ISSN 1680-8843

SERIES

MACROECONOMICS OF DEVELOPMENT

Tax policy in Latin America

Assessment and guidelines for a second generation of reforms

Juan Carlos Gómez-Sabaíni
Dalmiro Morán

ECLAC

SERIES

133

MACROECONOMICS OF DEVELOPMENT

Tax policy in Latin America

Assessment and guidelines for a second generation of reforms

Juan Carlos Gómez-Sabaíni
Dalmiro Morán

This document was prepared by Juan Carlos Gómez-Sabaíni and Dalmiro Morán, consultants of the Division of Economic Development of the Economic Commission for Latin America and the Caribbean (ECLAC), within the activities of the project ECLAC/GIZ: *Pacto fiscal para el crecimiento con igualdad* (GER/12/005).

The views expressed in this document, which has been reproduced without formal editing, are those of the authors and do not necessarily reflect the views of the Organization.

This document is a translation of the Macroeconomics of Development Series N° 133, but is an updated version.

United Nations publication
ISSN 1680-8843
LC/L.3632
ORIGINAL: SPANISH
Copyright © United Nations, June 2014. All rights reserved
Printed at United Nations, Santiago, Chile

Member States and their governmental institutions may reproduce this work without prior authorization, but are requested to mention the source and inform the United Nations of such reproduction.

Contents

Abstract 7

Introduction 9

I. The tax situation in Latin America: background and stylized facts 11
- A. Tax revenues in Latin America: recent trends 11
- B. The evolution of the tax structure in the countries of the region 15
- C. Factors that demonstrate the heterogeneity of the region's tax systems 19
  - 1. Social security financing 19
  - 2. The revenue composition of subnational governments 22
  - 3. Income from natural resource exploitation 25
  - 4. Environmental tax policy: pioneering experiences in the region 28

II. The behavior of the main taxes in the region 31
- A. The value added tax: the main source of revenue 31
- B. The structural imbalance of the income tax 35
- C. The chronic weakness of the wealth tax: is there hope? 41
- D. Unconventional roads to strengthening tax revenues 44
  - 1. Taxes on financial transactions 45
  - 2. Minimum or alternative taxes to the income tax 47

III. The economic and social consequences of the current tax systems 51
- A. The low redistributive effect of taxes in Latin America 51
- B. The link between informality and tax policy 57
- C. Tax expenditures: the need to level the playing field 61
- D. The new paradigm of tax administration 64
- E. Tax evasion in Latin America: past advances and pending improvements 67

IV. Tax reform guidelines for Latin America 73
- A. Current main priorities in the area of taxation 73
- B. Tax reform proposals for the countries in the region 75

Bibliography 81

Macroeconomics of Development Series: issues published 88

Tables

TABLE 1 TAX REVENUES IN LATIN AMERICAN COUNTRIES (INCLUDING SOCIAL SECURITY CONTRIBUTIONS) 13
TABLE 2 AVERAGE TAX STRUCTURE IN LATIN AMERICA, 1990, 2000 AND 2012 16
TABLE 3 AVERAGE TAX STRUCTURE IN LATIN AMERICA AND THE OECD, 1990, 2000 AND 2012 18
TABLE 4 SOCIAL SECURITY REFORMS IN LATIN AMERICAN COUNTRIES 19
TABLE 5 TAX REVENUES FROM SOCIAL SECURITY CONTRIBUTIONS IN LATIN AMERICA 21
TABLE 6 ALLOCATION OF TAX REVENUES AMONG THE DIFFERENT LEVELS OF GOVERNMENT, 2011 24
TABLE 7 EVOLUTION OF THE STANDARD VAT RATE IN LATIN AMERICA AND THE OECD 32
TABLE 8 VAT REVENUE AND EFFICIENCY IN LATIN AMERICA AND THE OECD, 2012 34
TABLE 9 INCOME LEVELS FOR THE APPLICATION OF MINIMUM AND MAXIMUM INCOME TAX RATES IN SELECTED LATIN AMERICAN COUNTRIES 36
TABLE 10 INCOME TAX RATE STRUCTURE IN CENTRAL AMERICAN COUNTRIES 38
TABLE 11 INCOME TAX REVENUE STRUCTURE AND EFFICIENCY RATIOS IN LATIN AMERICA, 2010 40
TABLE 12 REVENUE STRUCTURE OF TAXES ON PROPERTY IN LATIN AMERICA AND THE OECD, 2011 42
TABLE 13 RATES, REVENUES AND EFFICIENCY OF FINANCIAL TRANSACTION TAXES IN LATIN AMERICA 46
TABLE 14 MINIMUM INCOME TAX FOR BUSINESSES IN LATIN AMERICA, 2012 48
TABLE 15 STUDY RESULTS ON TAX INCIDENCE IN LATIN AMERICA, SELECTED COUNTRIES AND YEARS 53
TABLE 16 STUDY RESULTS ON THE INCIDENCE OF THE PERSONAL INCOME TAX IN LATIN AMERICA 55
TABLE 17 REDISTRIBUTIVE EFFECTS OF TAXES AND TRANSFERS IN SELECTED COUNTRIES 57
TABLE 18 TAX REVENUES FROM THE SIMPLIFIED REGIMES IN SELECTED COUNTRIES OF LATIN AMERICA, 2010 61
TABLE 19 TAX EXPENDITURES IN SELECTED COUNTRIES OF LATIN AMERICA, 2005-2013 62
TABLE 20 TAX EXPENDITURES IN LATIN AMERICAN COUNTRIES BY TYPE OF TAX, 2012 63
TABLE 21 MAIN REFORMS IN TAX ADMINISTRATION STRUCTURE 66

Figures

FIGURE 1 EVOLUTION OF THE TOTAL REVENUE STRUCTURE OF SUBNATIONAL GOVERNMENTS: AVERAGE FOR EIGHT LATIN AMERICAN COUNTRIES 23
FIGURE 2 FISCAL REVENUES DERIVING FROM NON-RENEWABLE NATURAL RESOURCES 26
FIGURE 3 ENVIRONMENTAL TAX STRUCTURE IN SELECTED OECD AND LATIN AMERICAN COUNTRIES, 2008 29
FIGURE 4 THE TAX BURDEN AND THE RELATIVE INCOME TAX STRUCTURE IN LATIN AMERICA: AVERAGE OF 17 COUNTRIES (EXCLUDING THE BOLIVARIAN REPUBLIC OF VENEZUELA), 1990 TO 2010 39
FIGURE 5 THE INFORMAL ECONOMY IN DIFFERENT WORLD REGIONS, AVERAGE FOR 1999-2007 58
FIGURE 6 LABOR INFORMALITY IN LATIN AMERICAN COUNTRIES, 2010 60

FIGURE 7 VAT EVASION IN LATIN AMERICA, 2008 AND THE OECD, 2006 69
FIGURE 8 THE EVOLUTION OF VAT EVASION RATES IN LATIN AMERICA, 2000-2010 70
FIGURE 9 ESTIMATED INCOME TAX EVASION RATES IN SELECTED COUNTRIES 71

Box

BOX 1 THE TAXATION OF WEALTHY INDIVIDUALS AND THE GINI COEFFICIENT 52

Abstract

In recent years, the countries of Latin America have introduced a series of reforms aimed at strengthening and modernizing their tax systems. While the reforms are part of an ongoing process carried over from earlier periods, the objectives pursued place a renewed emphasis on distribution issues, in clear contrast with the spirit of the tax reforms implemented in the region in the 1980s and 1990s.

This paper identifies the stylized facts that have characterized Latin American tax systems over the past two decades. Although there is a lot of heterogeneity among countries, the tax burden has increased in almost all cases, and the tax structure has, on average, become more concentrated on the value added tax and the income tax. Nevertheless, certain structural weaknesses have been maintained over time, such as the bias in favour of indirect taxation and the low weight of personal income taxes, which determines the low redistributive impact of taxation at the regional level. Moreover, the high degree of informality, the high level of tax expenditures (or concessions) and the unacceptable levels of tax evasion hinder the consolidation of tax systems based on sufficiency, equity, and efficiency.

As the objectives of tax policy expand beyond the merely fiscal, as has been the case in some recent experiences, it is becoming increasingly important to establish new guidelines for tax reform in the countries of the region.

Introduction

Over the last twenty-five years, Latin America has undergone a deep transformation of its tax systems, mainly in the context of the “first generation of tax reforms” launched during the peak of the Washington Consensus. However, many of the central problems or weaknesses of the Latin American tax systems remain, and the solution appears to be slow and difficult. Today, the countries in the region have a much more favourable macroeconomic context than in the past, which raises the possibility of moving forward on tax reforms that allow securing the improvements achieved to date while also introducing the necessary changes for each country. This will be the path to follow not only to improve the quality of tax policy, but also to adapt the tax structure to the region’s new economic conditions and to address new policy objectives (and some that have merely been postponed) such as equity improvement, the redistribution of income, environmental problems and macroeconomic stabilization.

The vast majority of the countries in the region have recorded marked growth of the tax burden relative to GDP (especially starting in 2002–2003), together with important structural changes such as the consolidation of the value added tax (VAT), an improvement in the share of direct taxes and a decline in specific taxes and taxes on international trade. The prolonged process of strong economic growth at the regional level in recent years has allowed the governments to consolidate their fiscal accounts and put their house in order. Nevertheless, many Latin American tax systems have been incapable of resolving substantial weaknesses in terms of the level of effective taxation and its effect on economic efficiency and, especially, on distributive equity.

Over the last few decades, Latin American countries have implemented numerous reforms to their respective tax systems with varying degrees of depth and success. The results obtained and the ongoing differences inevitably raise questions on whether the reforms can be considered adequate given the level and structure of the tax burden in the countries of the region, or whether a new vision is needed for the future in order to improve on the current situation.

Recent work shows that in most of the region, tax revenues are below potential based on the degree of economic development, that is, the countries display a low tax effort (Fenochietto and Pessino, 2010). More importantly, the current tax structures in these countries tend to be strongly biased towards indirect taxation, which in many cases makes the system as a whole regressive.

This context contrasts with the one observed along the member countries of the Organization for Economic Cooperation and Development (OECD), which tend to have a more balanced combination of direct and indirect taxes and social security contributions, which in turn has a progressive impact on the income distribution (Goñi et al., 2008). Thus, the most striking difference between Latin America and the developed countries lies in the income tax and, in particular, in the lower relative share of personal taxes versus corporate taxes in general tax revenues. Specifically, the low weight of personal income taxes in the tax structure of Latin American countries (in contrast to the tax structure in most of the OECD) further reduces the usually progressive redistributive effect of direct taxation in general.

Several countries in the region retain a large number of differential tax breaks and benefits that not only distort the basic principle of equitable treatment of taxpayers, but also, in most cases, represent a significant loss of potential tax revenues whose waiver by the State is generally not justified. Furthermore, despite the improvements in tax administration, the level of tax non-compliance is very high throughout the region, especially among the large volume of small taxpayers, where the phenomenon of informality reinforces the negative effects of evasion on the tax system.

The new global macroeconomic context has improved the growth outlook for developing countries, thereby creating the space and conditions for introducing structural changes. It could thus be a good time to address a series of tax reforms, within a framework of coherency and fiscal sustainability, aimed at ensuring the collection of greater revenues to finance social spending, consolidate macroeconomic stability and substantially improve the effects of the tax system on income distribution. There are also new challenges for tax policy stemming from the need for the State to provide solutions to environmental protection issues.

The paper is outlined as follows. The first section provides an assessment of the current tax situation in Latin America, identifying the key factors behind the high degree of heterogeneity among the region's tax systems and highlighting the need to take into account the specificity of the cases analysed. The second section analyses the distinctive components of the region's tax structures, such as the design of the VAT and the income tax, property and wealth taxes and some recent unconventional tax alternatives. The third section analyses the economic effects of taxation and some related cross-cutting issues in the countries in the region, including the level of tax expenditures, the magnitude of informality and the corresponding tax responses, the current paradigm of tax administration, the well-rooted phenomenon of tax evasion and the very low redistributive impact of current taxation in the region. Finally, the paper concludes with a list of core issues that will serve to guide the implementation of a much-needed new generation of tax reforms in Latin America.

I. The tax situation in Latin America: background and stylized facts

Despite heterogeneity among countries, Latin America as a whole has witnessed substantial changes in the level and structure of tax revenues. In particular, there has been a steady and fairly generalized increase in the region's average tax burden, but the trend hides strong differences among countries that need to be analysed. This revenue gap is also seen among the OECD member countries, albeit at relatively higher values. At the same time, the tax structures in Latin America share a number of characteristics that contrast sharply with the situation in most developing countries. The magnitude and implications of these contrasts must be taken into account in order to identify the areas of greatest need —and possibility— for introducing stronger tax reforms.

A. Tax revenues in Latin America: recent trends

To understand the relatively recent changes in regional tax policy, it is necessary to go back several decades to gain a long-term perspective.

At the start of the last century, the tax systems of both developed and under-developed countries were dominated almost exclusively by taxes on international trade. However, the drop in the international demand for commodities during the Great Depression of the 1930s, the high concentration of wealth and the protectionist import-substitution industrialization schemes implemented in several countries in the region required the introduction of reforms to raise the level of fiscal resources (Cornia et al., 2011).

After the Second World War, in a completely different macroeconomic context, this paradigm shift was reinforced when tax policy was expanded beyond the classic role of financing public goods and began to encompass the basic objective of correcting the unequal income distribution determined by the market. In the countries of the region, this environment favoured the strengthening of income taxation through the increase of personal and business tax rates, which led to improvements in the vertical equity of the tax systems, but not the horizontal equity due to the long list of exemptions, incentives and special tax regimes.

In the early 1980s, the neoliberal revolution of fiscal policy (Jenkins, 1995) implied a change in the main objectives that guided tax policy in subsequent years, as the design of taxation came to focus on efficiency, horizontal equity and the capture of new tax revenues. In faithful accordance with the recommendations of international organizations such as the World Bank and the International Monetary Fund (IMF), Latin American policy makers promoted a strong reduction in taxes on international trade[1] (which were considered a source of inefficiencies in local production and the international allocation of resources), the introduction of the value added tax (VAT), a decrease of the levels of income tax rates for both individuals and businesses, a substantial reduction in the number of small taxes (eliminating the majority whose revenue contribution was insignificant) and continued efforts to improve tax administration and control evasion, though not always successfully.[2]

Thus, despite the widespread criticism of the Washington Consensus and its consequences for Latin American economies, the policy agenda had an important influence in developing some of the "strengths" of the current tax systems, as well as some of their weaknesses. The emphasis on improving tax administration (even with the relative advances), the strengthening of the VAT and the simplification of tax structures all originate from that period and are usually highlighted as achievements of the movement, while the poor distributive effects of taxation, the lack of equity and the weak taxation of personal income that currently afflict the countries of the region are generally raised as the main objections.

While the tax policies promoted by the Washington Consensus and based on the supply-side economics precipitated deep changes in the region's economies, they failed to lead to stable, sustained economic growth that would, in turn, translate into improvements in the general well-being of the people. At the regional level, the tax burden was reduced, external debt increased (which limited growth even further) and inequality and fiscal volatility were heightened.

A new phase in Latin American tax policy began in the mid-1990s and flourished over the course of the next decade and a half, when tax revenues as a percentage of Gross Domestic Product (GDP) followed a rising trend both for the regional average and for the vast majority of countries. Between 1990 and 2012, the average tax burden in the region increased by over 52%, from 13.6% to 20.7% of GDP (see table 1).

While promising, this trend reflects a set of factors that do not strictly pertain to tax policy. Latin American governments have been improving the design of their respective tax systems based, for example, on a sustained effort to reduce and eliminate a long list of exemptions, deductions and tax incentives that were granted over the past several decades in order to attract foreign investment, but that did not always produce the desired results. Countries have also exercised greater responsibility in the use of public resources and made important advances in the administration of the VAT and income taxes, which translated into a sharp increase in tax revenues from these sources. Finally, the introduction of new financial transaction taxes and minimum taxes has contributed to increasing revenues, raising the level of compliance and expanding the range of tax policy instruments.

In addition, the change of trend in taxation in Latin America took place in a favourable macroeconomic context, which allowed a substantial reduction in budget deficits and debt levels in the countries of the region. At the same time, there was a revival of the importance of state action in terms of redistribution through taxes and transfers. The resulting reduction in inequality supported an increase in private consumption that was reflected in the evolution of taxes on goods and services and new domestic policies promoting the re-formalization of the economy, which contributed to expanding the tax base.

In some countries in the region, the increase in the tax burden is also explained by contingent factors, such as (i) the steady increase in international commodity and mineral prices since 2002-2003, which has increased fiscal revenues (from taxes and royalties) in countries specializing in the exploitation and commercialization of natural resources (analysed below); and (ii) an international

[1] According to Lora (2007), the average tariff on imports in South America fell from 55% in 1985 to approximately 10% in 2000. The drop was even greater in Central America (including Mexico): from 66% to 6% on average.

[2] Mahon (2004) discusses the causes of this series of reforms in greater depth.

context characterized by accelerating world economic growth rates (especially for the emerging countries since 2002-2003), which the countries of the region were able to capitalize on through strategies of trade and financial openness combined with successful monetary stabilization, generating an increase in tax elasticity (ex post) in Latin America.[3]

An additional factor that made increased tax burden acceptable to the majority was the greater emphasis in recent years on fiscal exchange, wherein governments can increase taxes if, respecting the fiscal covenant with the nation's citizens (ECLAC, 2010), they can simultaneously increase the quantity and quality of social services provided to society (Fjeldstad et al., 2009). As Bird (2003) argues, "in a (Wicksellian) democratic framework in which expenditure and tax decisions are taken conjointly… the existing tax structure, whatever it may be, must be assumed to be imposed in full knowledge of its consequences, reflecting the social judgment that the benefits of the actions financed more than compensate for all costs of taxation."

Thus, in the long term, the legitimacy and capacity for increasing taxes is affected by the greater efficiency achieved through public spending. The reforms of the neoliberal era reduced the role of the State in the supply of public services, causing the middle class to choose private alternatives and thereby causing a reduction in service quality and user satisfaction. In contrast, since the beginning of the current century, there has been an increase in social transfers and an expansion of access to primary health care and secondary education (Huber, 2009).

Table 1 presents data on the level of the tax burden for 18 Latin American countries for various years. For practical purposes, the countries are ordered by tax level in 2012. The country ranking, which does not change significantly in the years after the international economic crisis of 2008-2009, provides a clearer view of each country's situation in terms of its tax level and position within the region.

TABLE 1
TAX REVENUES IN LATIN AMERICAN COUNTRIES (INCLUDING SOCIAL SECURITY CONTRIBUTIONS)
(Percentage of GDP)

Countries	1990	1995	2000	2005	2010	2011	2012
Argentina	16.1	20.3	21.5	26.9	33.5	34.7	37.3
Brazil	28.2	27.0	30.1	33.1	33.2	34.9	36.3
Uruguay	19.6	21.0	21.6	23.8	27.0	27.3	26.3
Bolivia (Plurinational State of)[a]	7.2	11.8	14.7	19.1	20.7	24.2	26.0
Costa Rica	16.1	16.3	18.2	19.8	20.5	21.0	21.0
Chile	17.0	18.4	18.8	20.7	19.5	21.2	20.8
Ecuador	7.1	7.9	10.1	11.7	16.8	17.9	20.2
Mexico[b]	15.8	15.2	16.9	18.1	18.9	19.7	19.6
Colombia	9.0	13.8	14.6	18.1	18.0	18.8	19.6
Nicaragua[c]	n.d.	14.1	16.9	20.9	18.3	19.1	19.5
Panama	14.7	16.4	16.7	14.6	18.1	18.1	18.5
Peru	11.8	15.4	13.9	15.8	17.4	17.8	18.1
Paraguay[d]	5.4	13.6	14.5	13.8	16.5	17.0	17.6
Honduras	16.2	18.1	15.3	16.9	17.3	16.9	17.5
El Salvador	10.5	13.0	12.2	14.1	14.8	14.8	15.7
Venezuela (Bolivarian Republic of)[e]	18.7	13.3	13.6	15.9	11.4	12.9	13.7
Dominican Republic	8.3	10.6	12.4	14.7	12.8	12.9	13.5
Guatemala[f]	9.0	10.4	12.4	13.1	12.3	12.6	12.3

[3] Cornia, Gómez Sabaíni and Martorano (2011).

