; ii) scope and nature of the taxes overseen by national tax administrations; iii) collection of social security contributions; iv) range of functions carried out by the entities being examined; v) measurement methodology and accounting criteria employed; and vi) stage of institutional development of the agency at issue.<sup>9</sup>

Bearing in mind the above caveats, a recent estimate sponsored by CIAT shows that in 2009, based on information regarding budget execution and revenue collection in a representative sample of Latin American tax administrations, 1.66 monetary units out of every 100 units collected by these entities was spent on operating costs. The lowest costs were found at Mexico's Tax Administration Service (SAT), Colombia's Directorate of National Taxes and Customs (DIAN), and Brazil's Federal Secretariat of Revenue (RFB) (figure 9) (Pecho, 2011).

**FIGURE 9**  
**COST OF COLLECTION AS A PROPORTION OF TAX REVENUES IN SELECTED**  
**LATIN AMERICAN AND OECD COUNTRIES, 2009**  
(Per 100 monetary units collected)



Source: Authors based on CIAT data (for Latin America) and data from Tax Administration in OECD and Selected Non-OECD Countries: Comparative Information Series 2010 (OECD, 2011).

However, the following factors, related to the construction of the ratios, must be taken into account when drawing any conclusions based on international comparisons:

- The scope of activities varies from one tax administrations to another. As described in table 16, most collect only internal taxes, although there are cases of institutional integration (as per the Spanish model) in which tax administrations also oversee customs taxes (e.g. Mexico, Colombia and Guatemala), as well as cases where there is complete integration, including coverage of social security contributions, e.g. Brazil's RFB, Peru's National

<sup>9</sup> OECD (2011), op. cit.

Superintendency of Tax Administration (SUNAT) and Argentina's Federal Administration of Public Revenues (AFIP).

- Thus, the total spending of the institutions being compared is not readily attributable to identical functions. For example, some tax administrations, such as Brazil's RFB, El Salvador's General Directorate of Internal Taxes (DGII), Chile's Internal Revenue Service (SII) and Paraguay's Under Secretariat of State for Taxation (SET), are not authorized to collect tax debts.
- In addition, the revenue data must be purged by discounting tax revenues not attributable to the actions of the tax administrations being studied. Thus, for example, in Ecuador, Uruguay, Paraguay and the Dominican Republic, the revenue from customs taxes and general or specific taxes on imports have been discounted, since they are handled by customs agencies.
- In some countries with federal systems, it may be important to analyze the performance of each tax administration from a vertical perspective, in order to determine which taxing authorities are assigned to the subnational levels of government, as in the cases of Brazil, Argentina and Colombia.
- Lastly, there may be major differences in the cost structure of respective tax administrations in the various countries. Although payroll tends to be the predominant expenditure item, publicity and information dissemination costs, investment in technology and buildings, and costs of operational processes such as coercive collection, must also be taken into account.

Thus, international comparisons of revenue-collection costs, though a useful indicator for governments in analysing ways to improve the efficiency of public spending, should be calculated carefully, taking account of the particularities of the tax administrations involved. Only then is it possible to draw objective conclusions regarding the overall efficiency of the institution concerned.

Figure 9 highlights the fact that, despite what has been detailed above, the indicator for cost of collection dropped noticeably for 2009, averaging 1.10 for nine OECD member countries. This suggests that there is room for optimizing public spending by reducing real costs in some of Latin America's tax administrations.

In terms of how this indicator has behaved in the last several years, the recent OECD report (2011) indicates a declining curve for the vast majority of the tax administrations in the years leading up to 2007-2008, most likely as a result of the favourable macroeconomic environment, characterized by rising tax revenues and declining costs. Since mid-2008, and particularly in 2009, however, the indicator has risen in a number of countries, paralleling the fall in revenues caused by the global financial crisis.

Attempts to make inter-country comparisons of the cost of collecting revenue in Latin America for the last few years are hindered by the scarcity of information. Nevertheless, the data compiled in table 19 provide an idea of the diversity within the region with regard to changes in total cost for each country's tax administration, although trends in Chile and Mexico are similar to those of the OECD countries, with a decline in costs, at least up until 2007-2008.

**TABLE 19**  
**CHANGING COST OF COLLECTING REVENUE AS A PROPORTION**  
**OF TAX REVENUES IN SELECTED LATIN AMERICA COUNTRIES**

(Baseline: 2003=100)

	2003	2004	2005	2006	2007	2008	2009
Argentina	100.0	97.6	188.2	190.6	216.5	109.4	134.1
Brazil	100.0	127.1	n.a.	n.a.	n.a.	n.a.	n.a.
Chile	100.0	98.9	77.5	70.8	67.4	74.2	101.1

(continued)



Table 19 (concluded)

	2003	2004	2005	2006	2007	2008	2009
Mexico	100.0	91.5	83.7	75.2	67.4	30.5	41.1
OECD	100.0	107.4	97.2	93.5	89.8	79.6	88.9

Source: Authors, based on data from Tax Administration in OECD and Selected Non-OECD Countries: Comparative Information Series2010 (OECD, 2011).

The relative magnitude of, and trends in, administrative expenses of tax collection agencies, as a proportion of national GDP, constitute another important indicator.<sup>10</sup> Comparisons based on this indicator sidestep the impact of changes in the legal tax burden, as well as other economic factors inherent in the cost-of-collection ratio. However, this indicator, and its trends, may be affected by other exogenous factors, such as investment in technology and costs associated with implementing new taxes—factors that must also be considered.

Table 20 shows estimated data for a wide range of Latin American and OECD countries for 2009, revealing considerable inter-country differences.

**TABLE 20**  
**TOTAL SPENDING OF TAX ADMINISTRATIONS IN SELECTED**  
**LATIN AMERICAN AND OECD COUNTRIES, 2009**

(Percentages of GDP)

Latin American countries	Costs / GDP ratio	OECD countries	Costs / GDP ratio
Argentina	0.629	Germany	0.291
Bolivia (Plurinational State of)	0.124	Australia	0.233
Brazil	0.213	Belgium	0.509
Chile	0.132	Canada	0.286
Colombia	0.134	Denmark	0.345
Costa Rica	0.226	Spain	0.134
Ecuador	0.144	United States	0.083
El Salvador	0.075	France	0.392
Guatemala	0.250	Italy	0.248
Honduras	0.841	Japan	0.147
Mexico	0.078	Netherlands	0.506
Nicaragua	0.218	Portugal	0.258
Peru	0.275	United Kingdom	0.280
Dominican Republic	0.173	Czech Republic	0.222
Uruguay	0.193	Sweden	0.231
Average L.A.(15 countries)	0.247	Average OECD (15 countries)	0.278

Source: Authors based on data from CIAT (for Latin America) and data from Tax Administration in OECD and Selected Non-OECD Countries: Comparative Information Series 2010 (OECD, 2011).

<sup>10</sup> It is possible to compute two rates for the cost of collection as a percentage of GDP. One considers the total costs of each tax administration, while the other considers only the operational costs most closely associated with the tasks of collection and inspection (OECD, 2011). It is therefore to be expected that if total spending, rather than operational costs only, is considered, the ratios will be higher for those countries that have made large investments during a given period, and smaller for those that are benefiting from reduced costs resulting from earlier investments in technology and other previous actions.

Disregarding the outliers, a zone of concentration can be seen, with cost ratios between 0.15% and 0.30% of GDP and regional averages of 0.247% for Latin America and 0.278% for the OECD. Given the particularities of each tax administration, inter-country comparisons for this indicator should be interpreted cautiously. Nevertheless, the indicator can be useful in signalling significant deviations, in either direction, from the regional averages (even where there are reasonable explanations for the exceptions).

In short, it is important to realize that, although “lower costs of collection” can be evidence of lower relative costs (greater efficiency) and/or improvements in tax compliance (greater efficacy), the effect that certain exogenous factors exert on these performance indicators requires that these international comparisons be used and interpreted with care, lest one draw erroneous conclusions.

## 2. Indicators of collection efficacy

As explained above, evaluations of tax administration performance generally use the tax evasion rate as an overall indicator of efficacy. This reflects the fact that the basic function of tax-collection agencies is to obtain the greatest possible revenue, in order to come as close as possible to the ideal target set by the tax law.

In this respect, although estimates are often based on different methods and are calculated for only certain taxes, such as the VAT, the data presented in the second section of this report highlight the serious problems that many tax administrations face in regard to the monitoring and inspection needed to achieve a high degree of compliance.

However, the efficacy of a tax administration can also be measured by designing indicators related to the operational processes involving both collection and inspection.

One example of this is the handling of credit reimbursements in certain tax cases —most notably the VAT and the income tax. The administrative processes involved are important in terms of the human resources required. As will become clear in the following section, in many cases these tasks are so resource-intensive that the amount of revenue generated cannot be justified by the costs involved.