Table 1 (conclusion)

Countries	1990	1995	2000	2005	2010	2011	2012
Latin America (18)[g]	13.6	15.4	16.4	18.4	19.3	20.1	20.7
OECD (34)[h]	32.9	34.4	35.2	34.8	33.8	34.1	n.d.
According to ECLAC:							
Latin America (18)[i]	13.2	14.8	15.7	17.3	18.3	19.0	19.3

Source: Own elaboration based on data from OECD/ECLAC/CIAT (2014). Figures exclude revenue from local governments in Argentina (but includes income from the provinces), Bolivia (Plurinational State of), Costa Rica (until 1997), Dominican Republic, Ecuador, El Salvador, Honduras, Nicaragua, Panama (until 1998), Paraguay (until 2004, 2011 and 2012), Peru (until 2004), Uruguay and Venezuela (Bolivarian Republic of) since the data are not available.

[a] Estimates for 2011 and 2012. In ECLAC data, the Direct Tax on Hydrocarbons (DTH) is considered as a royalty within non-tax revenue (see box 1).
[b] In ECLAC and CIAT data the rights to the production of hydrocarbons are treated as non-tax revenue (see box 1). The data include expected income at state and local levels for 2012. In ECLAC data, the income tax is shown in net values of salary components and social security contributions are taken net of federal government transfers for payment of pensions of the Mexican Institute of Social Security (IMSS).
[c] Data for 1990 cannot be taken into account due to the devaluation of the national currency (Cordobas) of that year.
[d] Estimated data for 2011 and 2012. ECLAC does not include as tax revenue contributions to pension funds and pensions of certain sectors such as railways, banking and the National Electricity Administration (ANDE).
[e] Estimates for 2011 and 2012.
[f] Includes social security contributions paid to the Guatemalan Institute of Social Security (IGSS), which differs from the approach of ECLAC, where only payments to the state public employee pension fund are included.
[g] Simple average for 18 selected countries of Latin America.
[h] Unweighted average for OECD member countries.
[i] Differences with the base of OECD/ECLAC/CIAT arise due to the different criteria mentioned for each country in the preceding notes. Unweighted average for 18 countries of Latin America. Data refer to central government except for the cases of Argentina, Brazil, Bolivia (Plurinational State of), Chile, Colombia, Costa Rica, Guatemala and México (general government).

This paper draws on the statistical information contained in a recent joint publication by OECD/ECLAC/CIAT (2014), which represents one of the first systematic attempts[4] to establish a uniform body of tax data and indicators for Latin American countries under the same standards and classifications used by the OECD, which has clear advantages in terms of international comparison. These data are not without controversy, however, due to methodological differences with other recognized sources of information such CEPALSTAT, which are mostly related to the decision of whether or not to include certain fiscal resources in the tax burden.[5] Despite these qualitative discrepancies,[6] our tests showed that the general conclusions for the region are robust to the adoption of the different methodologies.

Latin America displays substantial heterogeneity in terms of the magnitude and relative intensity of the observed changes. When tax revenues from social security contributions are included in the calculation, two countries in particular show strong growth of tax revenues in the last 20 years. For example, in 2012 Argentina became the country with the highest tax revenues in Latin America (in GDP terms) at 37.3%,[7] which puts it above the OECD average for 2011 (34.1% of GDP).[8] Brazil also tops the regional ranking with total tax revenues of 36.3% of GDP in 2012, but its growth rate of taxes was lower in the period. In terms of the total tax burden, these two countries are currently very close to Germany

[4] Another database, constructed jointly by the IDB and CIAT (2012), contains fiscal information for the countries of the region including income from private social security systems and non-renewable natural resource exploitation (although these resources are not strictly tax revenues).
[5] For Bolivia, the database includes revenues from the direct tax on hydrocarbons as tax revenues; for Mexico, state hydrocarbon rights are considered taxes; and for Paraguay, the inclusion of resources from the decentralized social security institutions accounts for a large share of revenues (see the notes to table 1).
[6] For example, the OECD classifies these revenue sources in a special category (5121) under taxes on specific goods and services; ECLAC classifies them under property taxes (4000), regardless of whether they involve property holdings or transfers.
[7] The tax pressure in Argentina may be overestimated in 2009-2012 due to the statistical basis used to calculate nominal GDP.
[8] The average for 2012 was not available at the time of writing, but it is reasonable to assume that it would be very similar to the previous year (and slightly higher), given the stability of tax revenues in the OECD over the course of the past decade (*OECDStats*).

(37.6% in 2012) and above some key OECD members such as the United Kingdom (35.2%), Spain (32.9%) and Canada (30.7%).

Uruguay is a distant third in the ranking but still above the regional average (20.7%). The increase in the tax burden was more gradual, reaching 26.3% of GDP in the last year analysed. Bolivia nearly quadrupled its tax revenues in the period, reaching 26.0% of GDP in 2012. Non-renewable natural resources (hydrocarbons) represent a significant share of the total for Bolivia.

Next to the mentioned comes a large group of countries with tax levels that are substantially lower than the OECD countries, ranging from 17% to 21% of GDP in 2012. This group is led by Costa Rica (21.0%) and Chile (20.8%), down through Paraguay (17.6%) and Honduras (17.5%). All of these countries have, to a greater or lesser extent, managed to increase the tax pressure over the course of the last two decades. Within the group, Ecuador (20.2%) and Colombia (19.6%) recorded particularly large increases over the course of the period analysed.

As discussed, the increase in revenue levels between 1990 and 2012 was generalized throughout the region, although some countries still lag behind on this variable, including El Salvador (15.7%), Dominican Republic (13.5%), Guatemala (12.3%) and Venezuela (13.7%). The latter case is an exception to the trend: it is the only Latin American economy that recorded a decrease in tax revenues relative to its 1990 level, on the order of 30%. The decrease in Venezuela, as well as the increases in Mexico, Bolivia and Ecuador, reflects a growing fiscal dependence on income from hydrocarbon production and the different instruments and mechanisms that the countries use to effectively appropriate the profits from the exploitation of these non-renewable resources (see subsection 3.3. below).

B. The evolution of the tax structure in the countries of the region

While the strong heterogeneity among Latin American countries must be taken into account in any tax analysis aiming to provide a general picture of the region, the tax systems share a number of basic structural characteristics that are found in the majority of the cases. These can be identified as tax trends at the regional level, as summarized below.

One of the most important trends in Latin American tax policy is the considerable increase in general taxes on goods and services as a share of total tax revenues in the region, where the VAT has become the main tax instrument in most of the countries.[9] As shown in table 2, the relative weight of these taxes in the average tax structure for Latin America expanded from 23.9% of total tax revenues in 1990 to 32.6% in 2000, declining slightly to 31.1% in 2012. These levels are substantially higher than the OECD averages. Almost all of the increase in the percentage share of this type of tax occurred in the 1990s as a result of tax reforms that expanded the tax base and increased the standard VAT rate.

In contrast, other taxes on specific goods and services (excise taxes) recorded a significant contraction in their relative weight in the revenue composition over the last two decades, declining from 27.0% in 1990 to 16.0% in 2012. This trend was also seen in the developed countries. Within this group of taxes, excise taxes underwent a moderate decrease in their relative share in the regional average (from 10.4% in 1990 to 8.9% in 2012). They are now limited to a small set of products (alcoholic beverages, tobacco and fuels), mainly in countries with a higher tax burden that were able to consolidate their general consumption taxes by widening the taxable base of VAT with the inclusion of a large number of goods and services.

[9] Sales taxes are also important in some countries, where they make up the bulk of subnational tax revenues. Examples include the turnover tax collected by provinces in Argentina; the service tax levied by municipalities in Brazil; and the industry and trade tax collected by local governments in Colombia.

TABLE 2
AVERAGE TAX STRUCTURE IN LATIN AMERICA, 1990, 2000 AND 2012
(Percentage of total revenues)

	Latin America (18)			OECD (34)		
	1990	2000	2012	1990	2000	2012
Taxes on income and profits	22.2	19.6	25.1	38.0	35.5	33.4
Social Security contributions	17.6	18.1	18.3	23.1	25.3	26.7
Payroll taxes	1.3	2.1	1.1	1.1	1.1	1.2
Property taxes	5.6	4.4	4.2	5.5	5.4	5.3
DIRECT TAXES (A)	46.7	44.1	48.6	67.6	67.3	66.6
Taxes on general consumption	23.9	32.6	31.1	17.6	19.3	20.2
Value added taxes	20.7	30.1	30.3	16.1	18.8	19.4
Sales taxes and others	3.2	2.5	0.8	1.5	0.6	0.9
Taxes on specific goods and services	27.0	22.4	16.0	12.2	10.8	10.3
Excise taxes	10.4	11.8	8.9	8.1	8.3	7.9
International trade and transactions	16.7	9.5	5.4	2.0	0.9	0.4
Other [a]	0.0	1.1	1.7	2.1	1.6	1.9
Other taxes [b]	2.4	0.9	4.3	2.6	2.6	2.9
INDIRECT TAXES (B)	53.3	55.9	51.4	32.4	32.7	33.4
Total tax revenues	100.0	100.0	100.0	100.0	100.0	100.0
Ratio Direct / Indirect Taxes (A/B)	0.87	0.79	0.94	2.09	2.06	1.99

Source: Own elaboration base on data from OECD/ECLAC/CIAT (2014) and OECDStats. For the regional averages the relative share of these resources within the average structure for Latin America and the OECD was calculated, which is not necessarily equal to the simple average of the percentages shown for each of the countries considered.

[a] Includes other items from category 5120 (profits of fiscal monopolies, taxes on investment property, taxes on specific services and other minor taxes).
[b] Includes all taxes on use of goods and on permission to use goods and engaging in economic activities (for example, motor vehicles) of category 5200 and other taxes grouped in the category 6000, according to the OECD methodology.

The level and dispersion of import duties were reduced in the 1980s to achieve a flatter tariff protection structure, in both nominal and real terms. Progress was also made on eliminating the export duties effective in many countries in the region, which essentially taxed primary production (Barreix et al., 2010). This resulted in a sharp, steady decline in the percentage share of taxes on international trade (from 16.7% to 5.4% in the 1990-2012 period), especially in countries with a lower tax burden at the regional level. Argentina is an exception to this trend, having reintroduced export duties starting in 2002.[10]

The typical composition of the region's tax systems includes two additional pillars: income and capital gains taxes and also the social security contributions.

Income taxes have increased over the past two decades in almost all the countries of the region,[11] even though income tax rates have fallen sharply relative to the 1980s and 1990s, in line with the international trend. Revenue from income taxes currently represents 25.1% of the average tax burden in Latin America. The increase in the relative share of these taxes was mainly concentrated in the first few years of the last decade. It is explained by the application of minimum taxes and improvements in tax administration, in a context of increasing formalization of employment, price stability and sustained economic growth throughout the decade, which led to greater income generation in the private sector.

[10] This has allowed the government to collect a large and growing sum of additional tax revenues to date, capitalizing on the sustained increase in the international prices of exported goods. In 2012, these resources represented 2.8% of GDP —nearly 8% of total tax revenues. The annual average for the 2003-2012 period was 2.7% of GDP, with a peak of 3.5% of GDP in 2008.

[11] Venezuela is the one exception. In the early the 1990s, income taxes on income obtained from the state company PDVSA generated 83.7% of total revenues (15.6% of GDP). This share has fallen over the years as a result of fiscal reforms on the state appropriation of economic resources deriving from oil production.

Contributions to finance social security systems have accounted for a stable share of the average tax structure in Latin America over the period, at around 17-18% of total revenues (table 2). There is wide variation among countries, however. In countries with a higher tax burden and more consolidated social security systems, these contributions are as much as three or four times greater in GDP terms and as much as double in terms of total collections than in the remainder of the countries.

Finally, in addition to payroll taxes (effective in only 5 of the 18 countries analysed and with a meagre collection rate) and some minor taxes, Latin American tax structures include a small share of property taxes, which tended to fall somewhat and stagnate in the period analysed. Property taxes represented a little over 4% of total tax revenues in 2012. Here again, this trend is explained almost entirely by the countries with the highest tax burden, such as Argentina, Brazil and Uruguay, which are the only countries where these taxes increased slightly in GDP terms. Property taxes are fairly insignificant in the rest of the countries in the region.

Given these distinctive features of the Latin American tax structure, it is important to identify the key differences in comparison with the OECD countries. The typical tax structure in Latin America is clearly biased towards indirect taxation on goods and services, with both general taxes like the VAT and excise taxes: the ratio of direct to indirect taxes of less than one throughout the 1990-2012 period. In contrast, the tax structure in the OECD countries is characterized by a greater relative weight of direct taxation (66.6% in 2012), through both income taxes (which account for a third of total revenues, on average, and are equal to revenues from indirect taxes) and social security contributions. As a result, the direct-indirect ratio was 1.99 in 2012 (see table 2).

However, these qualitative differences should not obscure the gaps in terms of quantitative magnitudes. Table 3 presents tax revenue data by type of tax and percentage of GDP, showing the regional averages for both Latin America and the 34 member countries of the OECD. The findings can be summarized as follows:

- The most obvious difference is found in the income and capital gain taxes: in GDP terms, income taxes in the 34 OECD countries in 2011 were, on average, more than double the income taxes in the 18 Latin American countries in 2012 (11.4% versus 5.2%, respectively). While this gap has narrowed slightly in the last 20 years,[12] it still accounts for the largest difference between the two sets of countries. A closer analysis of the tax structure reveals that the main difference between Latin American and OECD tax structures lies specifically in the personal income tax, which explains a large share of the weaknesses of the region's tax systems. This issue is analyzed in detail in a later section of the paper.
- Income from social security contributions also vary sharply between the two groups of countries. Because of low coverage and a number of reforms implementing capitalization schemes (which do not contribute to tax revenues), only a few Latin American countries currently have financed pension systems. In 2012, Brazil (9.7%), Argentina (8.3%) and Uruguay (7.2%) led the region in the collection of this type of resource (in GDP terms). These rates are higher than some developed countries such as the United States (5.4%), the United Kingdom (6.8%) and Switzerland (7.1%), but substantially below other OECD countries such as Germany (14.4%), Belgium (14.5%), France (17.0%) and Italy (13.5%). The gap widens tremendously when comparing the other Latin American countries, where social security contributions are often less than 2% of GDP.

[12] This reflects not only the increase in tax revenues in the countries of the region, but also the fact that in 1990 the OECD had not yet incorporated its most recent members (Eastern Europe, Mexico and Chile), which clearly had a negative effect on the OECD average given the characteristics of their respective tax structures.

TABLE 3
AVERAGE TAX STRUCTURE IN LATIN AMERICA AND THE OECD, 1990, 2000 AND 2012
(Percentage of GDP)

	Latin America (18)			OECD (34)		
	1990	2000	2012	1990	2000	2011
Taxes on income and profits	3.0	3.2	5.2	12.5	12.5	11.4
Individuals	0.8	1.1	1.6	10.1	9.3	8.5
Corporations	2.2	2.1	3.6	2.4	3.1	3.0
Social Security contributions	2.4	3.0	3.8	7.6	8.9	9.1
Payroll taxes	0.2	0.3	0.2	0.3	0.4	0.4
Property taxes	0.8	0.7	0.9	1.8	1.9	1.8
DIRECT TAXES (A)	6.3	7.2	10.1	22.2	23.7	22.7
Taxes on general consumption	3.2	5.3	6.5	5.8	6.8	6.9
Value added taxes	2.8	4.9	6.3	5.3	6.6	6.6
Sales taxes and others	0.4	0.4	0.2	0.5	0.2	0.3
Taxes on specific goods and services	3.7	3.7	3.3	4.0	3.8	3.5
Excise	1.4	1.9	1.8	2.7	2.9	2.7
International trade and transactions	2.3	1.6	1.1	0.6	0.3	0.1
Other [a]	0.0	0.2	0.4	0.7	0.6	0.7
Other taxes [b]	0.3	0.1	0.9	0.9	0.9	1.0
INDIRECT TAXES (B)	7.2	9.1	10.7	10.7	11.5	11.4
Total tax revenues	13.6	16.4	20.7	32.9	35.2	34.1

Source: Own elaboration base on data from OECD/ECLAC/CIAT (2014) and OECDStats. For the regional averages the relative share of these resources within the average structure for Latin America and the OECD was calculated, which is not necessarily equal to the simple average of the percentages shown for each of the countries considered. The structure of the income tax emerges from own estimations based on IADB-CIAT (2012) and Gómez Sabaíni et al. (2012).

[a] Includes other items from category 5120 (profits of fiscal monopolies, taxes on investment property, taxes on specific services and other minor taxes).
[b] Includes all taxes on use of goods and on permission to use goods and engaging in economic activities (for example, motor vehicles) of category 5200 and other taxes grouped in the category 6000, according to the OECD methodology.

- With regard to general taxes on goods and services, the strong growth of the VAT in almost all the Latin American countries has contributed to equalizing the two regional averages at just below 7% of GDP. This trend is largely explained by Argentina and Brazil, which collect significant tax revenues not only from the VAT (8.7% and 8.5% of GDP, respectively), but also from gross sales taxes (which are generally allocated to subnational governments).
- Taxes on specific goods and services are similar for the two regions in terms of average total revenues, but the composition differs: excises account for the bulk of these revenues in the OECD countries versus just over half in Latin America. In the latter region, taxes on international trade and transactions still have a large relative share, whereas they have all but disappeared in the tax systems of the developed countries.
- Finally, payroll taxes are almost insignificant in both groups of countries, while property taxes are higher but still not very significant. The average share of property taxes in the OECD is almost the double that of Latin America, where they are most significant in the countries with the highest tax revenues.

Beyond the country-level differences in the volume of production, the per capita income level or the income concentration coefficient, there are three factors contributing to the great dispersion in tax pressures described above. These are the different mechanisms for financing social security programmes; the structure of the State political organization, whether federal or unitary; and the existence of different sources of natural resources capable of generating substantial additional fiscal revenues. Each of these factors is analysed in the next section.

C. Factors that demonstrate the heterogeneity of the region's tax systems

1. Social security financing

With respect to State financing through individual contributions, the role of social security constitutes a key factor differentiating the countries of the region. Latin America includes countries with very developed pension (and retirement) systems that mobilize a vast amount of monetary resources collected from formal workers, as well as countries with rudimentary pension systems that, for different reasons, have not been able to achieve much concrete progress in this area.

The countries also vary with regard to the nature of the institutions that provide the services, which is an important characteristic for classifying the different systems (Cetrángolo, 2009). In general, public systems are characterized by undefined contributions (which tend to increase in the long term due to the ageing of the population and the maturation of the system), a pay-as-you-go (PAYG) or collective partial capitalization (CPC) financing scheme and public administration (by an autonomous entity or directly by the State). Private systems have defined contributions (fixed in the long term, although the ageing of the population will eventually force either an increase in contributions or a reduction in pension amounts), a full individual capitalization (FIC) scheme and private administration (although administration can be public, private or mixed).

The region has undergone tremendous changes in State participation and financing in recent years, and many of these reform processes are still in the transition phase. Thus, some countries have implemented "structural" reforms in which the public system has been fully or partially substituted by a private system; others have opted for "parametric" reforms aimed at financially strengthening a long-term public system, whether by raising the retirement age, increasing contributions, tightening the calculation formula or taking other measures (Mesa-Lago, 2004).

Unfortunately, the status of any given system is not always easy to classify. In particular, the combination of reform processes that attempt to address the crisis of the old social security systems and those that aim for higher levels of coverage —whether or not concurrent— have increasingly led to the development of hybrid systems, as shown below.

TABLE 4
SOCIAL SECURITY REFORMS IN LATIN AMERICAN COUNTRIES

Model, country and date the reform began	Financial regime	Quote	Administration
Structural reforms			
Substitute individual capitalization model (private system replaces public system)			
Chile: May 1981			
Bolivia (Plurinational State of): May 1997			
Mexico: September 1997	Full individual capitalization (FIC)	Defined	Private[a]
El Salvador: May 1998			
Dominican Republic: 2003-2006			
Parallel individual capitalization model (competition between public and private systems)			
Peru: June 1993	Pay-as-you-go[b]	Not defined	Public
Colombia: April 1994	or FIC	or Defined	or Private[a]

Table 4 (conclusion)

Model, country and date the reform began	Financial regime	Quote	Administration
Mixed individual capitalization model (public and private system are complementary)			
Argentina: July 1994 [c]			
Uruguay: April 1996	Pay-as-you-go[b]	Not defined	Public
Costa Rica: May 2001	and FIC	and Defined	and Multiple
Ecuador: 2004			
Notional accounts			
Brazil (General Social Welfare Policy – private sector)	Pay-as-you-go	Defined	Public
Parametric reforms or without reforms			
Brazil (other) ; Cuba ; Guatemala ; Haiti; Honduras ; Nicaragua ; Panama ; Paraguay; Venezuela (Bolivarian Republic of) and English speaking Caribbean countries.	Pay-as-you-go or Collective partial capitalization (CPC)	Not defined	Public

Source: Mesa-Lago (2004) and Cetrángolo (2009).

[a] Multiple in Mexico, Dominican Republic and Colombia.
[b] In Peru, Argentina and Uruguay, but CPC in Colombia and Costa Rica.
[c] In October 2008, the capitalization system (AFJP) was revoked and integrated to the public pay-as-you-go system.

ECLAC (2006) has proposed a classification of the different systems that basically sorts the different social security systems by their financing scheme, taking into account the fact that, as a result of total or partial privatization of the pension system (and in some cases health care), some countries of the region recorded a drop in the relative share of social security contributions as a source of revenues. While it is difficult to establish precise guidelines, some general patterns can be identified based on the type of contributions (mandatory or voluntary), the nature of the institutions in charge of the benefits and the redistributive effect of the financing scheme.

- If contributions are mandatory, the system is managed by public institutions and the benefits play a redistributive role, then the contributions should be included as part of the tax pressure and the corresponding expenditures should be considered public. Examples include the pension systems in Brazil, Costa Rica, Panama and Paraguay. In Argentina, from July 1994 to October 2008, only contributions to the public pay-as-you-go system (currently the only system in place) are considered tax revenues.
- If contributions are mandatory and the system is managed by public institutions, while the benefits do not play a redistributive role, but rather are organized according to the "benefits principle", then the expenditures are public but the resources are not included as tax revenues. An example would be a pure notional accounts model such as the private sector RGPS in Brazil.
- When the contributions are managed by private institutions, regardless of whether they are mandatory or voluntary and whether or not they finance redistributive benefits, then the expenditures are not public and the resources are not included as tax revenue. Examples include the pension fund administrators in Chile and Argentina (from 1994 to 2008).

Beyond these general considerations, each country has its own method of organizing its public accounts and presents the information according to its own requirements. However, following the criteria proposed by ECLAC (2006), throughout this paper, social security contributions are considered an integral part of the tax burden in the region. Therefore, table 5 presents data on the absolute and relative magnitude of these public resources for each of the selected countries in 1990, 2000 and 2012.

TABLE 5
TAX REVENUES FROM SOCIAL SECURITY CONTRIBUTIONS IN LATIN AMERICA

Countries	1990	2000	2012	1990	2000	2012
	(percentages of the GDP)			*(percentages of total tax revenues)*		
Argentina	4.1	3.4	8.3	25.3	15.8	22.2
Bolivia (Plurinational State of)[a]	n.d.	1.3	1.5	n.d.	8.7	5.9
Brazil	6.8	7.1	9.7	24.0	23.5	26.8
Chile	1.5	1.4	1.1	9.0	7.3	5.2
Colombia	0.7	3.0	2.4	7.9	20.6	12.4
Costa Rica[b]	4.4	5.1	6.2	27.2	28.0	29.7
Ecuador	1.6	1.2	5.7	22.5	12.3	27.9
El Salvador[c]	1.4	2.0	1.7	13.3	16.4	10.8
Guatemala[d]	1.4	1.9	1.5	15.6	15.5	12.5
Honduras	1.4	1.6	3.0	8.8	10.6	17.2
Mexico[e]	2.1	2.8	2.9	13.4	16.5	15.0
Nicaragua	n.d.	3.4	4.4	n.d.	19.9	22.9
Panama	4.5	6.4	6.0	30.4	38.2	32.4
Paraguay[f]	0.4	3.7	4.1	8.3	25.6	24.5
Peru	0.9	1.7	1.8	7.7	12.3	10.2
Dominican Republic[g]	0.1	0.1	0.1	0.8	1.0	0.4
Uruguay[h]	6.0	6.4	7.2	30.5	29.6	27.3
Venezuela (Bolivarian Republic of)[i]	0.9	0.7	0.4	4.9	5.4	3.1
Latin America (18)	2.4	3.0	3.8	17.6	18.1	18.3
OECD (34)	7.6	8.9	9.1[j]	23.1	25.3	26.7[j]

Source: Own elaboration base on data from OECD/ECLAC/CIAT (2014) and OECDStats. For the regional averages the relative share of these resources within the average structure for Latin America and the OECD was calculated, which is not necessarily equal to the simple average of the percentages shown for each of the countries considered.

[a] Information available only from 2000 onwards. Estimates for 2011 and 2012.
[b] ECLAC data also include contributions paid to decentralized institutions such as INA, IMAS and FODESAF.
[c] Corresponds to social contributions paid to the Salvadorian Institute of Social Security.
[d] Social security contributions paid to the IGSS are included, which differs with ECLAC's approach that only includes payments of public employees to the state pension fund.
[e] ECLAC, unlike the OECD criterion, excludes the financing of the Mexican Social Security system provided by the Federal Government. Estimates for 2012.
[f] Estimates for 2011 and 2012. Unlike ECLAC's approach, figures include contributions to pension funds and pension sectors such as railway, banking and the National Administration of Electricity.
[g] Does not include the contributions paid to the general government managed by the private sector.
[h] Data from 1990 to 1998 are estimates recalculated with the current methodology in place since 1999.
[i] Estimates for 2011 and 2012.
[j] Latest data available is for 2011.

As the table shows, social security contributions are highly significant in the tax revenue composition of some countries. In 2012, the relative share exceeded 20% in Panama, Costa Rica, Ecuador, Paraguay, Nicaragua, Uruguay, Brazil and Argentina. In the latter case, the introduction of the private individual capitalization system reduced the tax revenues of the Argentine general government in the late 1990s and much of the last decade. Revenues then recovered starting in late 2008 when the two parallel social security systems were unified in a single public pay-as-you-go system.

In contrast, social security contributions currently represent less than 15% of the tax revenue structure in several countries in the region. The factors explaining this result vary by country. Not only

are there differences in the degree of development of each country's social security system, but some countries, such as Chile, Colombia and Mexico, have implemented structural pension reforms that affected the composition of tax revenues.

In countries such as Argentina, Brazil and Uruguay, the growth of tax revenues is related to the increase in the coverage of the current systems through successful programmes to formalize employment and expand pension benefits. In most of the countries in the region, however, and independent of the type of scheme adopted, population coverage is deficient, given that the high levels of informality restrict the reach and financing of the social protection systems in place.

2. The revenue composition of subnational governments

In the last two decades, Latin America saw a strong trend towards decentralization. In federalist countries (Argentina, Brazil, Mexico and Venezuela), this trend was reflected in the transfer of certain government functions to the lower levels of government; in unitary countries with multiple layers of government, there was a substantial transfer of functions towards local governments; and in very centralized unitary countries, new intermediate levels of government were created and charged with the formulation and execution of important public policies or, in some cases, their implementation only (Jiménez and Viñuela, 2004).

The decentralization processes in the region have been diverse and heterogeneous. This reflects a range of factors, from the institutional and democratic characteristics of the countries to the different motivations, institutional frameworks, process dynamics, sectors involved and degrees of autonomy of the subnational governments, as well as the social and economic structure of each case (Cetrángolo et al., 2009).

Despite the strong diversity, these processes and reforms share a common result: namely, the high vertical asymmetry in the allocation of revenues and expenses among the different levels of government. This imbalance is the result of the misalignment, or mismatch, between the vertical distribution of responsibilities (and therefore of expenditures) and the vertical distribution of potential tax revenues (financing needs) among the different levels of government.

Rezende and Veloso (2010) indicate that the decentralization processes were implemented mainly in two waves. The first wave gained momentum in the late 1980s, when it was thought that decentralization would promote a more efficient allocation of public goods among a territorially diverse subnational citizenry, which in turn would improve the channels of civic participation, political responsibility and accountability.

In the second wave in the mid-1990s, the reforms took on a different focus. Instead of the tax-sharing schemes (usually with discretionary funds) that were common in previous years, governments opted for channelling federal resources to subnational governments for education and health, thereby strengthening earmarked transfer mechanisms.

In both periods, this process mainly unfolded through public spending (as opposed to revenue), although there is substantial variation among countries. In general terms, Argentina and Brazil (federalist countries) have achieved the highest levels of subnational fiscal decentralization, as measured in terms of both expenditures and revenues, followed by Colombia and Bolivia (unitary countries).[13]

Although the allocation of spending responsibilities to subnational governments is important, how the subnational governments finance these services is a key concern. Financing is achieved through three mechanisms: (a) generation of own resources,[14] through either taxes or non-tax income (royalties, assessments, duties, etc.); (b) intergovernmental transfers; and (c) subnational debt (or a combination of all three).

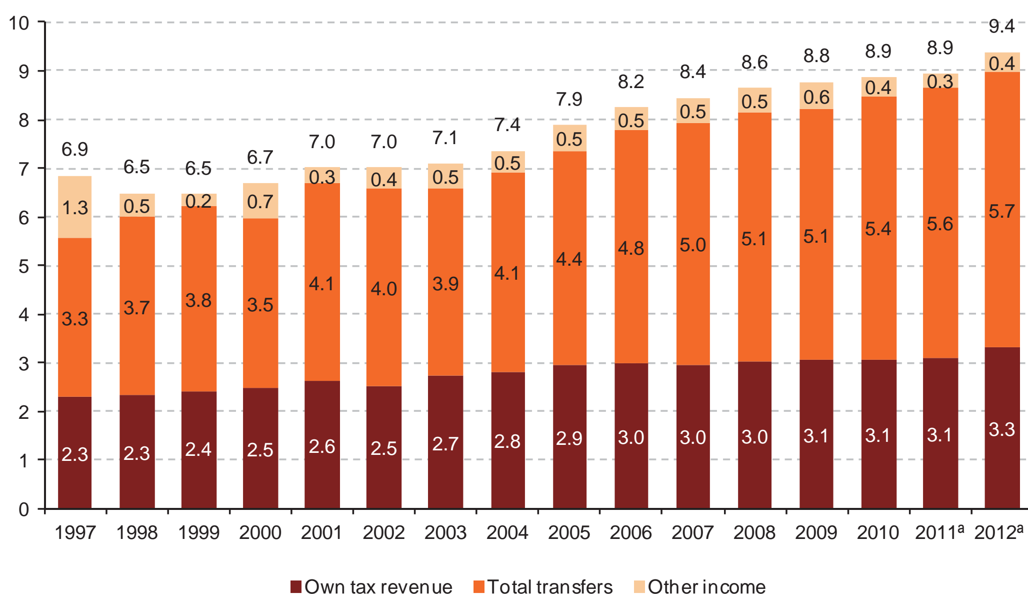
[13] Aghón and Edling (1997).

[14] In a strict sense, subnational own revenues are those taxes for which the subnational governments have the discretionary authority to determine their citizens' tax burden (Brosio and Jiménez, 2010). This authority can be exercised through three different instruments: tax administration, the setting of the tax rate and the definition of the tax base.

As shown in figure 1, the total fiscal revenues of these governments have grown considerably in recent years. However, this is essentially due to the increasing share of transfers from the central government and not from an increase in the tax revenues collected at the local and intermediate levels. For a set of eight countries in the region,[15] total transfers increased 2.4% of GDP, on average, between 1997 and 2012, while local tax revenues only expanded from 2.3% of GDP to 3.3% in the same period.[16]

FIGURE 1
EVOLUTION OF THE TOTAL REVENUE STRUCTURE OF SUBNATIONAL GOVERNMENTS: AVERAGE FOR EIGHT LATIN AMERICAN COUNTRIES

(Percentage of GDP)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures.

Note: The concept of subnational governments refers to the provinces in the case of Argentina; prefectures and municipalities in Bolivia (Plurinational State of); states and municipalities in Brazil; municipalities in Chile; departments and municipalities in Colombia; local governments (cantons) in Costa Rica; provincial councils and municipalities in Ecuador; states and municipalities in Mexico.

[a] Data for Argentina, Colombia, Ecuador and Mexico are projections made by ECLAC.

In most countries with some degree of fiscal decentralization, the subnational governments are strongly dependent on the transfer system through which the central government complements the financing of their expenditure responsibilities, that is, the provision of public goods to their citizens. According to ECLAC data, in Mexico, transfers to subnational governments reached 7.9% of GDP in 2012 and accounted for almost 85% of the total revenues received by these entities. Similarly, the share of transfers exceeded 60% of total revenues at the subnational level in Argentina (9.0% of GDP in 2012), Bolivia (Plurinational State of) (7.7%) and Ecuador (4.5%).

The decentralization of tax authority to states and provincials governments has been relatively weak in most of the countries in the region, subject to the specific characteristics of each country. As a result, the tax revenues of these levels of governments in the countries of the region have stagnated over the last ten years. This poor development is associated with the scarce level and limited structure of subnational taxation, which in turn is related to the tax bases available for these levels of government.

---

[15] Argentina, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Costa Rica, Ecuador and Mexico.

[16] For a detailed analysis of the transfer systems in each country in the region, see Jiménez and Podestá (2009a).

There are exceptions to the rule, however. In Brazil, the states and the plus municipalities contribute nearly 29% of total tax revenues (about 10.5% of GDP in 2011). In Argentina and Colombia, the subnational levels account for approximately 15% of total revenues, so they must be taken into account in the tax analysis (table 6). As mentioned earlier, in the rest of the countries, the central government has not made significant progress in the decentralization of tax revenues. In these countries, subnational taxes (almost exclusively municipalities) represent, on average, between 1.4% (Guatemala) and 6.6% (Chile) of total tax revenues.

TABLE 6
ALLOCATION OF TAX REVENUES AMONG THE DIFFERENT LEVELS OF GOVERNMENT, 2011

	Central government and social security[a]	State government	Local government	Total	Central government and social security[a]	State government	Local government	Total
	(percentages of GDP)				*(percentages of total collected)*			
Federal countries								
Argentina	31.9	5.4	--	37.3	85.5	14.5	--	100.0
Brazil	25.8	8.6	1.9	36.3	71.1	23.8	5.2	100.0
Mexico	18.9	0.5	0.2	19.6	96.4	2.5	1.1	100.0
Venezuela (Bolivarian Republic of)	13.7	--	--	13.7	100.0	--	--	100.0
Unitary countries								
Bolivia (Plurinational State of)	26.0	--	--	26.0	100.0	--	--	100.0
Chile	19.5	--	1.4	20.8	93.4	--	6.6	100.0
Colombia[b]	16.5	0.9	2.2	19.6	84.3	4.7	11.0	100.0
Costa Rica	20.4	--	0.6	21.0	97.1	--	2.9	100.0
Ecuador	20.2	--	--	20.2	100.0	--	--	100.0
El Salvador	15.7	--	--	15.7	100.0	--	--	100.0
Guatemala	12.1	--	0.2	12.3	98.6	--	1.4	100.0
Honduras	17.5	--	--	17.5	100.0	--	--	100.0
Nicaragua	19.5	--	--	19.5	100.0	--	--	100.0
Panama	18.2	--	0.3	18.5	98.5	--	1.5	100.0
Paraguay	17.6	--	--	17.9	100.0	--	--	100.0
Peru	17.6	--	0.5	18.1	97.1	--	2.9	100.0
Dominican Republic	13.5	--	--	12.8	100.0	--	--	100.0
Uruguay	25.2	--	1.1	26.3	95.9	--	4.1	100.0

Source: Own elaboration on the basis of OECD/ECLAC/CIAT (2014).

Note: Figures exclude revenue from local governments in Argentina, Costa Rica (until 1997), Dominican Republic, Ecuador, El Salvador, Panama (until 1998 and 2010), Paraguay (until 2004), Peru (until 2004), Uruguay and Venezuela (Bolivarian Republic of) since data are not available.

[a] Income from contributions to social security were allocated to the sphere of the central government since, in general, the current pension systems are managed at national level and, even though there might be in some country of the region a system at the sub-national level (for example, in Argentina) the amount of resources involved is marginal and it is not available for the purposes of this work.

[b] Colombia is constitutionally a unitary country with a decentralized political structure.

The taxes that are most commonly allocated to subnational governments are property taxes, motor vehicle licenses, specific service taxes and certain municipal taxes, where the potential for income generation is relatively limited in comparison with the tax bases allocated to the central government, such as the VAT or the income tax.

In countries that record higher tax revenues at the subnational level, some general consumption taxes have become the main source of own tax revenue for these government entities in recent years, as is the case of Brazil.

In this country, sales taxes were adopted by all three levels of government, which presented difficulties in terms of inter-jurisdictional coordination. The federal government collects the industrialized products tax (IPI); the state governments have full tax authority on the goods and services circulation tax (ICMS), which is a general tax on all phases of goods and services that covers a much broader tax base than the IPI; and the municipal governments manage and collect the services tax (ISS), which taxes all services stipulated in the legislation that are performed within the geographical boundaries of the municipality. In Argentina, the main source of tax revenues for the provinces is the gross income tax. In Colombia, sales taxes on goods and services provide a large share of subnational financing, in particular the industry and trade tax (ICA) collected by the municipalities (Gómez Sabaíni and Jiménez, 2011a).

While the low level of own tax revenues represents a problem for decentralization, there does not appear to be much margin for redistributing tax authority given the quantity of expenditures that the intermediate and local governments have to finance. In addition to the limited potential for generating own resources, the subnational governments are not effectively exploiting the tax authority that is available to them, as evidenced by the meagre income from property taxes in the countries of Latin America.

3. Income from natural resource exploitation

A third factor in the diversity of financing sources available to the countries in the region is the share of fiscal revenues deriving from the exploitation of natural resources, which in some cases determines the resulting tax burden. In particular, this factor can have a strong influence on tax policy in these countries, especially around three central questions: the mechanism for appropriating the income generated by these economic activities, the effects of these additional public revenues on the domestic economy and the different options available to the State for using these resources to consolidate economic growth.