Another indicator for which estimates are controversial is the relation between revenue obtained from specific inspection activities and total tax revenues. The utility of this efficacy indicator tends to be downplayed, since there is a lack of consensus on what methodology should be used to determine the values.

Table 21 shows the values of two indicators related to the efficacy of tax administration, calculated for a group of OECD countries. Considerable differences can be seen from one case to another.

**TABLE 21**  
**INDICATORS OF THE COLLECTION EFFICACY OF TAX ADMINISTRATIONS**  
**IN OECD COUNTRIES, 2009**

(Percentages)

Country	Tax reimbursements as a percentage of total gross revenue collected	Percentage of revenue derived from inspection as a percentage of total revenue
Argentina	2.0	n.a.
Austria	3.5	2.4
Belgium	22.5	14.9
Canada	23.5	2.7
Finland	22.7	10.8
Republic of Korea	22.9	6.4
Luxembourg	11.2	1.4

(continued)

Table 21 (concluded)

Country	Tax reimbursements as a percentage of total gross revenue collected	Percentage of revenue derived from inspection as a percentage of total revenue
Mexico	22.1	3.6
New Zealand	18.4	4.0
Spain	29.7	4.0
Sweden	11.6	0.3
United States	18.7	2.1
Average	17.4	4.8

Source: Authors, based on data from Tax Administration in OECD and Selected Non-OECD Countries: Comparative Information Series2010 (OECD, 2011).

Unfortunately, there are no consolidated statistics for these variables for Latin American countries. There are, nonetheless, indices which, with sufficient coordination and collaboration among all of the region's countries, could serve as a basis for establishing management plans (as in the case of AFIP), with strategic objectives and indicators to measure results. It would be interesting, for example, to obtain detailed information, for each national tax-collection agency, on the degree of voluntary compliance, in terms of both the submission of sworn tax statements and the timely payment of tax obligations, as well as statistical information on the specific inspection and coercive collection actions used (AFIP, 2007).

### 3. Indicators of human resources employed

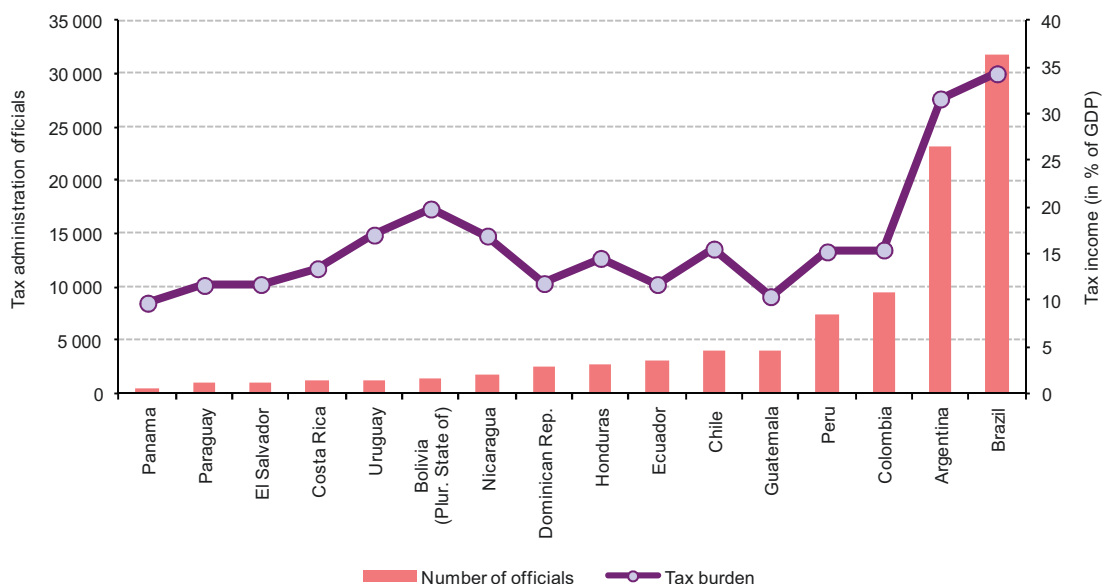
In addition to the financial resources and capital required to carry out their assigned tasks, tax administrations need an additional and indispensable element in order to meet their strategic objectives: competent personnel to conduct their assigned tasks and functions, in the most effective manner and with the lowest cost possible.