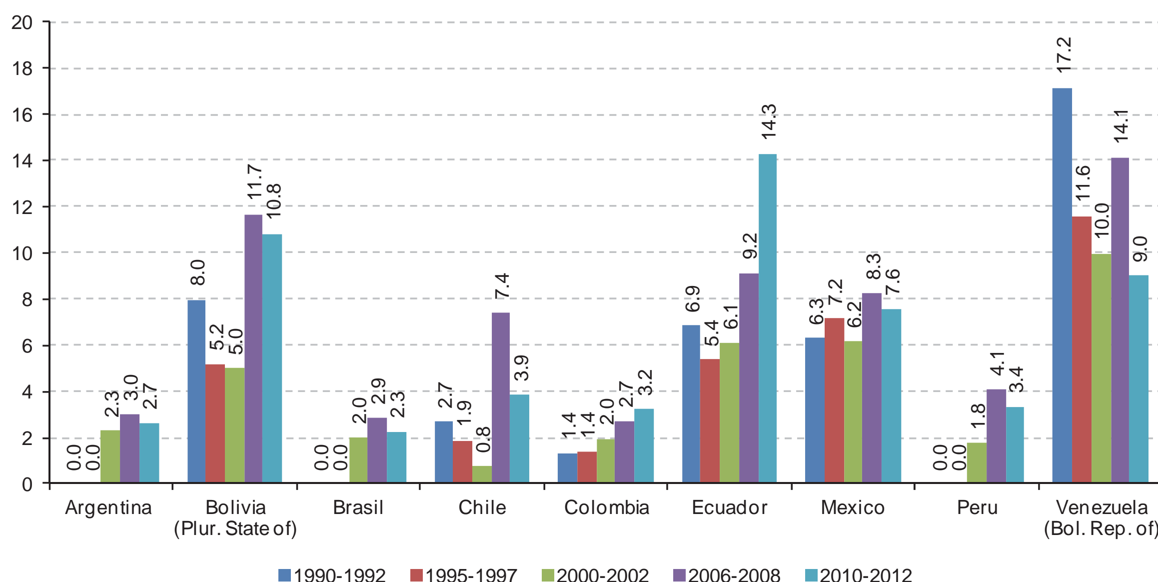
The boom in international demand for the region's commodity exports has been central to the improvement in the macroeconomic performance and fiscal position of commodity-exporting countries from 2003 onwards.

Additionally, the last boom period (2003-2010) saw an increase in the States' participation in the economic rents of the non-renewable natural resource sectors (minerals and hydrocarbons), as well as in their relative fiscal contribution. This contrasts with the performance of the preceding period (1990-2003) in these sectors. This trend can be interpreted as an improvement in the effectiveness of the current institutional frameworks for achieving the public appropriation of wealth deriving from extractive activities (Aquatella, 2012).

As shown in figure 2, resources deriving from the exploitation of non-renewable natural resources have increased in GDP terms over the last two decades in countries that specialize in these goods. The increase is especially significant in comparison with 2000-2002, when this type of fiscal revenue plummeted. Thereafter, international commodity prices rose steadily, and the commodity-exporting countries matched or exceeded their historical peaks for this type of revenue in 2006-2008. Finally, in the last three-year period (2010-2012), the countries under analysis continued to collect a considerable level of resources from this source —Ecuador, in particular, averaged 14.3% of GDP in the period— despite the reversal following the international crisis of 2008-2009.

Venezuela is the exception. Revenues from natural resources contracted sharply in the 1990s, even though the country continues to be one of the Latin American economies with the highest fiscal revenues deriving from the exploitation of natural resources, together with Ecuador, Bolivia (Plurinational State of) and Mexico (figure 2). Venezuela (Bolivarian Republic of) also has the highest degree of fiscal dependence on these resources in the region, with a relative share of around 40% of total revenues in the three-year period 2010–2012, albeit with a clear downward trend (the share was almost 80% in 1990-1992). According to ECLAC data, Bolivia (Plurinational State of) (32.9%), Ecuador (37.1%) and Mexico (33.4%) have also recorded a high and growing fiscal dependence on resources stemming from the exploitation of non-renewable natural resources in recent years. The situation is relatively more moderate in Chile (17.6%), Colombia (21.3%) and Peru (16.5%), and the share is even lower in countries with a very high total tax burden and more diversified tax structures, such as Argentina (10.9%) and Brazil (6.2%).

FIGURE 2
FISCAL REVENUES DERIVING FROM NON-RENEWABLE NATURAL RESOURCES
(Percentage of GDP)



Source: Own elaboration on the basis of ECLAC's data and official sources from the selected countries.

Note: The values presented correspond to public resources from different instruments of collection. For Bolivia (Plurinational State of) (General Government) they include taxes on hydrocarbons such as the Special Tax on Hydrocarbons (IEHD), VAT and Tax on Transactions, Direct Tax on Hydrocarbons (IDH) and royalties; for Chile (Central Government) values cover gross sales revenue from copper (CODELCO) and, since 1994, the specific tax on private mining; in Colombia (Central Government) values include revenue related to the state company Ecopetrol such as income tax, dividends to the nation, royalties and the contribution of hydrocarbons; in Ecuador (Non Financial Public Sector) values include export earnings and sales of by-products from PetroEcuador; for Mexico (Public Sector) figures consist of income from state-owned PEMEX in addition to those admitted by the Federal government under concepts of Rights and Exploitation, special tax on production and services of gasoline and diesel and the oil tax returns; in Peru (Central Government) the amounts collected by the income tax and Royalties in the mining and hydrocarbon exploitation are computed; for Venezuela (Bolivarian Republic of) (Central Government), the values shown cover both oil tax revenues (income tax and others) and oil non-tax revenues (royalties and dividends from Petroleum of Venezuela (Bolivarian Republic of) (PDVSA).

In countries with substantial non-renewable natural resource deposits (gas, oil, minerals), the most direct mechanism through which governments appropriate income from commodity exports and transform it into fiscal resources is participation in exploitation, through either public companies or shareholding (Jiménez and Tromben, 2006). These companies are usually subject to a special tax regime, which can consist in leasing or rental fees, additional taxes for the public companies (as in Chile) or special taxes on oil production (as in Mexico and Venezuela (Bolivarian Republic of)).[17] Since 2005, several countries in the region have introduced important legal reforms to ensure the public control of non-renewable natural resources, generally based on nationalization of the deposits or the company assets; this is the case in Argentina, Bolivia (Plurinational State of), Ecuador and Venezuela (Bolivarian Republic of) (ECLAC, 2013).

Other mechanisms of State appropriation include the use of royalties, which are usually production based and which ensure a minimum payment for the resources to both national and subnational governments (as in Bolivia (Plurinational State of)). Most countries apply the traditional income tax with differential rates, as well as other special taxes on companies dedicated to the exploitation of non-renewable resources. For example, Chile applies its first-category income tax (20%), an additional tax on profit remittances (35%), a special tax of 40% on earnings generated (only for

[17] These countries apply a tax on the difference between the domestic reference price and the international crude oil price.

public companies) and a specific tax on mining activity with progressive rates ranging from 0.5% to 14.0%. In addition, foreign sales of copper by CODELCO are subject to an Armed Forces tax of 10% on returns in foreign currency.[18]

The wide range of instruments used in the region raises a series of challenges for the identification of the share of total tax revenues that can be attributed to natural resources. Some tax measures explicitly take into account the exploitation of non-renewable resources as a tax base, which makes it easy to associate them with the resource sector even if they are not all classified as taxes. In some cases, the application of criteria to identify a tax can be particularly problematic. As mentioned earlier, the best example is hydrocarbon production rights in Mexico, where there is no general consensus on their classification as a tax.

In addition to these considerations, the accelerated growth of international commodity prices in the last decade led governments to strengthen taxation to appropriate greater resources. The main thrust of fiscal reforms in the exploitation of natural resources has involved changes in the region's tax systems and the introduction of new mechanisms to guarantee the appropriate capture of revenues. For example, Chile introduced a mining tax in 2005, which taxes income from natural resource exploitation. Venezuela increased its income tax rates on oil in 2005 and created a new tax on crude oil extraction. Peru introduced two new special mining taxes in 2011, both of which incorporate progressive rates on operating income (ECLAC, 2013).

The growing importance of tax and non-tax revenues deriving from natural resource exploitation can translate into an economic dependence for the respective States, with serious implications and risks for sustainability. There is an extensive literature on the macroeconomic management of extraordinary income flows from the exploitation of natural resources to avoid the negative effects on the exchange rate and the rest of the productive apparatus, the so-called Dutch Disease.

Two key questions should be considered when evaluating the fiscal revenues of these countries. (1) If the resources are non-renewable, what happens when the resources run out? (2) How should the government deal with the volatility of public revenues originating in the price cycles of exported commodities? The first question entails the problem of intergenerational equity, since the shortfall resulting from the reduction in non-tax revenues will affect future generations through lower levels of spending or higher taxes. With regard to the second question, price fluctuations have a significant impact on revenues and the solidity of the public finances, which makes it even more difficult to determine the appropriate tax structure for the country.

As Aquatella (2012) points out, the countries of the region have historically had difficulty translating boom periods for natural resource exports into long-term economic development. More recently, however, Latin America demonstrated the benefits of having the ability to implement countercyclical policies to avoid the impact of the international crisis, based on the management of fiscal savings captured during the price boom from 2003 to 2008. An important trend in this area is the establishment of stabilization funds using the surplus revenues from copper exports in the case of Chile and from oil rents in Colombia, Ecuador, Mexico and Venezuela.

The issues associated with abundant non-renewable natural resources must be analysed taking into account the effective use of fiscal resources that they allow. If the fiscal resources are managed prudently from a macroeconomic perspective (without exacerbating the volatility effects of commodity prices) and a microeconomic perspective (investing in human capital and infrastructure to increase the productivity of other sectors and offset possible negative Dutch Disease effects), then the natural wealth can feasibly be used to consolidate a long-term growth path.

These facts point out another important facet of the problem. It is usually argued that the presence of these resources generates positive effects on citizens' well-being, since they constitute an additional source of revenues that the State can use to improve the supply of public goods and services, bolster growth and improve equity. However, to the extent that the State has alternative sources of financing to

[18] ECLAC (2013) presents a detailed discussion of the main characteristics of the current fiscal regimes on this type of extractive activity.

the taxation of a broad base of taxpayers, it weakens the link between the citizenry and the State through empowerment and reciprocity (CAF, 2012). This can have a negative effect on the tax effort of governments, which might put off necessary tax reforms that are always politically costly.

Ossowski and Gonzales (2012) confirm that the ample availability of this type of fiscal revenue has a negative impact on other public revenues in the region's commodity-exporters, which display a lower relative yield of some taxes. Furthermore, Perry and Bustos (2012) find that fiscal revenues from oil and mining can transmit their high volatility through two channels: higher public spending during export booms (the income effect, which generally tends to prevail) or a discretional reduction in general taxes (the substitution effect). Automatic stabilizers would be lower and more volatile when oil and mining taxes are higher, although the substitution of these taxes with general taxes across the cycle can partially mitigate the volatility associated with these instruments. However, the Latin American countries that export non-renewable natural resources appear to behave the opposite of what the evidence indicates: we find that in the last decade, the income generated from general taxes grew in step with the revenues received from the exploitation of these resources in these countries.

4. Environmental tax policy: pioneering experiences in the region

Over the past few decades, there have been growing concerns at the international level about the seriousness of environmental problems and their consequences for the population and the world we live in.

Although there is a broad set of alternative instruments available for environmental policy (regulation, tradable pollution permits, cooperative mechanisms, etc.), most governments have opted for market-based mechanisms in recent years, especially environment-related taxation. According to Fullerton et al. (2008), this type of instrument has a series of relative advantages. For example, they are more effective than conventional direct regulation for minimizing the costs associated with the changes in consumption and production patterns that are promoted by environmental policies. The application of these instruments can also lead to dynamic efficiency gains, since the increased costs can foster private technological innovation that reduces the external impacts without affecting other economic variables.

Environmental taxes not only contribute to reducing the amount of pollution produced, but they also have the potential to generate additional tax revenues for the State. These resources can then be used to reduce distortionary or inefficient taxes in the system, such as taxes on wages or investment. Thus, several authors argue that environmental taxes can provide what has been called a double dividend —a cleaner environment and a more efficient tax system— to the extent that they reconfigure the total tax base to lower the share of capital and labor income and incorporate the consumption and production of polluting goods (Oates, 1995; Goulder, 1995).

On this premise, a number of developed countries began to implement environmental tax reforms in the mid-1990s, including cuts in direct taxes and a reduction in the fiscal burden on employment through a decrease in employers' social security contributions.[19] To offset the resulting loss of revenues, existing taxes were adapted to environmental criteria, new purely environmental taxes on "emissions" were introduced and adjustments were made to traditional direct taxes to eliminate incentives for environmentally damaging behaviour (Barde, 2005).

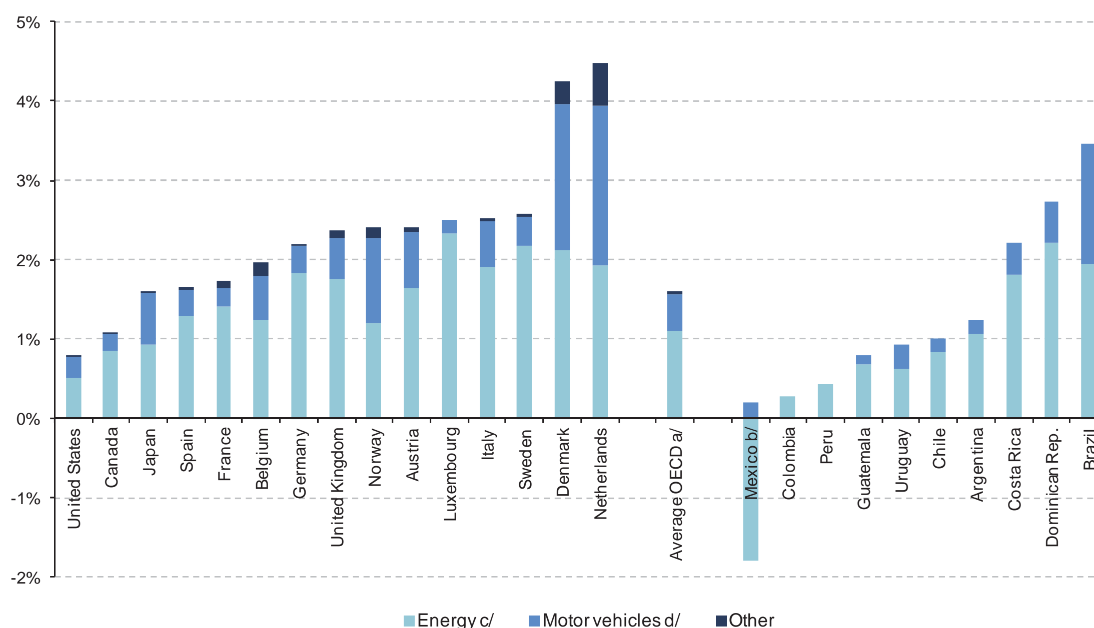
The different taxes with explicit environmental objectives are usually classified into three general categories, based on the tax base: energy taxes (on different forms of generation and production), motor vehicle taxes (on ownership and circulation) and other minor environmental taxes.

According to this criterion, fuel taxes are included in the first group (energy). Revenues from fuel taxes have been gradually decreasing in recent years, although they still represent more than two thirds of total revenues, on average, in the OECD countries. Motor vehicle taxes account for about a third of all environment-related tax revenues, on average, for the same group of countries. The contribution of other

[19] The northern European countries were the pioneers in this area: Sweden (1991), Norway (1992), Denmark (1994), Holland (1995) and Finland (1997).

environmental taxes (for example, on waste, air traffic, energy consumption or pesticides and fertilizers) is significant in some countries, such as Denmark and the Netherlands. Figure 3 shows the structure of environmental taxes for a small sample of OECD and Latin American countries in 2008.

FIGURE 3
ENVIRONMENTAL TAX STRUCTURE IN SELECTED OECD AND LATIN AMERICAN COUNTRIES, 2008
(Percentage of GDP)



Source: Own elaboration on the basis of OECD (2010), “Taxation, Innovation and the Environment”.

[a] Weighted average for member countries (includes Mexico and Chile).
[b] Negative collection of taxes on energy in Mexico corresponds to the IEPS (subsidy).
[c] Includes taxes on fuels.
[d] Does not include taxes on fuels.

Beyond the marked differences among countries, over the course of the last 20 years, the vast majority of revenues from environmental taxes (around 90% on average) have come almost exclusively from taxes on gasoline, diesel and motor vehicles in general, while the contribution of other environmental tax bases is very limited (OECD 2006; OECD 2010).

In recent years, in the face of worsening environmental conditions and increasing traffic congestion in the main urban centres in the region, some Latin American countries have implemented a series of tax measures oriented towards environmental protection. Following the lead of the developed countries, the majority of these incipient initiatives have focused on motor vehicles and the fuels used to operate them.

Ecuador stands out in this area. In 2011 the Law on Environmental Promotion and the Optimization of State Revenues was passed to reduce pollution emissions, change consumption patterns and promote the use of public transportation. The law created the vehicle emissions environmental tax (*Impuesto Ambiental a la Contaminación Vehicular*, or IACV), which taxes automobiles based on engine capacity and age of vehicle, and the tax on disposable plastic bottles, and it established progressive rates for the special consumption tax (*Impuesto a los Consumos Especiales*, or ICE) for hybrid and electric vehicles (vehicles with a sales value of US$ 35,000 or less are exempt from the VAT and the special consumption tax).

The Dominican Republic established a motor vehicles tax (new and used) based on CO^2 emissions per kilometre (with progressive rates from 1% to 3%), which is in addition to the existing 17%

tax for the first license plate or first registration of motor vehicles, established in 2005. Passenger transport vehicles and cargo trucks are exempt from the new tax.

Peru changed its selective consumption taxes on fuels to incorporate a criterion of proportionality for the degree of harmfulness of a given fuel, and eliminated the 10% tax on new automobile imports that use natural gas or gasoline as fuel. In Honduras, since 2011 used automobile imports are subject to a surcharge, called an eco-rate, which fluctuates between 5,000 and 10,000 Lempiras. In Mexico, the 2013 reform created a tax on the sale and import of fossil fuels according to carbon content and a tax on pesticides based on toxicity levels.

Over and above the debate on the existence and relevance of the so-called double dividend, the key issue lies in achieving a productive integration between tax reform policies and environmental policies to evaluate the final net effect on general welfare. In addition to capturing resources to finance public needs, modern tax policy requires the formulation of extra-fiscal objectives that complement the revenue objective. This is critical for transforming any given tax into a social or economic policy tool for addressing goals in the general interest, such as environmental protection. Consequently, the assessment of the level and structure of a given country's tax burden must consider the multiple objectives that tax policy can address in the pursuit of instruments and practical solutions that can be adjusted to the needs of each particular context.

Nevertheless, market-based environmental policy instruments, including environmental taxes, have their limitations. The geographic variability of environmental damage, the incompatibility of these measures with private decision-making and the adoption of responses that can be even more damaging for the environment may all be detrimental to the application of these instruments in specific cases. Another potential obstacle is the possible loss of competiveness, either through an increase in the costs of domestic tradable goods production in the international market or through the incentive to transfer activities in order to avoid paying these taxes (OECD, 2006).

Environmental taxes are generally applied to different means of transportation, fuels and the generation of different forms of energy, all of which represent a large share of the budget of lower-income households. Consequently, these taxes tend to set off a series of distributive effects that are often potentially regressive.

In Latin America, there are few studies that specifically analyse this issue, beyond considering the tax incidence of the system in general. However, the impact of selective fuel consumption taxes is usually quite different depending on whether the analysis considers (i) only the direct impact, that is, the payment of the selective fuel tax for the household vehicle; or (ii) both the direct and indirect impacts, that is, basically the payment of the selective fuel tax incorporated in the transportation of passengers and of the goods consumed by the household. The direct impact —in particular, the impact associated with the fuel for the household vehicle— is strongly progressive, while the indirect impact is regressive and usually more than offsets the direct impact.[20]

In this regard, Gómez Sabaíni and Morán (2013) examine the available empirical evidence and conclude that the generally regressive nature of fuel taxes is fairly contained and that their influence on the income distribution is minimal. Thus, the distributive aspects should not impede the adoption of policies aimed at combating the problems of environmental pollution, to the extent that the existing initial conditions are taken into account and compensatory measures are implemented simultaneously.

[20] This is the main reason for justifying the application of differentiated rates by type of fuel, with a lower relative tax rate applied to diesel (which is mainly used by heavy vehicles for passenger and cargo transport). The fact that diesel combustion produces more environmental pollution in the form of gas and particulate emissions highlights the ongoing conflict between policy objectives.

II. The behavior of the main taxes in the region

As mentioned above, the structural economic changes that were implemented in Latin America after the Second World War, albeit with different motivations and scope over time, have had deep consequences for the tax strategies of subsequent governments. The countries of the region basically adopted two general models for tax design, which had a crucial effect on the evolution of the tax structures over the past decades: the value added tax (VAT) was based on the model applied in Western Europe, while the income tax followed the North American model.

A. The value added tax: the main source of revenue

Brazil was the pioneer in introducing the VAT in 1967. The region then underwent a massive introduction of the VAT in the 1970s and 1980s, as a key element of the Washington Consensus to offset the revenue loss associated with the reduction in taxes on international trade. With relatively low efficiency costs, a VAT with standard rates between 10% and 20% (and a 0% tax rate on exports) was considered a reliable and relatively stable source of revenues, with few lags in collection. The countries anticipated a provision for a tax exemption on goods in the basic consumption basket to reduce the regressive effects of the tax on the income distribution (Cornia et al., 2011).

The aforementioned strengthening of VAT revenues at the regional level in recent decades reflects a process of perfecting and adjusting the use of the tax in the different tax systems. In particular, the VAT has been extended to include intermediate and final services, whereas it was initially applied almost exclusively to physical goods and some final services. In terms of rates, almost all the countries in the region have progressively increased their standard VAT rate, from an initial average of 11.1% to 15.1% in 2012 (table 7)[21]. This increase is in line with international tax trends: the majority of the OECD countries have recorded a proportionally similar increase, with a current average rate of almost 19%.

[21] Some countries in the region have increased their general VAT rates in the last 15 years, including Mexico in 2010 (from 15% to 16%), the Dominican Republic in 2012 (from 16% to 18%), Panama in 2010 (from 5% to 7%) and Venezuela in 2009 (from 9% to 12%). In contrast, Peru is the only country to have reduced the VAT (from 19% to 18% in 2012). For more details, see ECLAC (2014).

TABLE 7
EVOLUTION OF THE STANDARD VAT RATE IN LATIN AMERICA AND THE OECD
(Percentages)

Countries	Year of introduction	Initial rate	1992	2000	2012 [a]
Argentina	1975	16.0	18.0	21.0	21.0
Bolivia (Plurinational State of) [b]	1973	10.0	14.9	14.9	14.9
Brazil [c]	1967	15.0	20.5	20.5	20.5
Chile	1975	20.0	18.0	18.0	19.0
Colombia	1975	10.0	12.0	15.0	16.0
Costa Rica	1975	10.0	8.0	13.0	13.0
Ecuador	1970	10.0	10.0	12.0	12.0
El Salvador	1992	10.0	10.0	13.0	13.0
Guatemala	1983	7.0	7.0	10.0	12.0
Honduras	1976	3.0	7.0	12.0	12.0
Mexico	1980	10.0	10.0	15.0	16.0
Nicaragua	1975	6.0	10.0	15.0	15.0
Panama	1977	5.0	5.0	5.0	7.0
Paraguay	1993	10.0	…	10.0	10.0
Peru	1976	20.0	18.0	18.0	18.0
Dominican Republic	1983	6.0	6.0	8.0	18.0
Uruguay	1987	21.0	22.0	23.0	22.0
Venezuela (Bolivarian Republic of)	1993	10.0	…	15.5	12.0
Latin America		11.1	12.3	14.4	15.1
Germany	1968	11.0	14.0	16.0	19.0
Canada	1992	7.0	7.0	7.0	5.0
Denmark	1967	15.0	25.0	25.0	25.0
Spain	1986	12.0	13.0	16.0	21.0
France	1968	20.0	18.6	20.6	19.6
Italy	1973	12.0	19.0	20.0	21.0
Japan	1989	3.0	3.0	5.0	5.0
United Kingdom	1973	8.0	17.5	17.5	20.0
OECD-34		15.4	16.3	17.8	18.9

Source: ECLAC, CIAT, OECDStats and Shome (1992).

[a] It was verified that the general VAT rates were unchanged during 2013.
[b] Tax rate calculated separately.
[c] ICMS average effective rate, whose value varies from state to state as legislated in each one.

In the 1990s, the majority of the countries were successfully able to expand the tax base of the VAT to encompass intermediate and final services, as well as to eliminate numerous exemptions on specific goods that had granted over the years. According to ECLAC (2013), further advances on these issues were recorded in the 2007-2013 period, especially in Central America (El Salvador, Guatemala, Honduras and Nicaragua). In other cases where rates were increased, there was a trend towards a selective reduction of the tax base through the establishment of 0% rates or exempt categories (Colombia and Panama), except in the Dominican Republic where the two measures coincided in order to increase revenues.

As a result of these changes in the design of the tax and improvements in tax administration, average revenues from the VAT in Latin America increased substantially between 1990 and 2012, reaching levels on par with the OECD countries. Thus, in GDP terms, the revenues perceived by some countries in the region, such as Uruguay (8.8%), Argentina (8.8%), Bolivia (Plurinational State of) (8.7%), Brazil (8.4%) and Chile (8.0%), were higher in 2012 than in the United Kingdom (7.4%), Germany (7.3%), France (7.0%) and Italy (6.1%).[22] Even the Central American countries recorded VAT revenues of over 5% of GDP in 2012, bringing the regional average to 6.2% of GDP. At the same time, some countries in the region have very low revenues from the VAT, such as Panama and Mexico (3.2% and 3.6% of GDP en 2012, respectively), which highlights the heterogeneity discussed earlier and points to potential space for increasing tax revenues in these countries.

However, a closer look at the data reveals some important contrasts in the VAT in the two groups of countries. First, the share of the VAT in the tax structure is much higher in the Latin American countries than in the OECD. As explained above, this is mainly due to the very unequal relative weight of direct taxation in the tax systems of these countries. Thus, while the VAT typically accounts for 15%-25% of total revenues in the OECD countries, it brings in 30% and up to 40% of total tax revenues in several countries in Latin America (table 8).

Second, despite the upward trend in standard VAT rates, there are significant differences within the region. Argentina (21%), Brazil (20.5%),[23] Chile (19%) and Uruguay (22%) have the highest rates in Latin America (on par with the European members of the OECD, but below the Scandinavian countries, where general rates are around 24-25%). There is a large gap, however, between this group and the rest of the countries in the region, which generally have rates between 12% and 16%. Paraguay and Panama are even lower, at 10% and 7%, respectively.

Finally, the design of the VAT also varies among countries in terms of the taxable base. Beyond the application of a 0% rate on exports (respecting the destination principle) and the broad regional consensus to exempt education, cultural, financial and insurance services, several Latin American countries provide a range of additional VAT exemptions on food and medicines (whereas the developed countries usually apply a lower rate), as well as on services such as medical care, the supply of potable water and passenger transportation.

Colombia, Costa Rica, Ecuador, Nicaragua and Venezuela are among those with the most VAT exemptions. Mexico, however, is the paradigmatic example, where the application of a 0% rate on food, medicines and a long list of goods and services has resulted in a strong erosion of the tax base. This particular treatment of the VAT constitutes the main category of Mexico's tax revenue and would be equivalent to 1.13% of GDP in 2011/2012 according to the Secretariat of Finance and Public Credit (SHCP) or 2.5% of GDP according to Fuentes Castro et al. (2010).[24] In addition, the application of a 0% rate on food and medicines is ineffective as a redistributive mechanism. Studies show that low-income households end up receiving a smaller share of the implicit subsidy in a generalized exemption (SHCP, 2011).[25]

Even given the current level of general rates, actual VAT collection is below potential in several Latin American countries. This revenue gap is explained by two key factors that are analysed in more detail later in the paper: tax evasion and tax expenditures (or concessions). To approximate the magnitude of the foregone revenues from these two sources of tax obstruction, most studies use the VAT productivity ratio (also called the efficiency ratio), defined as the ratio between actual total revenues (as

[22] Source: *OECDStats*.

[23] The real average rate corresponds to the goods and services circulation tax (ICMS), which is administered by the state. The final rate varies from state to state, according to state legislation. (*Source: CEPALSTAT*).

[24] The very significant difference in the estimates is explained by the use of different data sources and calculation methods, as well as the definition of tax expenditures. The SHCP estimates of tax expenditures mainly draw on data from the 2008 National Household Income and Expenditure Survey (ENIGH 2008), together with tax statements and tax audit reports presented by taxpayers to the tax administration service (SAT), which are adjusted to reflect evasion for different categories of taxpayers. In contrast, Fuentes Castro et al. (2010) use National Accounts data (2003 base year) and estimate tax evasion (and tax expenditures as an intermediate result) for different tax categories using a final consumption model, which assumes an ex ante evasion rate of 0%.

[25] However, the recent tax reform of October 2013 made some progress towards the harmonization of the standard VAT rate in the border region from 11% to 16% (ECLAC, 2014).

a percentage of GDP) and the standard tax rate. This ratio provides an indication of the tax power of one point of the VAT, given by the size of the tax base and the degree of tax compliance.

A more consistent alternative for estimating VAT productivity is the so-called C-efficiency ratio, based on private consumption (Ebrill et al., 2001). Table 8 presents VAT revenue data alongside the two efficiency ratios for a sample of Latin American and OECD countries.

TABLE 8
VAT REVENUE AND EFFICIENCY IN LATIN AMERICA AND THE OECD, 2012

Countries	Collection		Productivity	Efficiency-C
	(percentages of GDP)	*(percentages of the total)*		
Argentina	8.7	23.3	0.41	0.72
Bolivia (Plurinational State of)	7.6	29.3	0.51	0.82
Brazil	8.5	23.5	0.42	0.69
Chile	8.0	38.4	0.42	0.71
Colombia	5.5	27.9	0.34	0.55
Costa Rica	5.0	23.6	0.38	0.56
Dominican Republic	4.0	29.7	0.22	0.25
Ecuador	6.4	31.8	0.54	0.90
El Salvador	7.0	45.0	0.54	0.55
Guatemala	5.3	43.2	0.44	0.50
Honduras	5.6	31.8	0.46	0.56
Mexico	3.8	19.1	0.23	0.25
Nicaragua	6.1	31.5	0.41	0.56
Panama	3.3	17.7	0.47	0.65
Paraguay	6.5	37.2	0.65	0.87
Peru	6.4	35.4	0.36	0.57
Uruguay	8.7	33.2	0.40	0.57
Venezuela (Bolivarian Republic of)	6.8	49.6	0.57	1.07
Latin America (18)	6.3	31.7	0.43	0.63
Germany	7.3	19.4	0.38	0.66
Canada	4.2	13.6	0.84	1.50
Denmark	9.9	20.7	0.40	0.81
Spain	5.4	16.6	0.26	0.45
France	7.0	15.4	0.36	0.62
Italy	6.1	13.7	0.29	0.53
Japan	2.7	13.8	0.54	0.22
United Kingdom	7.4	20.9	0.37	2.29
OECD (34)	6.6	19.2	0.35	0.89

Source: Own elaboration on the basis of OECD/ECLAC/CIAT (2014), OECDStats, CIAT and USAID (2011).

Based on total revenues, most of the countries in the region record VAT revenues between 0.34 (Colombia) and 0.65 (Paraguay) points of GDP for each point of the standard rate. When using private consumption as the tax base, the coefficients range from 0.50 (Guatemala) to 1.07 (Venezuela), with a

regional average of 0.62. The two outliers are Mexico (0.23 and 0.25, respectively) and the Dominican Republic (0.22 and 0.25). Although these two countries have a standard VAT rate around the regional average, they combine low revenue collection with a very high ratio of private consumption to GDP. As shown in table 8, the VAT productivity ratio is slightly lower, on average, in the OECD countries than in Latin America, but the C-efficiency ratio is higher. This comparison can be misleading, however, due to the different levels of private consumption as a share of GDP in the two regions.[26]

Gómez Sabaíni and others (2012) show that these results are around the averages of other world regions, especially developing regions. Moreover, an analysis of these ratios over time shows that VAT productivity has improved significantly in some of the countries, including Chile, Colombia, Ecuador, Peru and Uruguay.

The regional variability in this regard is quite substantial, which makes it difficult to extract general conclusions. However, an examination of each particular case should aim towards encouraging the countries that lag furthest behind (as a result of either the erosion of the tax base, as in Mexico, or the high level of VAT evasion, as in most of the Central American countries) to close the gap with the regional averages through the imitation and adaptation of the successful tax reforms and experiences in other Latin American countries.

In sum, the changes in the VAT to date, in terms of both the rate itself and the expansion of the potential tax base, have positioned this tax on a frontier where marginal increases in VAT revenues will largely depend on achieving further progress on tax administration, that is, reducing VAT evasion.

B. The structural imbalance of the income tax

The income tax was incorporated into Latin American tax systems much earlier than the VAT,[27] but it did not play a major role in revenues until the 1950s and 1960s, with the emergence of the redistributive approach to taxation and fiscal policy (Kaldor, 1962). According to Cornia et al. (2011), direct taxation came to represent a relative share of around 30% of total tax revenues in several Latin American countries, despite initial obstacles such as the predominantly rural and informal structure of the economies, their high income inequality and low institutional and administrative quality.

In the 1970s and 1980s, the neoliberal reforms displaced the income tax from the centre of tax and fiscal policy. In this period, the majority of the analysts and authorities in the region held the belief that high tax rates were not only unpopular, but also slowed economic activity and were ineffective in improving the distribution of income and wealth (Bird and Zolt, 2005).

This led governments to reduce both the level of individual income tax rates and the number of tax brackets. In contrast to the trend in the standard VAT rate, the average top marginal income tax rate fell from 49.5% to 29.1% between 1980 and 2000 and then continued to decline gradually to 27.7% in 2012.[28] As Cornia et al. (2011) point out, in some extreme cases the personal income tax was eliminated altogether (Uruguay in 1974 and Paraguay in 1992), while other countries adopted a flat rate (Bolivia (Plurinational State of) at 10%, which was later increased to 13%, and Colombia at 35%, which was changed to a sliding scale in 2008). Furthermore, the simplification of corporate income taxes favoured convergence between personal and corporate rates. The latter thus fell from a regional average of 43.9% in the 1980s to 28.6% to 2000, ending the period at 28.3% in 2012 (the current average should be slightly lower due to reforms introduced in Ecuador and Colombia in 2013).[29]

[26] Private consumption as a share of GDP was calculated on the basis of data from USAID (2011).

[27] According to the CIAT, income taxes were first established in Latin America in the 1920s, starting in Brazil (1923), Mexico (1924) and Colombia (1928).

[28] The average should rise slightly due to the increase in the top individual income tax rate in Mexico (from 30% to 35%), introduced in the tax reform of October 2013 (ECLAC, 2014).

[29] The income tax rate for legal entities was decreased from 23% to 22% in Ecuador and from 33% to 25% in Colombia (source: *CIATdata*).

The decline in corporate income tax rates in Latin America was in line with the international trend, and recent data show a similar magnitude as the developed countries. However —and this is one of the main weaknesses of personal income tax in the region— current top marginal rates in Latin American countries are in the range of 25% to 35%, on par with corporate top rates.[30] This is appreciably lower than the rates in the OECD (especially in the European countries), which in 2012 were 47.5% in Germany, 50% in the United Kingdom and even higher in Spain, Denmark and Sweden (including taxes levied by subnational governments).[31]

At the same time, the revenue effects of this downward trend in personal income tax rates were not offset by an expansion of the tax base. Rather, the current rates continued to be applied most strongly to labor income, without incorporating capital gains in the tax base. This combination of a reduction in rates, a weak tax base and high tax evasion and non-compliance is at the root of the small share of personal income taxes in total revenues.

Having stabilized the income tax level in recent years, governments have begun to make progress on tax collection as a result of reforms to the specific design. In the last two decades, with rare exceptions, the income level subject to the top marginal rate has been substantially reduced (see table 9), although it is still only applied to relatively few taxpayers who make, on average, nine times the country's per capita income.

Governments also eliminated a long list of personal exemptions and deductions that, far from providing benefits, represented huge losses in tax revenues. As a result, the average cut-off point for personal income tax exemptions fell to approximately 1.4 times per capita GDP (see table 9).[32] Nevertheless, as Barreix et al. (2012) show, the current tax-exempt income level is higher in Latin America than in other regions, especially the OECD, where the average is a little over 0.2 times per capita GDP.[33]

TABLE 9
INCOME LEVELS FOR THE APPLICATION OF MINIMUM AND MAXIMUM INCOME TAX RATES IN SELECTED LATIN AMERICAN COUNTRIES

(Times per capita GDP)

	Application of minimum rate of income tax (level of exemption)			Application of maximum marginal rate of the income tax		
	1985	2001	2010	1985	2001	2010
Argentina	0.8	1.4	0.3	21.4	16.5	3.7
Bolivia (Plurinational State of)	1.0	…	0.2	10.1	…	0.2
Brazil	0.3	1.5	1.1	10.1	3.1	2.7
Chile	0.2	0.1	1.0	2.8	1.2	11.2
Colombia	0.0	4.1	2.8	20.5	16.6	10.7
Costa Rica	1.2	0.8	1.9	1.4	3.7	2.9
Dominican Republic	1.1	2.3	1.8	413.5	5.8	3.8
Ecuador	0.4	2.4	2.2	29.2	8.3	22.3
El Salvador	…	1.2	0.4	171.7	11.0	3.4
Guatemala	0.9	5.0	1.6	356.0	22.5	14.4
Honduras	0.0	3.6	2.9	600.4	36.0	13.1

[30] The exceptions are Bolivia and Chile. Bolivia taxes individuals at a flat rate of 13%, while the Chilean tax system is based on a relatively low corporate rate of 20% (including individuals who engage in commercial or industrial activities) combined with a sliding scale from 5% to 40% for personal income tax.

[31] European Union (2012).

[32] In some cases, such as Argentina, this was also due to a growth of GDP in real terms, with no inflation adjustment to the nominal parameters governing the tax.

[33] Barreix et al. (2012) add that in between those who are totally exempt from the income tax and those who are subject to the top rate lie the bulk of the already scarce taxpayers, who are subject to intermediate rates. These tax rates are clearly lower in Latin America than in the average middle-income countries, which leaves a considerable margin for increasing tax revenues.

Table 9 (conclusion)

	Application of minimum rate of income tax (level of exemption)			Application of maximum marginal rate of the income tax		
	1985	2001	2010	1985	2001	2010
Mexico	0.7	0.1	0.5	21.3	44.0	3.4
Nicaragua	1.7	7.7	2.1	56.9	61.2	20.7
Panama	0.3	0.9	1.4	89.0	57.8	4.1
Peru	…	2.9	1.7	…	22.3	14.7
Uruguay	…	…	0.7	…	…	10.3
Venezuela (Bolivarian Republic of)	…	0.0	1.5	…	0.0	12.7
Latin America	0.7	2.3	1.4	128.9	20.7	9.1

Source: Own elaboration on the basis of Stotsky and WoldeMariam (2002) and Barreix et al. (2012).

Until recently, the typical income tax in Latin America was, at least in practice, "schedular" in that income earned from different sources (from wage labor, interest on deposits, stock dividends, etc.) would be taxed separately under a different schedule.[34] Several countries also had a long list of exemptions by income source, especially for capital income (Cetrángolo and Gómez Sabaíni, 2007). Consequently, a large share of personal income tax is generally shouldered by dependent wage workers, reducing the redistributive impact of the tax.

In recent years, however, some progress has been made in expanding the income tax base with the incorporation of dual systems for personal income tax. Adapting the model used in the Nordic countries,[35] Uruguay was the pioneer in the region when, in July 2007, it reintroduced the tax that had been repealed several decades earlier and began to apply separate taxes for labor income, with progressive rates from 10% to 25%, and capital income, with a proportional rate of 12%, except dividends which are taxed at 7% (Barreix and Roca, 2007). The reintroduction of the individual income tax in the Uruguayan tax system alone implied considerable improvements in terms of both revenue collection and tax incidence (Amarante et al., 2007).