In this regard, there are major differences between the various Latin American tax administrations in terms of the relation between number of persons regularly employed and the amount of tax revenue they collect (as a percentage of GDP). Argentina, Brazil and Mexico, for example, each have over 20,000 employees, while most of the region's other countries (with the exception of Peru and Colombia) have no more than 5,000 each.

Figure 10 shows the region's countries, ranked according to the tax revenue collected by their respective agencies (considering only the revenue for which they are responsible under current legislation). As the figure demonstrates, the number of people employed at an institution does not appear to be correlated with the amount of revenue collected, which is instead influenced by others factors such as the number of taxpayers and their geographical dispersion across a nation's territory.

When the number of employees per tax burden as a percentage of GDP is calculated, however, and compared with representative OECD countries (figure 11), it is clear that the average values for this indicator vary greatly: in Latin America, one percentage point of tax burden is generated by 438 employees, while in the OECD countries, 1,638 employees are required to achieve the same result. Mexico is an exception in Latin America, in that its ratio is much higher than the regional average (and higher than many OECD countries), while its tax burden falls well short of its potential and is far from international averages, considering the country's level of development.

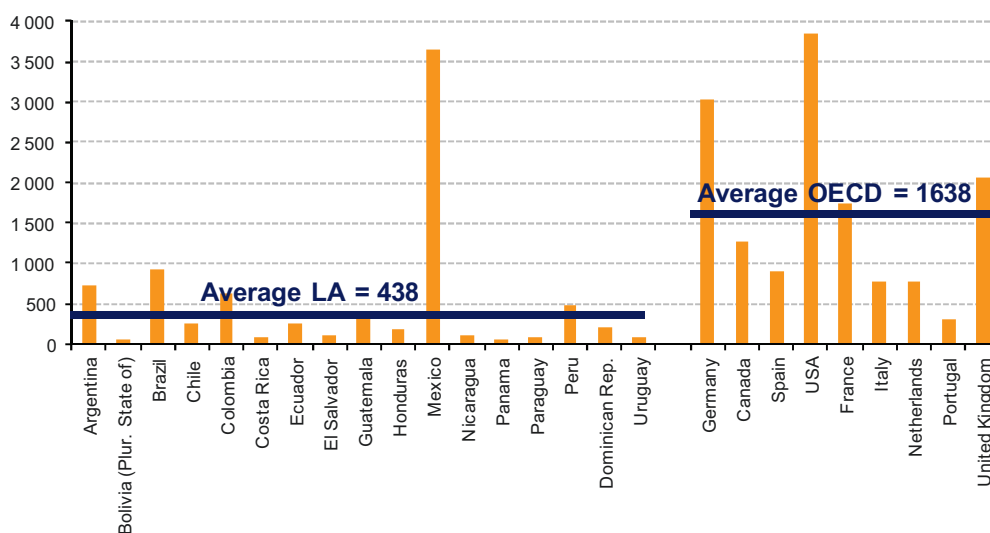
**FIGURE 10**  
**NUMBER OF EMPLOYEES AND TAX BURDEN COLLECTED BY THE TAX ADMINISTRATIONS OF LATIN AMERICAN COUNTRIES, 2009**



Source: Authors, based on data from ECLAC and CIAT.

Note: For most of the countries, only internal tax revenues (in relation to GDP) —which are overseen exclusively by the tax administrations— are taken into account, except in the cases of Colombia, Guatemala, Honduras and Mexico (where customs revenues are included) and for Argentina, Brazil and Peru (where, in addition to customs duties, social security contributions are included).

**FIGURE 11**  
**NUMBER OF EMPLOYEES PER PERCENTAGE POINT OF TAX BURDEN COLLECTED BY TAX ADMINISTRATIONS IN LATIN AMERICAN AND OECD COUNTRIES, 2009**



Source: Authors, based on data from CIAT and OECD.

Another dimension that can be analysed quantitatively, by constructing indicators, is the relative use of staff by each tax administration in relation to the number of taxpayers in a given tax system. The

problem in applying this approach to Latin American countries is the dispersion or lack of information—and, when available, the lack of comparability—on the number of taxpayers.

Given these limitations, and despite the ongoing problems of unemployment and tax evasion in many Latin American countries, one can assume that the economically active population (EAP) is a reasonable approximation of the potential tax base in any tax system in which the work force is taxed. Total population figures can also be used as a common denominator for inter-country comparisons, though added caution must be taken when drawing any conclusions, since the results may depend on many factors unrelated to tax issues.