Similarly, Peru has incorporated some elements of dual taxation. Since 2009, the country uses progressive rates (from 15% to 30%) on labor income, while capital income is taxed at a proportional rate of 6.25% (on 80% of taxable income), with the exception of dividends, which are taxed at 4.1%. Interest on personal savings and bank deposits is exempt since 2010.

After the international crisis of 2008, several Central American countries also approved tax reforms along the same lines, setting flat rates of between 10% and 15% on capital income that was previously tax exempt (with exceptions for non-residents), combined with higher rates on business earnings and progressive rates for labor income, in line with the Uruguayan version of the dual income tax (ICEFI, 2011). Table 10 presents summarizes the current rate structure for individual income taxes in Central America and the Dominican Republic, which have taken concrete steps towards the adoption of a dual tax system.

[34] This type of taxation undermines horizontal equity, since two taxpayers with the same total income could pay different income taxes depending on the breakdown by schedule and the applicable tax rates. It also undermines vertical equity, since a taxpayer who would pay a higher rate based on total income (where total income falls within a higher tax bracket) may be subject to a lower tax after the income is divided into the different schedules, such that the taxpayer ends up paying the same or less than an individual with lower total income.

[35] Strictly speaking, the Nordic dual tax applies a single proportional rate of around 30% to both corporate earnings and capital gains. Labor income is taxed at a progressive rate ranging from a minimum of 30% up to around 50%.

TABLE 10
INCOME TAX RATE STRUCTURE IN CENTRAL AMERICAN COUNTRIES

Countries	Number of taxable tranches	Labor income		Capital income			Capital gains	Rate on profits
		Minimum	Marginal maximum	Dividends	Interests	Royalties		
Costa Rica [a]	2	10%	15%	15%[b]	O.I. [c]	O.I.	Exempt[d]	30%[e]
Dominican Republic	3	15%	25%	10%	10%	29%	29%	29%[f]
El Salvador	3	10%	30%	10%	10%	10%	10%[g]	25%
Guatemala	2	5%	7%[h]	5%	10%	10%	10%	31%[i]
Honduras	3	15%	25%	10%	10%	10%	10%	25%
Nicaragua	5	10%	30%	10%	10%	O.I.	O.I.	30%
Panama	2	15%	25%	5% or 10%[j]	O.I.	O.I.	10%[k]	25%

Source: Own elaboration based on the countries' updated legislation. O.I.= Taxed as ordinary income with other types of income.

[a] It has a special regime for natural persons who develop lucrative activities, commercial or professional, with progressive rates ranging from 10% to 25% depending on income level.
[b] Rate of 5% over stock dividends or shares of listed companies on the Stock Exchange.
[c] Contemplates special definitive retention of 8% for the interests of securities of official stock exchanges or issued by financial institutions and cooperatives duly registered.
[d] If they come from habitual transactions or from sale of tangible assets they are taxed as ordinary income.
[e] Small businesses are taxed at reduced rates of 10% or 20% over its taxable income.
[f] The rate for corporate income tax will be reduced to 28% in 2014 and to 27% in 2015 (Law No. 253-12).
[g] Only the ones derived from unusual transactions exceeding one year term; the rest are taxed as ordinary income.
[h] Rate of 5% on taxable income up to 300 thousand quetzals; for amounts above it is imposed a fixed amount of 15 thousand quetzals and a rate of 7% over the surplus of 300 thousand quetzals.
[i] Rate applicable to the general regime on profits (quarterly paid and comparable to the current tax in other countries), which is reduced to 28% in 2013 and 25% since 2014. For lucrative activities (individuals and corporations) there is an optional simplified scheme with a rate of 5% over gross monthly income of up to 30 thousand quetzals and a fixed amount of 1,500 quetzals plus 6% (7% in 2014) over the excess of 30 thousand quetzals, with the tribute paid monthly.
[j] Whether they are natural persons residents or not residents, the rate is 10% when the source of income is Panamanian and 5% if the source of income is foreign (registered shares), and 20% for bearer shares.
[k] The rule varies as it relates to operations of real property, stocks or intangible assets.

Other countries in the region have recently made progress on expanding the individual income tax base to include some capital gains that were exempt in the past. When Uruguay repealed its exemption on personal income taxes and non-resident income taxes, the sale of bearer shares began to be taxed at the same rate as registered shares. Argentina eliminated its exemption on the sale of stocks and securities that are not traded on an exchange, which are now taxed at 15%, and applied a rate of 10% to the distribution of dividends. Mexico created a 10% tax on exchange-traded capital gains and the distribution of dividends.[36]

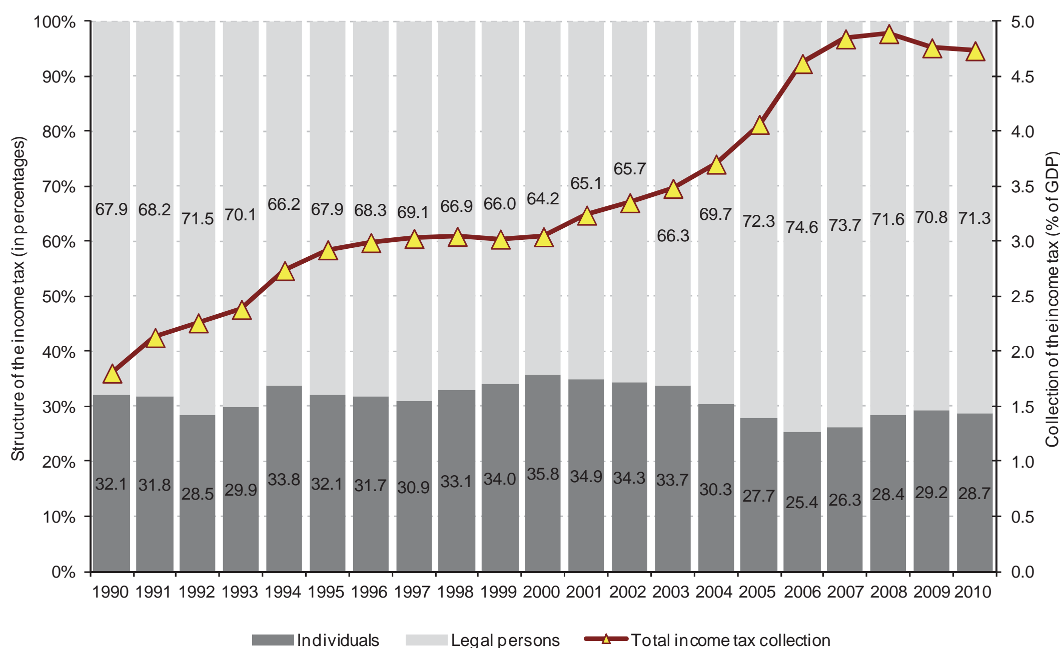
[36] Colombia recently introduced two minimum individual income taxes with the dual objective of raising the level of compliance and increasing the progressive distributive impact: namely, the alternative minimum tax (IMAN), which is a mandatory system for employees featuring progressive rates from 0% to 27% up to a certain taxable income amount, and the simple alternative minimum tax (IMAS), which is a simplified system aimed at employees and self-employed workers featuring rates between 0% and 8.17% that are applied over the same tax base as the IMAN.

Several countries have also achieved good results with corporate income taxes by limiting tax incentives that were granted in the framework of free trade zones and, at the same time, introducing minimum taxes on corporate income (which is addressed in the next section). Additionally, most of the reforms have included rules on international taxation (transfer prices, tax havens and non-resident income), and agreements on information exchange have been established between countries as a way to fight tax evasion.

In recent years, a relatively innovative approach to the taxation of corporate income involves an emerging trend to use this tax as a tool for promoting formal employment, by eliminating or reducing payroll taxes and replacing the foregone resources with taxes on fixed assets. This mechanism contributes to redistributing the tax burden away from companies in sectors that use more formal employment and transferring it to firms that are more capital intensive, in particular in the mining sector. For example, the 2012 tax reform in Colombia adopted measures that included a reduction in payroll taxes (from 29.5% to 16.0%), which was offset by the creation of the Business Contribution for Equity (*Contribución Empresarial para la Equidad*, or CREE), which assesses a 9% tax on business profits and excludes deductions for fixed assets (ECLAC, 2013).[37]

All these factors have contributed to increasing income tax revenues, especially after 2002, which are now the second-largest source of revenues in Latin American tax structures. Despite the reforms, however, over the years the structure of income tax revenues has remained strongly biased towards businesses over individuals. With a few exceptions such as Mexico, El Salvador and Uruguay, where tax revenues are more evenly divided among the two categories, most Latin American countries collect over two thirds of their income tax revenues from businesses, with a regional ratio of about 70:30, on average (see figure 4).

FIGURE 4
THE TAX BURDEN AND THE RELATIVE INCOME TAX STRUCTURE IN LATIN AMERICA: AVERAGE OF 17 COUNTRIES (EXCLUDING THE BOLIVARIAN REPUBLIC OF VENEZUELA), 1990 TO 2010



Source: Author's elaboration based on data from BID-CIAT (2012); "Carga fiscal ajustada de América Latina y el Caribe. Base de datos".

---

[37] The CREE rate will decrease to 8% in 2015. The 2012 reform also included a reduction in the general individual income tax rate from 33% to 25%.

This imbalance in the income tax structure has serious implications for the income distribution. Under reasonable assumptions about market power and structures, the income tax paid by businesses is less progressive than the personal income tax due to the possibility that the tax will be passed through to prices. Nevertheless, the higher relative share of corporate taxes has been almost constant, on average, over the last two decades (fluctuating between 65% and 75% of tax revenues), independent of the reforms to individual income taxes (Gómez Sabaíni et al., 2012).

Consequently, the weak individual income tax is perhaps the most important and problematic difference between the tax systems in Latin America versus in developed countries. In absolute terms, the average level of revenues from corporate income taxes in 2006-2010 was similar in both regions, at around 3.4% of GDP for Latin America (17 countries, excluding Venezuela) and 2.9% of GDP for the OECD countries.[38] In contrast, revenues from the personal income tax averaged 1.4% of GDP in Latin America in 2010, which is six times lower than the average for the sample of 34 OECD countries in the same year (8.4% of GDP). Table 11 shows the income tax revenue structure for the countries in the region, together with their efficiency ratios, which are clearly quite low.

TABLE 11
INCOME TAX REVENUE STRUCTURE AND EFFICIENCY RATIOS IN LATIN AMERICA, 2010

Countries	Collection (percentages of GDP)			Productivity (coefficient)	
	Individuals	Corporations	Total	Individuals	Corporations
Argentina	1.7	3.7	5.3	0.05	0.10
Bolivia (Plurinational State of)	0.2	3.4	3.6	0.01	0.14
Brazil	2.4	3.7	6.1	0.11	0.15
Chile	1.4	6.3	7.7	0.04	0.37
Colombia	0.2	4.6	4.8	0.01	0.14
Costa Rica	1.3	2.7	4.0	0.10	0.09
Dominican Republic	0.9	2.1	2.9	0.04	0.08
Ecuador	0.6	3.5	4.1	0.02	0.14
El Salvador	2.2	2.4	4.5	0.08	0.09
Guatemala	0.2	2.9	3.1	0.01	0.10
Honduras	1.2	3.5	4.7	0.05	0.14
Mexico	2.6	2.5	5.1	0.10	0.08
Nicaragua	2.1	4.0	6.1	0.07	0.13
Panama	1.6	3.3	4.9	0.07	0.13
Paraguay	-	2.6	2.6	-	0.26
Peru	1.9	4.0	5.8	0.07	0.13
Uruguay	2.6	2.6	5.2	0.11	0.10
Venezuela (Bolivarian Republic of)	n.d.	n.d.	3.6	n.d.	n.d.
Latin America-18	1.4	3.4	4.8	0.06	0.14
OECD-34	8.4	2.9	11.3	0.20	0.12

Source: Author's elaboration based on data from IADB and CIAT (2012)

Note: In Paraguay the income tax on individuals was not yet applied in 2010 and in Venezuela data about the structure of tax revenue was not available.

[38] These figures reflect that fact that the financial crisis cut into business profits in the developed world during this period, while the commodity price boom was an extraordinary source of income for many Latin American firms.

Not only are the top marginal rates of the income tax considerably higher in the developed countries, but the share of personal and business taxes in their revenue structure is practically the opposite of Latin America. The average ratio for the OECD is also approximately 70:30, but with personal income taxes accounting for the larger share (especially in the Western European countries).

With regard to tax productivity (which is calculated similarly to the VAT over GDP), Chile and Paraguay stand out in table 11 for their high corporate tax productivity ratios, especially given their particularly low tax rates (20% and 10%, respectively).[39] In general, most of the countries collect between 1.0% and 1.5% of GDP for each point of the legal tax rate, which is comparable to the OECD average for corporate tax productivity.

For the personal income tax, the efficiency calculation is more complex.[40] In general, the Latin American countries with the highest tax revenues (such as Brazil, El Salvador, Mexico and Uruguay) also record the highest tax productivity, at around 0.1% of GDP for each average rate point. The tax yield is much lower in other countries, however, in strong contrast with the average value calculated for the sample of 34 OECD countries (0.20).

Thus, as Gómez Sabaíni et al. (2012) show, income tax efficiency ratios are far lower in Latin America than in the developed countries —and even farther below the levels recorded in South-east Asia or the Middle East— especially in terms of the individual income tax. This contrasts sharply with the region's VAT efficiency. In this area, there is still a long road ahead for improving this tax, whether by expanding the tax base or substantially improving taxpayer compliance. Latin American countries need to redirect their efforts towards achieving these objectives.

C. The chronic weakness of the wealth tax: is there hope?

It is well known that wealth taxes (and on all kinds of property) account for a very small relative share of tax revenues in Latin American countries, to the point of being practically ignored as an alternative in the debates on tools for improving the distributive impact of the region's tax systems.

In recent years, however, the direct taxation of assets has attracted growing interest among public officials and academics in both developed and developing countries. In addition to presenting a series of advantages in terms of efficiency and equity, these taxes have been recognized as a viable tool for generating a relatively stable flow of tax revenues, with low costs in terms of compliance and tax administration and few distortionary effects on employment or GDP growth. As noted in a recent report on taxation in Europe, to the extent that cadastral values are duly updated, this type of tax has some potential as a price stabilization tool in the real estate market. This is highly relevant given the drastic consequences of the 2008-09 financial crisis, which originated in a speculative bubble in the real estate market and the corresponding mortgages (European Union, 2012).

As pointed out by De Cesare and Lazo Marín (2008), this type of taxation encompasses a wide range of taxes.[41] In addition to recurrent taxes on the ownership or possession of immovable property, other widely used wealth taxes in Latin America include gift taxes and motor vehicle taxes, and some countries have established a recurrent tax on net wealth. A few countries have incorporated taxes on financial and capital transactions and movements in the last decade; these are analysed in a later section of this report as an example of unconventional taxation in the region.

[39] The calculation is based on data and rates for 2010 (17%).

[40] The efficiency of the personal income tax provides a homogeneous measure of how the tax functions in different countries, on considering jointly the current tax rates, the minimum income threshold subject to the tax and the actual revenues generated from the tax based on the above parameters. The calculation is based on the amount of revenues collected as a percentage of GDP, divided by the weighted average of the tax, which is given by weighting the top and bottom marginal rates on taxable income (source: USAID, 2011).

[41] Strictly speaking, the tax classification used by the international organizations (OECD, IMF, World Bank) identify six categories of wealth taxes: (1) recurrent taxes on immovable property; (2) recurrent taxes on net wealth; (3) estate, inheritance or gift taxes; (4) taxes on financial and capital transactions; (5) other recurrent property taxes; and (6) other non-recurrent property taxes, including taxes for local improvements.

Table 12 presents revenue data for 2011, with a breakdown of the different types of wealth taxes following the international classification. As the table shows, the average revenues obtained from this source by the 18 Latin American countries was 0.85% of GDP, which is less than half the average for the sample of 34 OECD countries (1.79% of GDP). However, the gap between the two groups of countries hides two important characteristics of these taxes.

TABLE 12
REVENUE STRUCTURE OF TAXES ON PROPERTY IN LATIN AMERICA AND THE OECD, 2011
(Percentage of GDP)

Countries	Real estate	Net wealth	Inheritances and donations	Financial and capital transactions [a]	Others on property	Total taxes on property
Argentina	0.32	0.33	-	2.47	-	3.12
Bolivia (Plurinational State of)	-	-	0.01	1.90	-	1.91
Brazil	0.48	-	0.07	0.95	0.58	2.08
Chile	0.60	-	0.03	0.22	-	0.85
Colombia	0.60	0.68	-	0.82	-	2.09
Costa Rica	0.24	-	-	0.09	0.01	0.34
Dominican Republic	0.25	-	0.01	0.39	0.07	0.72
Ecuador	-	-	-	-	-	-
El Salvador	-	-	-	0.07	-	0.07
Guatemala	0.17	-	-	0.00	-	0.17
Honduras	-	-	-	-	0.09	0.09
Mexico	0.20	-	-	0.09	-	0.29
Nicaragua	-	-	-	-	-	-
Panama	0.35	-	-	0.12	0.27	0.73
Paraguay (2010)	0.27	-	-	-	0.02	0.29
Peru	0.18	-	-	0.21	-	0.39
Uruguay	0.77	1.12	-	0.17	0.05	2.11
Venezuela (Bolivarian Republic of)	-	-	0.02	-	-	0.02
Latin America (18)	0.25	0.12	0.01	0.42	0.06	0.85
Germany	0.45	0.02	0.16	0.24	-	0.88
Canada	2.88	0.06	-	0.17	0.21	3.32
Denmark	1.39	-	0.26	0.29	-	1.94
Spain	0.95	0.01	0.21	0.61	0.16	1.93
France	2.50	0.21	0.43	0.60	-	3.74
Italy	0.62	0.32	0.03	1.06	0.20	2.23
Japan	2.16	-	0.31	0.29	-	2.77
Netherlands	0.71	0.00	0.26	0.32	-	1.29
United Kingdom	3.38	-	0.19	0.58	-	4.16
United States	2.88	-	0.09	-	-	2.97
OECD (34)	1.07	0.17	0.12	0.41	0.04	1.79

Source: Author's elaboration based on data from OECDStats (including countries in Latin America).

[a] Under this category, the OECD also includes taxes on stamps and currency transactions.

First, the composition of revenues deriving from this type of taxes differs considerably between the two regions. In Latin America, almost half of average total revenues derive from taxes on financial

and capital transactions (including, in recent years, a tax on financial operations, which is analysed in the next section) and a quarter from recurrent taxes on immovable property. The other categories together account for the remainder with the largest share coming from taxes on net wealth (although they are applied in only three Latin American countries[42]). In contrast, the main wealth taxes in the OECD are the recurrent ones on immovable property, followed first by taxes on financial transactions and distantly by real estate, inheritance and gift taxes (which are widely used) and net wealth taxes (assets).

Second, in both Latin America and the OECD, the differences among countries are very large, which must be taken into account in the analysis. This is reflected in both total revenues and in each category of wealth taxes applied. Argentina leads the Latin American region in the use of financial and capital transaction taxes, while Spain and Italy have the highest shares in the OECD. The OECD countries display a much wider variation than Latin America (see table 12), although generally at a much higher level in terms of revenues generated.

Despite the diversity of these taxes, the present paper will focus on the recurrent tax on immovable property, which is known locally as a real estate tax (*impuesto immobiliario*) or a land tax (*impuesto predial*). The financial operations tax, which generates significant revenues in some countries in the region, has substantial differences in terms of its economic effects, so it is analysed separately below.[43] The other taxes mentioned above generate very little tax revenue. Moreover, taxes on property are essential for complementing the distributive effects of the personal income tax, given its structural weakness in the region's tax systems described earlier.