As table 22 shows, there are, on average, significantly more economically active persons per tax administration employee in Latin American countries than in the selected OECD countries. In other words, each Latin American tax administration employee is responsible for more members of the workforce, on average, than are the corresponding employees in developed countries.

Thus, while there is an average of one tax administration employee per 663 economically active persons (and per 1,338 inhabitants) in nine OECD countries, the corresponding figure for Latin America is one employee per 2,075 economically active persons (and per 4,356 inhabitants).

**TABLE 22**  
**INDICATORS OF USE OF PERSONNEL IN TAX ADMINISTRATIONS**  
**OF LATIN AMERICAN AND OECD COUNTRIES, 2009**

Country	Economically active population (EAP) per tax administration employee	Number of inhabitants per tax administration employee
Argentina	863	1 741
Bolivia (Plurinational State of)	3 606	7 610
Brazil	3 054	6 109
Chile	1 717	4 248
Colombia	2 607	4 830
Costa Rica	1 817	3 749
Ecuador	2 333	4 483
El Salvador	2 757	5 622
Guatemala	1 131	3 451
Honduras	1 362	2 778
Mexico	1 308	3 056
Nicaragua	1 288	3 194
Panama	3 078	6 567
Paraguay	3 163	6 111
Peru	2 041	3 987
Dominican Republic	1 670	3 839
Uruguay	1 479	2 680
Average L.A. (17 countries)	2 075	4 356
Germany	371	729
Canada	482	883
Spain	967	1 928

(continued)

Table 22 (concluded)

Country	Economically active population (EAP) per tax administration employee	Number of inhabitants per tax administration employee
United States	1 680	3 316
France	392	860
Italy	744	1 779
Netherlands	372	697
Portugal	519	989
United Kingdom	441	862
Average OECD (9 countries)	663	1 338

Source: Authors, based on data from ECLAC (population and labor force), CIAT and OECD.

In terms of the types of indicators discussed above, the differences must be viewed in relative terms, and the practical constraints must be taken into account, using caution in drawing any detailed conclusions based on inter-country comparisons.

On one hand, it might be thought that lower employee-population ratios (whether total population or EAP) would contribute to more effective inspection and taxpayer services, and would thus reduce tax evasion. However, the clearly visible variability between tax administrations in this respect relates to a combination of other factors. A proper understanding therefore requires a careful analysis of each individual case.

Notwithstanding the importance assigned to developing measures and indicators to facilitate comparative evaluations of tax administration at the international level, the exercise will necessarily involve, for each tax-collection agency, a “conceptual triad”: (i) the availability and management of technical instruments to ensure efficacy; (ii) the availability and use of skilled human resources to carry out the assigned functions; and (iii) the availability of, and capacity to manage, vital financial resources so as to ensure that strategic objectives are achieved with the least possible cost.

The task of developing indicators and statistics to make comparative evaluations of Latin American tax administrations is a perfectly feasible, albeit arduous, undertaking—difficult given the absence of adequate relevant information covering individual countries and time periods. This type of information, which is available in developed countries, is essential in drawing conclusions concerning changes over a given period of time.

The relation between the indicators presented in this report and the (estimated) levels of evasion is complex. There currently are no homogeneous statistics regarding levels of non-compliance at the regional level; only figures for individual countries are available, and these are generally limited to the VAT, with far less information available on income taxes—the area in which there are presumed to be higher levels of evasion.

Moreover, evasion, measured as the gap between potential revenue and actual revenue, depends not only on the tax administration’s efficiency and efficacy in inspection, monitoring and taxpayer education, but also on aspects of tax policy such as the definition of the tax base, rates applied and tax exemptions.

Lastly, as explained above, evaluating tax administrations as a step towards achieving greater efficiency and efficacy, and better enforcement of established tax laws, is a prerequisite to formulating the optimal policy approach and determining the resources that are to be employed and the results to be sought. However, evasion also involves subjective obstacles to taxpayer compliance—a set of factors commonly grouped under the term “tax morale”. It is in this area that the question of voluntary compliance assumes major importance, as part of the fiscal pact between the State and its citizens. The efforts of tax-collection agencies should therefore reflect these two complementary purposes.

## B. Approaches to modernizing tax administrations in the region. Choosing the right course

In the last several years, the directors of tax-collection agencies have been given greater autonomy, responsibility and flexibility in selecting an approach focusing on results and on establishing a workable budget, but with a parallel expectation of increased accountability for performance.

In this respect, the report “*Fiscal Blueprints on Tax and Customs Administration*”, by the European Commission, Taxation and Customs Unions (2007), highlights six strategic objectives for tax administrations, in addition to providing indicators for each. The objectives are to:

- Guarantee adequate autonomy for the tax administration
  - \* Is the autonomy of the tax administration guaranteed by law?
  - \* Are there legal provisions covering the reports required from the head of the tax administration?
  - \* Is the autonomy of the tax administration reflected in its organizational structure and operational responsibilities?
  - \* Does the tax administration have sufficient freedom to design and implement its own policies?
  - \* Is there a clear description of the responsibilities of the relevant central, regional and local entities?
- Ensure that the obligations of the tax administration are clearly reflected in its mission, vision and objectives
  - \* Are the tasks of the tax administration aligned with its mission and vision?
  - \* Does the tax administration develop strategies with objectives, benchmarks and operational plans?
  - \* Are taxpayers and stakeholders, as well as employees, familiar with the tax administration’s mission?
- Provide the tax administration its own organizational structure and the competencies it needs to function effectively and efficiently
  - \* Does the structure of the tax administration permit it to carry out its tasks and obligations effectively?
  - \* Does the tax administration’s organizational structure allow for decentralizing responsibilities so that decisions on taxpayers are made at the most appropriate level?
- Provide the resources that the tax administration needs to implement and manage the tax system
  - \* Does the tax administration have the resources and funds necessary to ensure implementation of its policy and to perform its duties?
  - \* Do the tax administration’s resources derive from a budget that is the result of a dialogue as to the specific performance goals of the agency?
  - \* Is the tax administration’s financial planning based on a multi-year budget that facilitates the implementation of its strategy and provides for the carrying forward surplus funds?

- Provide the revenue collection agency with a stable legal framework to ensure proper administration and execution of tax obligations
  - \* Is the tax administration competent to develop legislation relating to evaluation, tax collection and tax enforcement?
  - \* Does the law give the tax administration sufficient power to effectively meet all of its responsibilities?
- Hold the tax administration accountable for its operations, and ensure that it is subject to ongoing monitoring and evaluation
  - \* Does the tax administration have an internal audit system?
  - \* Does an independent external institution audit the operations of the tax administration and evaluate its performance?

Some of the region's tax administrations have indeed made progress in the institutional realm with regard to issues such as creating management plans, establishing objectives and conducting ongoing performance evaluations.

Argentina's AFIP, for example, formulates annual management plans that set overall performance goals and strategic objectives, which serve as parameters for the functioning of the agency. The guidelines call for monitoring tax compliance, providing taxpayer services, ensuring institutional quality and transparency, and interacting with citizens as well as other domestic and foreign entities, both public and private.

Each fiscal year, estimates for a detailed set of more than 50 quantitative indicators are made. These relate to the parameters that are to be monitored, and measure transparency as well as predictability, and help provide a better understanding of the trends occurring with the country's tax administration.<sup>11</sup>

In Mexico, SAT also frames its activities within the context of a set of quantitative goals, which are published by the Secretariat of Finance and Public Credit (SHCP) in its Quarterly Report on the Economic Situation, Public Finances and Public Debt. This includes ten indicators that measure different aspects of strategic efficiency and efficacy, as well as assessing the quality of institutional management and taxpayer services (Samaniego Breach and others, 2009).

These methods are important elements in effective tax administrations. In the medium term, expanded use of these institutional management tools in all of the countries' tax collection agencies could help in creating a sizeable and relatively homogeneous body of statistical information, thus increasing transparency and facilitating inter-country comparisons using specific performance indicators.

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<sup>11</sup> See, for example, AFIP (2008), "Plan de Gestión 2008", at: [www.afip.gov.ar](http://www.afip.gov.ar).