The (immovable) property tax is recognized at the international level as the most important source of own revenues for subnational governments, and experts generally agree on the advantages it offers in this regard. In theory, even given the imperfections of local tax systems, this tax has great potential to generate considerable revenues, compliance can be relatively high where adequate sanctions are applied, and the tax base does not diminish over time. It also creates fewer distortions on private economic decisions than other alternatives, and given that it allows a differentiated treatment of taxpayers with different economic situations, the fiscal burden generally falls on middle- and high-income families, with a progressive impact on the income distribution. This is very relevant in Latin America, where the high concentration of wealth —mainly land— tends to exacerbate the income concentration, especially in the developing countries.

In the region, the property tax is the most commonly accepted source of tax revenues for the lower levels of government. As Bahl and Martínez-Vázquez (2007) indicate, the developing countries might not use the property tax as intensively as the OECD countries, but they often rely on it more heavily to finance local government expenditures. In some countries, such as Chile, Bolivia (Plurinational State of) and Peru, this tax provides more than half of subnational own revenues (Gómez Sabaíni and Jiménez, 2011a).

In addition, this particular tax typically take the form of annual payments made by the owner, where the amount of the payment is tied to some measure of the economic value of the property subject to the tax, which is periodically reassessed according to an adjustment index. However, Martínez-Vázquez and Sepúlveda (2011) find significant differences in the institutional arrangements associated with this tax, which generally affect its performance.

Most Latin American countries allocate property tax jurisdiction to the local or municipal government, but there are exceptions where the tax continues to be under the authority of the central government (Dominican Republic) or where some tax authority is still held by either the central government (for example, Brazil for rural taxes, Guatemala and Panama) or the provincial government (Argentina). In most cases, the municipal governments are also granted the power to change tax rates, sometimes within legislated limits, but here too there are exceptions. For example, Chile does not

[42] Some countries in the region also use net assets to apply minimum income taxes, which is another example of unconventional taxation.

[43] Cetrángolo and Gómez Sabaíni (2007) classify it as a special selective tax, applied to a specific activity that consists in the use of bank checks.

delegate this authority to the municipalities, and in Mexico and Argentina the states or provinces share this authority with the national authorities.

In general, the central governments (the provinces in the case of Argentina) are most frequently responsible for updating the cadastre, although it is a municipal function in Costa Rica, Honduras and Mexico. The responsibility for billing and collections is sometimes allocated exclusively to either the central or municipal government and sometimes shared by different levels of government.

In sum, the revenue yield of these taxes is limited in all the Latin American countries that apply it, which is explained by a combination of factors that limit their ability to function properly as a source of subnational revenues.[44]

The low operational capacity and inefficient tax administration of local governments in Latin America play a central role. In many cases, the billing and collections of property taxes is affected by the low coverage ratio of the property registry, the high levels of delinquency and the significant undervaluation of properties due to the systematic lack of an adequate reassessment of cadastral values. The high tax delinquency has several causes, including the lack of information and diffusion to make payments, the lack of payment facilities, perceptions of low risk for those who do not comply with their tax obligations and the scarce information and transparency in the use of the resources.

Another obstacle to wealth taxation in general and, specifically, to apply efficient property taxes, is their high visibility. In more than a few cases, the municipalities must have the legal authorization of the state or provincial congress to modify the cadastral value of land and the tax value of immovable property, but the congress does not have an incentive to increase the land valuation tables because citizens perceive that the increases are not justified, especially in capital cities, which makes these political decisions very unpopular. The high visibility of the tax generates strong political pressure and often leads to the concession of tax benefits, such as exemptions, preferential tax treatment and amnesty, as well as the reduction of tax rates or the maintenance of asset undervaluation, all of which contribute to eroding the tax base and reducing progressivity and the final redistributive impact.

Finally, all these factors affecting property taxation are exacerbated by the insufficient decentralization of the tax systems. As shown by Gómez Sabaíni and Jiménez (2011a), this is the case in the majority of the countries in the region, where the financing of the lower levels of government depends crucially on intergovernmental transfers from the central government, which generally act as a disincentive for strengthening sources of own revenues and improving subnational tax administration.

D. Unconventional roads to strengthening tax revenues

One of the characteristics of Latin American tax policy has been to try to overcome the deficiencies in the level of the tax burden through the creation of fairly unconventional taxes that can provide additional tax revenues to finance growing public spending. As governments have prioritized the revenue and administrative objectives, the impact on the efficiency and equity of the tax system has been minimized or considered minor in the majority of the cases in which they were applied. That is, governments chose the “easy way out” on tax issues without sufficiently considering the economic costs of these taxes.

These taxes do have some advantages. In all cases, the tax administration is simpler than traditional taxation, with fewer possibilities for evasion or avoidance. Moreover, some of the taxes considered in this section have proven to be capable of generating a significant amount of revenues in the short term.

Nonetheless, all these unconventional tax mechanisms are open to a number of objections, one of which has to do with their negative impact on the allocation of resources. These are clearly not the only distortionary taxes, to the extent that any type of taxation (other than a poll tax) has some effect on

[44] Martínez-Vázquez and Sepúlveda (2011) use econometric analysis to explore the main determinants of the low yields on these taxes in Latin American countries.

private economic decisions. Rather, the impact of these taxes is greater than the effect of more traditional forms of taxation, which have proven difficult to administer under the conditions prevailing in the region. The unconventional taxes also have different distributive implications, which must be taken into account during implementation.

Some of the taxes applied in Latin America have sought to tax gross business income or assets, but financial transaction taxes are also commonly applied to debits and/or credits to bank accounts and accounts with other financial institutions.

1. Taxes on financial transactions

In the case of financial transaction taxes, the administrative ease derives from the possibility of its being implemented very quickly. Since it is withheld by the financial intermediaries, it requires little advance preparation and no cooperation from the tax payer. In addition, the introduction of the tax could incorporate information on the taxpayers, which could facilitate the administration of other types of taxes.

In the region, the evidence on this type of taxation is relatively recent and centres on bank transactions. Although this taxation has been implemented in times of crisis, on a temporary basis to address an urgent need to increase fiscal revenues, it is currently included in a number of tax systems as a permanent item.

The financial transactions tax, which has different names in different areas, has grown substantially at the international level in the last two decades, especially in developing countries. Whereas only one country in the region used this tax in the late 1990s, by 2005 there were eight (Coelho, 2009). In most of those countries, the taxes remain in force (six countries in 2012). The most important examples are Argentina, Bolivia (Plurinational State of), Colombia and Peru.

According to González (2009), financial transaction taxes in the region can be divided into two groups: (i) a tax on debit transactions (Colombia, the Dominican Republic and Venezuela); and (ii) a tax on both debits and credits to checking and other transaction accounts in the financial system (Argentina, Bolivia (Plurinational State of), Brazil and Peru). To hinder evasive tactics, Argentina, Brazil, Peru and Venezuela (Bolivarian Republic of) also tax the movement of funds through organized payment systems that operate outside of financial institutions.

There are two main arguments for using this tax as a source of revenue: (i) it can be introduced in a relatively short period of time, since it is based on a simple withholding operation by financial intermediaries and requires little preparatory work and no cooperation by the taxpayer; and (ii) a small tax rate can generate substantial revenues, especially in countries with an extensive banking sector that reaches a large share of the population, since bank debits are typically a multiple of GDP. The revenue generation function works best if the rate is kept low and the tax is temporary.

Table 13 shows that in Argentina, this type of tax (*Impuesto a los Débitos y Créditos en Cuenta Corriente*), with a rate of 0.6%, has achieved good results generating revenues of around 2% of GDP in recent years. In 2012 revenues from this source accounted for over 5% of the country's total tax burden. In Colombia, the financial transactions tax (*Gravamen a los Movimientos Financieros*, or GMF) also holds an important position in the current tax structure, contributing on the order of 0.83% of GDP and 4.24% of total revenues in 2010. While the tax is currently still in effect with a rate of 0.4% on debits, Law 1430 of 2010 established that the rate would be progressively reduced starting in 2014 and completely eliminated in 2018.

In both cases, revenues from these taxes have not paralleled the strong growth of the national tax burden, which can be interpreted as a loss in revenue from the tax. This could be due to the growing trend in the use of electronic means of payment (including debit and credit cards) instead of checks, which have been losing share as a payment means in financial operations.

The other countries that have implemented these taxes have not had such satisfactory results, at least in terms of revenues. In 2012, tax revenues from this source in countries such as Bolivia

(Plurinational State of), Honduras, Peru[45] and the Dominican Republic barely approached 0.2% of GDP and were under 2% of total revenues (table 13). In all these countries, however, the tax has a very high productivity ratio given the very low rates applied.

TABLE 13
RATES, REVENUES AND EFFICIENCY OF FINANCIAL TRANSACTION TAXES IN LATIN AMERICA

Countries	Aliquot and tax base	Collection		Productivity (without general rate)
		Percentage of GDP	Percentage of total [a]	
Argentina	0.60%/debits and credits	2.03	5.44	1.69
Bolivia (Plurinational State of)	0.15%/debits and credits	0.21	0.81	0.70
Colombia	0.40%/debits	0.83	4.24	2.08
Honduras	0.20%/debits	0.18	1.03	0.90
Peru	0.005%/debits and credits	0.02	0.11	2.00
Dominican Republic	0.15%/debits	0.20	1.48	1.33

Source: Author's elaboration based on Pecho Trigueros (2013).

[a] According to data of total tax burden presented in this document (OECD/ECLAC/CIAT, 2014).

Brazil and Venezuela (Bolivarian Republic of) also had highly productive financial transaction taxes, at least through 2007. As described by Coelho (2009), Brazil repealed its temporary levy on financial transactions (*Contribuição Provisória sobre Movimentação ou Transmissão de Valores e de Créditos e Direitos de Natureza Financeira*, or CPMF) on 1 January 2008, after generating revenues of 1.4% of GDP in the previous year (5.8% of total tax revenues).[46] The financial transactions tax replaced the bank debit tax (in effect since 2002) and was only in effect in 2007 and 2008. The associated tax revenues in 2008 were equivalent to 0.9% of GDP and almost 7% of the total tax burden.[47]

With regard to the advantages of this type of tax, Coelho et al. (2001) suggest that taxes on financial operations are usually able to indirectly capture income that eludes the traditional tax system, such as funds generated through illegal activities. They also have lower collection costs than several other taxes. The fact that banks are in charge of withholding the tax, that there are few banks in the sector and that they have an automated system for recording all transactions contribute to making these taxes simplified, transparent and easy to collect.

Nevertheless, financial transaction taxes have a negative impact on economic efficiency through two channels. On the production side, they promote vertical integration (intra-firm transactions to avoid paying the tax) and affect international competitiveness by increasing the cost of exports. On the consumption side, they increase the relative price of goods with multiple production phases or that require a faster turnover of financial resources. These taxes can also be seen as a tax on liquidity and financial intermediation; as such, they reduce the economy's dynamism. Finally, by slowing the degree of bank penetration in the economy, these taxes act as a negative incentive for formalization and, therefore, affect the revenue productivity of the rest of the taxes; this effect is particularly important in the context of tax reforms.

[45] Peru has gradually reduced the rate of its financial transactions tax, which was introduced in 2004, from an initial rate of 0.15% to 0.005% on debits and credits.

[46] Brazil applied a rate of 0.38% on recorded debits throughout the period in which the tax was in force (except for some temporary changes in 2000-2001).

[47] After going through a number of legal changes, the rate was 1.5% on bank debits in the last year the tax was in effect (2008).

The tax incidence can be broken down into two types of impact. First, there is a direct effect to the extent that people in the lower-income brackets do not have access to the banking system, so they are not immediately covered by the tax (a progressive impact). Second, there are secondary (or indirect) effects stemming from the grossing up of goods prices in affected sectors. This impact is regressive because the food sector usually incurs a large number of transactions. Another regressive effect derives from tax avoidance by the upper strata of the income distribution through the use of offshore accounts.

In a recent report, Pecho Trigueros (2013) reviews the Latin American experience in the application of these taxes in 1990-2012. He highlights a number of stylized facts on tax productivity, the impact on financial intermediation and payment systems, the tax incidence and the costs of administration and compliance.

In contrast to the related literature, the mentioned author holds that these instruments are not as harmful as portrayed, especially in the short term. The data show that the revenues generated, although limited and generally decreasing over time, have contributed to the recovery of tax revenues during times of fiscal crisis and even exceeded the proceeds from the personal income tax in the countries analysed. The available data further suggest that the impact on lower-income groups is usually insignificant, as the tax mostly affects people in higher income brackets, who have a more inelastic demand and carry out many financial transactions. Finally, in addition to the tax's easy administration, it opens the door for the potential use of the associated bank information in tax enforcement, in particular of the VAT and the income tax.

2. Minimum or alternative taxes to the income tax

The arguments in favour of replacing the income tax with an alternative minimum tax are based on the weakness of tax design and administration, the tax formalization of small and medium-sized enterprises (SMEs) and the direct and indirect costs of tax collection and taxpayer compliance. Many countries resort to the adoption of taxes that act as a lower bound for the income tax, based on the value of a company's assets or its total gross sales or gross income.

Stotsky (1995) points out that a minimum tax aims to prevent businesses or individuals that earn an income from regularly avoiding paying the corresponding income tax. This argument explains why developing countries are more likely to implement simplified taxes with low collection costs, such as minimum or presumptive taxes, as a remedy to the insufficient tax administration capacity in the region.

Gómez Sabaíni and Jiménez (2011b) explore the application of minimum taxes in the region in depth (table 14). Argentina applies a minimum tax on the value of gross assets, which is an alternative measure to business earnings under the assumption of capital mobility but still protects revenues in an inflationary environment. Costa Rica opted for taxing companies' fixed assets. Colombia, Ecuador, Panama and Uruguay all use net equity or assets, albeit with tax rate levels. Guatemala applies the solidarity tax, which assesses a 1% tax on 25% of either net assets or gross income, whichever is greater. From 2008 through October 2013 (it was repealed in the recent tax reform), Mexico had a minimum tax (*Impuesto Empresarial de Tasa Única*, or IETU), which assessed a flat rate (17.5%) on the residual profit or return on factors of production.

As an alternative to the income tax for small businesses, a minimum tax, when correctly applied, can successfully expand the tax base to increase both the number of taxpayers and the volume of tax payments, thereby reducing the cost of tax compliance for businesses (mainly SMEs) and promoting a reduction in tax avoidance and evasion. However, experience shows that when countries apply presumptive tax rates that force small taxpayers to opt for calculating the tax owed by the taxpayer based on real profits, it generates incentives for companies to move into the informal sector, producing the opposite of the intended effect.

TABLE 14
MINIMUM INCOME TAX FOR BUSINESSES IN LATIN AMERICA, 2012

Country	Tax (rate and base)
Argentina	1.0% on gross assets
Bolivia (Plurinational State of)	No
Brazil	No
Chile	No
Colombia	3% on net wealth
Costa Rica	No
Ecuador[a]	0.15% on net wealth
El Salvador	1.0% on gross income
Guatemala	1% over the 25% of the net assets or 25% of the gross income, whichever is greater (Solidarity tax).
Honduras	1.0% on assets
Mexico	No (IETU was in force between 2008 and 2013)
Nicaragua	1.0% on gross income
Panama[b]	CAIR (Alternate Calculation of Income Tax): 25% of the greater between the net taxable income and the 4.67% of taxable gross income (1.4% of gross income).
Paraguay	No
Peru [c]	0.4% on net assets
Dominican Republic	1.0% on assets
Uruguay	1.5-3.5% on net wealth
Venezuela (Bolivarian Republic of)	No

Source: Author's elaboration based on Gutiérrez *et al.* (2010); "Global Corporate Tax Handbook 2010", and updated country legislation.

[a] The tax base consists of immovable property but the tax is not intended as a property tax but as an additional tax on the profit of the companies
[b] This tax is in the form of a license to do business and the maximum amount of tax is 20,000 Balboas per year.
[c] While TTNA does not constitute a binding minimum tax, it does for the current fiscal year as its surpluses are likely to return as a tax credit.

When these taxes operate above the tax calculated on profits, they can discourage productive investment since they tax inventories, productive assets, machinery and other fixed assets. This can result in disinvestment in firms with losses, regardless of the tax mechanism (lump sum, percentage of assets, gross income, etc.), because taxing above net income turns the income tax into a capital tax. In sum, these taxes become a substitute for net income taxes, with all the associated consequences —both negative and positive.

Sadka and Tanzi (1993) argue that when the minimum tax is combined with a presumptive income tax, it can increase efficiency by inducing businesses to pursue a socially efficient use of capital. At the same time, Graetz and Sunley (1988) hold that a minimum tax can equalize the marginal tax rates of the different economic sectors, since it unfavourably affects firms with an advantage in activities that are subject to a preferential tax regime.

However, even when a lump-sum tax is used, some activities will be untaxable, which creates tax efficiency costs. Furthermore, the introduction of this type of tax, especially as a replacement for the income tax, can be a strong blow to horizontal and vertical equity.

Finally, proponents of these unconventional taxes generally draw on arguments of urgency or crisis, and their implementation is usually conditioned on their being phased out in the medium term. In the case of financial transaction taxes, tax productivity decreases when they are in force for long periods, because the tax base tends to shrink due to financial disintermediation or the development of evasion mechanisms. According to Shome (2011), the implementation of non-tax regulatory reforms is preferable, and if the two measures are used simultaneously, then the tax should be temporary, global and low.

In the case of minimum taxes or alternative income taxes, the duration of this type of tax is usually temporary and highly variable in legal terms in the tax structure over the years. Considering that the application of minimum taxes is the flip side of deficiencies in tax administration and legal shortcomings in the definition of taxes such as the income tax (Baer, 2006), governments should address the solution to these structural problems in the medium term.

In conclusion, any tax system must provide an integrated set of instruments that can consistently guarantee revenue sufficiency relative to the level of public spending and the premises of horizontal and vertical equity established by society. The tax system must therefore be able to adapt to fluctuations in the activity level (flexibility) and —with minimal distortion of private incentives in the face of State involvement— to generate revenues in a way that is simple for taxpayers and incurs low tax administration costs.

III. The economic and social consequences of the current tax systems

A. The low redistributive effect of taxes in Latin America

Although Latin America is considered the most unequal region in the world, the income concentration indices have recorded a favourable trend in the last decade, and this positive change is hoped to be consolidated in the future. In most of the countries in the region, the Gini coefficient was lower in 2010 than in 2000. The regional average has fallen from 0.54 in 2000 to about 0.50 in recent years, and it is currently at its lowest value of the last 30 years, although it is still higher than other world regions with a similar level of development (López-Calva and Lustig, 2010).

Two key facts attest to these changes. First, the educational structure of the population is changing as the wage gap between highly specialized workers and reasonably well educated workers closes, while several years of steady GDP growth have generated additional demand for less trained workers and a reduction in labor informality. Second, the governments of almost all Latin American countries have implemented policies to close the wage gap through social policies oriented towards lower-income sectors. This includes more generous pensions and conditional cash transfers linked to specific changes in behaviour in those sectors, such as children's school attendance.

Fiscal policy can affect the income distribution of a given country through the use of the revenues generated to increase both public spending on human capital, thereby increasing the wages of skilled workers, and public social spending, ensuring the supply of public goods and services to the most vulnerable sectors (primary redistribution). Additionally, the State can influence the income concentration, before transfers, through the application of progressive taxes (secondary redistribution). Given the high concentration of income and wealth in the region, the most efficient way to achieve results is through the joint action of tax and spending policies, which have a redistributive impact and which complement and reinforce each other in the pursuit of a common objective.

However, this has not been the message coming out of the policies implemented in the past decades, which sought to achieve redistributive effects exclusively through spending and relegated taxes to the role of purely financing the effort. Moreover, in many cases, the growth of redistributive public spending was financed with regressive taxes, which substantially reduced the net effects of fiscal policy.

After many years of discussion and debate, the paradigm would appear to be changing, as it is gradually abandoned and replaced by a more global vision of fiscal policy in which the two instruments are working in concert to improve the high income inequality that characterizes the region.