## VIII. Summary and conclusions

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- The last 20 years have seen profound social, economic and institutional changes in Latin America, with consequent effects on the countries' tax policies. Tax burden has increased substantially, driven by economic growth, increased macroeconomic stability, higher commodity prices and the impact from tax reforms adopted in the early 1990s.
- Those reforms focused primarily on generating increased tax revenues in order to meet the growing demand for public spending, by strengthening the VAT as the predominant tax within Latin America's tax systems. However, the marked emphasis on indirect taxation, the narrow direct-tax bases and the current state of tax administration have limited countries' ability to adopt other important policy objectives related to equity and stabilization.
- The average tax burden in Latin America, including social security contributions, has increased steadily over the last two decades. In absolute terms, the increase was nearly 5% of GDP, while it has grown 34% compared to the 1990-1992 average.
- At the same time, a number of countries have managed to obtain revenue from other sources, such as natural-resource extraction (Argentina, Plurinational State of Bolivia, Chile, Colombia, Ecuador, Mexico, Peru and the Bolivarian Republic of Venezuela), revenue from use of the Panama Canal (Panama) and, to a lesser extent, bilateral and multilateral donations that help raise governments' revenues (Haiti, Honduras and Nicaragua). Although these resources finance public spending and services, their "tax bases" tend to be more volatile than traditional ones.

Moreover, when the revenue is derived from non-renewable, finite natural resources, the issues of fiscal sustainability and intergenerational equity come into play.

- Beyond improving tax collections through changes in the tax structure, the region's tax systems have had difficulty in making advances in solvency, efficiency and equity, owing to a number of problems: i) tax burdens below potential levels and subject to high volatility; ii) unbalanced tax structures biased towards indirect taxes; iii) narrow tax bases, due to numerous exemption schemes and tax privileges; and iv) high rates of evasion, which affect not only the amount of revenue obtained but also the distributive equity and economic efficiency of the tax systems in the region's countries.
- One of the constraints in analyzing tax evasion in the region is the scarcity of detailed studies on the phenomenon, particularly with regard to direct taxes, and the lack of a common methodology that would allow for inter-country comparisons. Although research on the VAT has progressed, due to the development of a common methodology, there remain serious difficulties and limitations in attempting to compare data on income tax evasion.
- Analysis of existing studies of evasion in the region nonetheless make possible a number of conclusions. First, evasion rates, for both the income tax and the VAT —notwithstanding sharp disparities and a few exceptional cases— are generally high, representing at least 20% of potential revenue. Second, income tax evasion is more widespread than VAT evasion. The rate of evasion of the VAT averages 25.9% in the region, as compared with 51.4% for income tax evasion. Third, there is more evasion by corporations than by physical persons. The rate of evasion of the income tax by juridical persons is 7 percentage points higher than evasion rates for physical persons (54% versus 47%). One of the main reasons for this is the role that wages and salaries play in the individual income tax, where earnings are subject to withholding at the income source.
- Given the vast importance of tax evasion in Latin America, the phenomenon must be analyzed from an overall perspective; this necessarily includes considering tax-system design, the efficiency of tax administrations in enforcing tax obligations, the fundamental role of the judicial branch in appropriately punishing evaders once identified, and the State's responsibility to its citizens.
- Beyond the changes in tax structure already cited, the countries have adopted a series of practices in tax administration and management over the last several years. This has produced a number of advances —in some cases highly significant, in others, clearly lackluster and disappointing.
- One conclusion that can be drawn from the experience of various countries is that the benefits of improving tax administration can only be realized if several conditions prevail: a political commitment to the reforms implemented; adequate human resources with strong leaderships; a willingness to abandon old administrative practices and establish a formal plan with defined goals and costs and realistic timeframes; and, lastly, measures to ensure that the approaches to be adopted in the future will have continuity and durability.
- Tax administration strategies to control evasion and improve voluntary compliance have centered on certain common elements, found in nearly all countries of the region. This involves shifting from a tax and object-based approach to a “functional” or “subjective” approach (focusing on issues of management, technical aspects, legislation, inspection, collection and information technologies), with the goal being to achieve full coverage of all taxpayers by identifying links that taxpayers have with the revenue-collection agencies.
- One major landmark in the modernization of tax administrations has been the drive to integrate all revenue-collection entities (for domestic taxes, customs taxes and social security) within a single centralized agency. This institutional unification has in some cases included initiatives to grant the agencies self-governing or autonomous status, providing them, in many

cases, with an operational budget linked to the amount of revenue they generate. The results achieved through this approach are still being assessed, particularly since the institutional process involved in administrative unification is at varying stages in the different countries—ranging from physical integration (various functions within a single building) to “virtual” integration, in which the tax-collection agencies merge their information systems.

- As tax administrations implement improvements to address some of the above-mentioned problems, there will be increased opportunities to orchestrate tax reforms that encourage convergence within the region. Such efforts will create a more efficient, equitable, effectively administered and credible (socially legitimate) tax structure. This, in turn, will lead not only to increased revenues, but also to tax systems of higher quality. One important step in this direction is to systematically develop and publish indicators to measure the performance of tax administrations, making such information widely available and thus enhancing transparency, while at the same time providing a basis for making comparative analyses of the agencies’ performance.
- One of the most widely used variables for comparing tax administrations is what is generally known as “cost of collection”. This indicator, usually used as an overall measure of the efficiency of tax-collection agencies, compares a tax administration’s total spending with the revenue it generates in a given period of time. In assessing performance, tax evasion rates are commonly used as an overall indicator of efficacy. Underlying this approach is the principle that the basic function of tax-collection entities is to obtain the greatest possible revenue, approaching as closely as possible the level established by the tax law. However, the efficacy of the tax administration can also be assessed by developing indicators that measure the operational processes involved in tax collection, including inspection activities.
- Efforts to adopt measures and indicators that facilitate comparative evaluation of tax administrations at the international level will be based on a “conceptual triad” of factors at each agency: i) the availability and management of technical instruments to ensure efficacy; ii) the availability and use of skilled human resources to carry out the assigned functions; and iii) the availability of, and capacity to manage, vital financial resources so as to ensure that strategic objectives are achieved at the least possible cost.
- In 2009, according to information from a representative sample of Latin American tax administrations, based on budgets executed and actual revenues collected, 1.66 monetary units were spent on operations for every 100 monetary units collected, with the operations of Mexico’s SAT, Colombia’s DIAN and Brazil’s RFB having the lowest costs. When this information is compared with figures from a number of developed OECD countries, the cost-of-collection indicator is noticeably lower in the latter group, where the average for nine member countries is 1.10, suggesting that, in certain Latin American tax administrations, there is room for optimizing public spending by reducing costs.
- The notable lack of information available on the Latin American countries makes it difficult to compare changes in collection costs at the regional level over the last few years. However, data compiled to date provide an idea of the wide range within the region with respect to changes in total tax administration costs for the various countries, although Chile and Mexico show a decrease in costs similar to that seen in the OECD, at least up until 2007-2008.
- The magnitude of administrative spending at tax-collection agencies, as a percentage of their countries’ GDP, serves as another useful indicator. Disregarding the outliers, a zone of concentration can be seen, with cost ratios between 0.15% and 0.30% of GDP and regional averages of 0.247% for Latin America and 0.278% for the OECD. Given the particularities of each tax administration, inter-country comparisons for this indicator should be interpreted cautiously. Nevertheless, the indicator can be useful in signaling significant deviations, in either direction, from the regional averages.

- In addition to the financial resources and capital required to carry out their assigned tasks, tax administrations need an additional and indispensable element in order to meet their strategic objectives: competent personnel to conduct their assigned tasks and functions in the most effective manner and with the lowest possible cost. In this regard, there are major differences between the different Latin American tax administrations in terms of the relation between number of persons regularly employed and amount of revenue they collect (as a percentage of GDP). Argentina, Brazil and Mexico, for example, each have over 20,000 employees, while most of the region's other countries (with the exception of Peru and Colombia) have no more than 5,000 each.
- The findings show that when the number of employees per percentage point of tax burden (as a percentage of GDP) is calculated and compared with representative OECD countries, the indicator's average values are very different: in Latin America, generating one percentage point of tax burden requires 438 employees, while the number required in the OECD is 1,638. Mexico is an exceptional case within Latin America, with a ratio far above the regional average (and above many of the OECD countries). However, its tax burden is well below its potential, and is far from international averages, considering the country's level of development.
- Lastly, there are, on average, significantly more economically active persons per tax administration employee in Latin American countries than in the selected OECD countries. In other words, each Latin American tax administration employee is responsible for more members of the workforce, on average, than are the corresponding employees in the developed countries. Thus, while the average for nine OECD countries is one tax administration employee per 663 economically active persons (and per 1,338 inhabitants), the average for Latin America is one tax administration employee per 2,075 economically active persons (and per 4,356 inhabitants).
- There is a distinct relation between levels of tax evasion and current tax structures in Latin American countries, and tax administration is particularly important in complementing tax policy, in terms of ensuring sufficient revenue to meet citizens' demands. Only by establishing a high level of tax compliance will it be possible to implement reforms to improve the balance between direct and indirect taxes, and thus, in focusing on tax systems, emphasize not only revenue targets, but also the objectives of efficiency and distributive equity.

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