Historically, the high Gini coefficients of income distribution in Latin America were barely affected by the tax effect, which played a modest or even exacerbating role. The general perception is that, whether due to high evasion, tax benefits or a better ability to avoid tax obligations, the wealthiest individuals do not pay taxes in line with their wealth or income level and, in some cases, pay comparatively less taxes than others with a lower income (see box 1).

BOX 1
THE TAXATION OF WEALTHY INDIVIDUALS AND THE GINI COEFFICIENT

In response to the economic and social consequences of the international economic debacle of 2008-2009, an old debate was resurrected in most of the developed countries regarding who should bear the weight and costs of the necessary recovery of the domestic economies. The answer to this question has focused on the concrete possibility of requiring a greater effort from individuals who hold substantial wealth or who regularly earn very high incomes but whom, for various reasons, are not paying taxes in line with their situation. In Latin America, this debate has not yet been added to the agenda in the discussion of distributive equity and, for now, statistical limitations represent a serious obstacle to the tax identification of this small and privileged group of taxpayers.

Several authors highlight the progress that has been achieved —despite the extreme magnitude— in the income distribution in the countries of the region (Gasparini et al., 2009; Cornia, 2013). However, the studies that present these conclusions include quantitative estimates based on data from household income and expenditure surveys. As such, they usually face serious statistical limitations, which are exacerbated in the case of the wealthiest individuals, who are generally reluctant to faithfully declare their total income and its real composition, such that they remain beyond the scope of the surveys. Consequently, the traditional measures of income inequality could be missing a phenomenon of income concentration that is not captured in the household survey data, raising a new issue for discussion with regard to the encouraging change of trend in the region's income distribution, once the corresponding adjustments are made.

Some recent work addresses this issue for Argentina (Alvaredo, 2010), Chile (López et al., 2013), Uruguay (Burdín et al., 2013) and Colombia (Alvaredo y Londoño, 2013), and similar studies are underway for Brazil and Ecuador[a]. There is still room for improvement, however, in terms of generating knowledge about these processes. In all the studies, the results indicate that correcting the estimates to effectively include the wealthiest individuals leads to higher Gini coefficients, both before and after the implementation of fiscal policy.

Progress in these areas should support the consideration of reforms involving other direct taxes, such as wealth taxes, which have been hit throughout the region in the face of increasing international capital mobility, taxes on the free transfer of goods (that is, estate, inheritance and gift taxes) and net wealth or equity taxes, whose generally meagre revenue results should not obscure their low efficiency costs and clearly progressive incidence.

Source: Gómez Sabaíni and Rossignolo (2014).

[a] Project "World Top Incomes Database", http://topincomes.parisschoolofeconomics.eu/.

Table 15 presents the main results of a series of studies coordinated by the Inter-American Development Bank (IDB). The studies are based on partial analysis and do not incorporate the effects of the business income tax or social security contributions. Nevertheless, they use a uniform approach for the different countries —based on microsimulation analsys using household income and expenditure surveys— for a significant share of the countries in the region. In general and independent of the final results, the results are really limited in terms of progressiveness and redistributive impacts.

TABLE 15
STUDY RESULTS ON TAX INCIDENCE IN LATIN AMERICA, SELECTED COUNTRIES[a] AND YEARS

Countries	Year[b]	INDICES				
		Pre-tax Gini	Tax concentration	Kakwani	After-tax Gini	Reynolds-Smolensky
Ecuador	2004	0.4100	0.5400	0.1300	0.3900	0.0200
Panama	2003	0.6364	0.7575	0.1211	0.6274	0.0090
Costa Rica	2004	0.5770	0.6192	0.0422	0.5720	0.0050
Argentina	2008	0.4839	0.4904	0.0065	0.4804	0.0035
Uruguay	2006	0.4995	0.5208	0.0213	0.4974	0.0021
Chile[c]	2003	0.5791	n.d.	n.d.	0.5764	0.0027
Nicaragua	2001	0.5963	0.6313	0.0350	0.5946	0.0017
Colombia	2004	0.5370	0.5320	-0.0050	0.5370	0.0000
Honduras	2005	0.5697	0.5609	-0.0088	0.5707	-0.0010
Dominican Republic	2004	0.5106	0.4609	-0.0497	0.5126	-0.0020
El Salvador	2006	0.5034	0.4677	-0.0357	0.5109	-0.0075
Guatemala	2000	0.5957	0.5002	-0.0955	0.6034	-0.0077
Peru	2004	0.5350	0.4600	-0.0750	0.5430	-0.0080
Bolivia (Plurinational State of)	2004	0.5560	0.4980	-0.0580	0.5670	-0.0110
Brazil[d]	2009	0.5909	0.4609	-0.1300	0.6116	-0.0207

Sources: Barreix *et al.* (2009); Barreix *et al.* (2006); Gómez Sabaíni *et al.* (2011); Gaiger Silveira et al. (2013); Roca (2010); Jorratt (2010) and Scott (2009). Countries were ranked according to the estimated value of the Reynolds-Smolensky index for each of the countries where a positive value of the difference between the Gini coefficients after and before taxes indicates a positive redistributive impact.

[a] For Venezuela there is no aggregate table on the effect of taxes, nor can it be rebuilt because the effect of each tax is presented with a different methodology.
[b] Corresponds to the period analyzed (not the year of publication).
[c] For Chile a table with the results of the analysis of the distributional effect of the tax system with all the indices calculated is not presented, so it was necessary to recalculate them from deciles tax allocations tax by tax and then recalculate the indices in the aggregate.
[d] For Brazil the studies do not determine separately the impact of taxes, but this data was calculated from the indices of disposable income after cash transfers.

The available data for the 1990s suggest that taxes were regressive in most cases. In that decade, only in Venezuela did taxes generate a modest redistributive effect, while in Argentina, Honduras, Mexico and Nicaragua the income distribution worsened after the implementation of taxes, rising between two and five percentage points of the Gini coefficient (Cornia et al., 2011). The inability to perceive revenues and the regressive tax incidence were especially evident in Central America and Mexico (Agosín et al., 2005).

However, as a result of changes in fiscal policy and tax systems in the region in the last decade, the distributive impact has improved in almost all Latin American countries. Nicaragua, in particular, witnessed a considerable improvement in the progressivity and final redistributive impact of its tax system between the 1990s and the mid-200s, thanks to an ambitious tax reform. The old tax system drew 80% of revenues from indirect taxes, while providing numerous subsidies and special exemptions that caused a significant los of revenues and implied unequal treatment of taxpayers. To correct the situation, the 2003 reform was aimed at both improving tax equity and simplifying the tax structure.

In all the Andean countries except from Ecuador, the redistributive impact of the tax system continues to be minimal or null despite the recent reforms, and in some cases it actually reinforces the income concentration, as in the case of Bolivia and Peru (Barreix et al., 2006). In Ecuador, incidence studies centred on direct taxes show that the personal income tax is highly progressive, although the

redistributive impact is modest. The January 2008 reform was essentially purely theoretical, since the increased progressivity was accompanied by a reduction in tax revenues (Roca, 2009).

The situation in the Southern Cone is more encouraging. According to Cruces and Gasparini (2008), the tax concentration in Argentina increased in the 1990s, but at a slower rate than the income concentration, such that the tax system became increasingly regressive. This trend changed in the 2000s, however, when inequality began to recede following the 2001–2002 crisis. At the same time, significant changes were implemented in the tax structure, in particular the introduction of export duties, which contributed to financing large-scale social spending and poverty reduction programmes. Gómez Sabaíni et al. (2013) highlight the role of these taxes in offsetting the regressivity of the rest of the taxes in force in the country.

In Chile, for the better part of the last two decades there was an implicit consensus that the best policy for improving the income distribution was through targeted social spending, based on the premise that the tax system was not effective at doing so and that its objective should therefore be limited to financing social spending. This stance had its roots in academic studies such as Engel et al. (1998), who conclude that the tax system is slightly regressive and its redistributive impact is insignificant.

More recent studies have modified this biased formulation of the impact of fiscal policy on income distribution given that Chile has one of the highest income inequality coefficients at the regional level.[48] For example, Cantallopts et al. (2007) find a higher income concentration (relative to Engel et al., 1998) using a broader definition of income that includes, among other things, the participation of individuals in companies' retained earnings. The authors show that even when the tax system continues to be slightly regressive (the Gini increases from 0.5223 to 0.5302 after implementation), a tax reform that has a neutral effect on revenues, while aiming to expand the tax base of the progressive income tax and reduce the share of the VAT, would achieve a better income distribution, with a reduction in the Gini from 0.5302 to 0.4879. These results points to a re-evaluation of the potential redistributive impact of taxes.

Jorratt (2010) shows that the tax system is slightly progressive, where the Gini coefficient for the household income distribution would fall from 0.5791 to 0.5764 due to the tax effect. This result can be explained by the change in the share of direct and indirect taxes. Of the limited set of taxes considered,[49] the personal income tax is the only progressive tax, whereas the VAT has a clearly regressive effect and exceeds the former in terms of its significant effect on income distribution.[50]

In Uruguay, the tax reform of 2007 explicitly aimed to improve tax equity. Before the reform, the tax system had a large number of taxes and multiple exemptions, and the tax incidence was basically neutral. According to Amarante et al. (2007), the fiscal reform has achieved that objective, largely thanks to the strengthening of the income tax: the application of the tax system resulted in an effective reduction in all the synthetic inequality indices, independent of the income scenario or transfer assumptions adopted. Roca (2010) confirms these results by assessing the combined distributive impact of the main taxes in the Uruguayan tax system. According to this study, the pre-tax income distribution improved slightly due to the tax effect, with the Gini coefficient declining from 0.4995 to 0.4974. The redistributive effect of the personal income tax dominates the concentrating effect of the VAT, while the selective taxes have no effect on the coefficient.

In the case of Brazil, a recent study shows that the tax system has been regressive throughout the last decade, because the weight of indirect taxes (which are highly regressive) is not offset by the progressivity of direct taxes, which do not generate enough tax revenues to have a significant redistributive impact (Gaiger Silveira et al., 2013). The estimates show that in 2003, the Gini coefficient

[48] According to ECLAC, the Gini coefficient for income was 0.516 in 2011.

[49] Jorratt (2010) uses a methodology developed by the IDB, which only assesses the incidence of taxes that have a broad consensus on who actually pays the tax burden, thus generally excluding business income taxes, taxes on international trade and taxes on non-renewable natural resources. Social security contributions are also excluded from the analysis.

[50] The fact that these results contradict previous studies for Chile reflects the decision to measure the theoretical income tax rather than actual revenues: theoretical revenues are higher than actual revenues since no assumptions are made about evasion, which reinforces the redistributive impact of the tax, exceeding the regressivity of all the other taxes combined.

for initial income (after in-kind transfers) was 0.6241, falling to 0.6148 due to the effect of direct taxation but rising again to 0.6552 when indirect taxes are considered (which have a much higher weight than direct taxes).[51] In 2009, the tax incidence had not changed much: the Gini coefficient for initial income (including cash transfers) was calculated at 0.5909; the effect of direct (progressive) taxation lowered the Gini toe 0.5777; and indirect taxation then raised it to 0.6116. The combined distributive impact was thus regressive.

In light of these results, Gaiger Silveira et al. (2013) indicate that the reduction in inequality levels is a direct consequence of greater social spending (especially in health and education) and does not stem from changes in the tax structure, although the distribution profile has become more progressive.[52] In contrast, Siqueira et al. (2012), who use a different methodology that incorporates current consumption as an indicator of well-being, find a certain degree of progressivity in both direct and indirect taxes, although they recognize that the tax system is almost neutral in terms of its redistributive role. Beyond these differences, despite the concrete progress has been made in recent years with policies on redistributive social spending, the problems of tax coordination between jurisdictions have hindered several reforms aimed at reducing the strong bias towards indirect taxation in the Brazilian system.

Despite the metholological limitations of the available studies, there are some basic similarities in the results at the regional level, which suggest that current taxation in Latin America has regressive or only slightly progressive effects, due precisely to the predominance of indirect taxes over direct taxes.

More specifically, the existing weakness and low share of the most progressive tax,[53] namely, the personal income tax, cannot offset the regressive weight of the other taxes, such as those that fall on goods and services (the VAT and selective taxes). Moreover, the practically nonexistent wealth tax makes no contribution whatsoever towards changing this bias (Gómez Sabaíni et al., 2012). Table 16 shows that while the personal income tax is clearly progressive in design in all the countries in the region (see the Kakwani indices), it has a very small effect on the income distribution (see the Reymolds-Smolensky indices) due to its low share in the region's tax systems.

TABLE 16
STUDY RESULTS ON THE INCIDENCE OF THE PERSONAL INCOME TAX IN LATIN AMERICA

Countries	Year	Indices				
		Pre-tax Gini	Tax concentration	Kakwani	After-tax Gini	Reynolds-Smolensky
Colombia	2004	0.5370	0.8940	0.3570	0.4590	0.0780
Dominican Republic	2004	0.5106	0.9057	0.3951	0.4759	0.0347
Chile	2006	0.5791	0.9677	0.3886	0.5584	0.0207
Uruguay	2006	0.4995	0.8630	0.3635	0.4875	0.0120
Argentina	2008	0.5133	0.8821	0.3688	0.5018	0.0115
El Salvador	2006	0.5034	0.8281	0.3247	0.4947	0.0087
Costa Rica	2004	0.5770	0.9098	0.3328	0.5692	0.0078
Brazil	2009	0.5837	0.9046	0.3209	0.5766	0.0071
Nicaragua	2001	0.5963	0.9441	0.3478	0.5905	0.0058

[51] The data presented take into account sorting effects. In a policy with an impact on the income distribution, the improvement in the distribution profile deriving from that policy implies a lower progressivity index —if it is measured a posteriori— relative to the index for the previous situation.

[52] The Reynolds-Smolensky index remained negative (that is, the tax system increases income inequality), but the magnitude decreased between the two estimation periods, from –0.0311 to –0.0207 (see table 15).

[53] Most of the recent studies find that in all the countries in the region, the 20% of the population with the highest income contribute over 90% of effective tax revenues.

Table 16 (conclusion)

Countries	Year	Indices				
		Pre-tax Gini	Tax concentration	Kakwani	After-tax Gini	Reynolds-Smolensky
Panama	2003	0.6364	0.8803	0.2439	0.6312	0.0052
Honduras	2005	0.5697	0.9000	0.3303	0.5647	0.0050
Ecuador	2004	0.4080	0.8310	0.4230	0.4040	0.0040
Venezuela (Bolivarian Republic of)	2004	0.4230	0.8400	0.4170	0.4210	0.0020
Guatemala	2000	0.5957	0.9115	0.3158	0.5946	0.0011
Peru	2004	0.5350	0.5820	0.0470	0.5344	0.0007

Source: Barreix *et al.* (2009); Barreix *et al.* (2006); Gómez Sabaíni *et al.* (2011); Gaiger Silveira et al. (2013); Roca (2010); Jorratt (2010) and Scott (2009). Countries were ranked according to the estimated value of the Reynolds-Smolensky index for each of the countries where a positive value of the difference between the Gini coefficients after and before taxes indicates a positive redistributive impact.

This undoubtedly points to the need to reinforce the role of the personal income tax in future tax reforms, with an expansion of the tax base. Otherwise, given the low revenues it generates in the countries' tax structure, any improvement aimed at increasing progressivity will be diminished in a tax structure dominated by indirect taxes such as the VAT or selective taxes, which generally have a strong regressive impact on the income distribution.

Beyond the improvements that have been achieved or that might be achieved in the future in terms of the specific design of current taxes, the tax structure of the countries in the region have a strong bias towards indirect taxes and an income tax paid mainly by businesses, which is the primary cause behind the low redistributive effect of Latin American taxes today. This brings up another very important stylized fact: the distributive impact of the taxes (and fiscal policy as a whole) is much greater (and more progressive) in developed countries than in the countries of Latin America (Goñi et al., 2008).

Prior to the effects of fiscal policy, the Gini coefficients of the distribution in Latin American countries are usually similar to those found in more developed countries. However, while the Gini coefficient falls substantially in industrialized countries due to the effects of taxes and public transfers, the developing countries only achieve marginal changes (Gómez Sabaíni, 2006). Table 17 presents a set of results on the redistributive effects of fiscal policy in a broad and varied list of countries, including some representative cases from Latin America.

With regard specifically to the tax impact on the income distribution, Cubero and Vladkova Hollar (2010) confirm the differences described above, finding greater progressivity and a stronger redistributive impact from taxes in the European countries than in Latin America. Similarly, Wang and Caminada (2011) use a heterogeneous sample of 36 countries to verify that Latin American countries have the highest levels of inequality and a low redistributive capacity from the tax effect. However, this uneven behaviour between the developed countries and the Latin American economies does not in any way imply that tax policy instruments are not useful or effective for achieving redistributive objectives relative to the current situation in each country. On the contrary, they are the result of the structural weaknesses of the tax systems in the region analysed throughout this report.

In one of the most recent works on the subject, Lustig et al. (2012) apply a standard incidence analysis to estimate the impact on inequality and poverty of direct taxes, indirect taxes, subsidies and social spending (cash and in-kind transfers related to education and health).[54] The main result of the study is that the magnitude of the reduction in inequality (as meausred by the Gini coefficient) deriving from direct taxes and transfers is very limited (2% on average), especially when compared with Western Europe (15% on average). This reflects not only the lower relative level of cash transfers (in particular

54 The group of countries analysed in these studies includes Argentina, Bolivia (Plurinational State of), Brazil, Mexico and Peru.

the most progressive), but also the small impact of direct taxes on inequality, which generate approximately half the revenues (as a share of GDP) of indirect taxes. This has a regressive effect on the income distribution in most of the countries in the region.

TABLE 17
REDISTRIBUTIVE EFFECTS OF TAXES AND TRANSFERS IN SELECTED COUNTRIES

Country	Year	Gini coefficient of disposable per capita household income		Changes in Gini coefficients due to fiscal policy		
		Before fiscal policy	After fiscal policy	Total	Taxation	Public transfers
Austria	2004	0.459	0.269	0.190	0.034	0.156
Belgium	2000	0.542	0.279	0.263	0.063	0.201
Canada	2004	0.433	0.318	0.114	0.038	0.076
Denmark	2004	0.419	0.228	0.191	0.042	0.149
France	2005	0.449	0.281	0.168	0.017	0.151
Germany	2004	0.489	0.278	0.210	0.052	0.158
Netherlands	2004	0.459	0.263	0.196	0.040	0.156
Spain	2004	0.441	0.315	0.126	0.001	0.124
United Kingdom	2004	0.490	0.345	0.145	0.021	0.124
United States	2004	0.482	0.372	0.109	0.043	0.066
Argentina	2006	0.589	0.479	0.110	0.019	0.091
Brazil	2006	0.570	0.486	0.084	0.014	0.070
Colombia	2004	0.568	0.562	0.006	-0.001	0.006
Costa Rica	2004	0.559	0.479	0.080	0.012	0.068
Guatemala	2006	0.521	0.507	0.014	0.012	0.002
Mexico	2006	0.537	0.497	0.040	0.003	0.037
Uruguay	2004-2006	0.542	0.428	0.124	0.010	0.114

Source: Cornia, Gómez Sabaíni and Martorano (2011).

B. The link between informality and tax policy

Latin America is characterized by high levels of economic and labor informality, and the situation is more extensive and complex than would be desirable. Whether through an involuntary exclusion from the formal labor market or a rational choice to leave on the part of the worker, many people work and obtain all or part of their monetary income in the so-called informal sector of the economy. This is the case with self-employed workers and businesses (especially small enterprises) where, due to both exclusion and choice, there are high levels of informality.[55]

This phenomenon has serious economic implications because it affects not only labor market issues, but also the structure of the economies, the income distribution, the existing relations between the government and private firms, national accounts statistics, social statistics and so forth.

To address this problem, the countries of the region have resorted to implementing a range of measures and economic policy tools, with varying degrees of success. Tax policy is one of the main channels through which governments have attempted to develop processes for formalizing informal workers, so it is pertinent to identify the main links between informality and taxation in Latin America.[56]

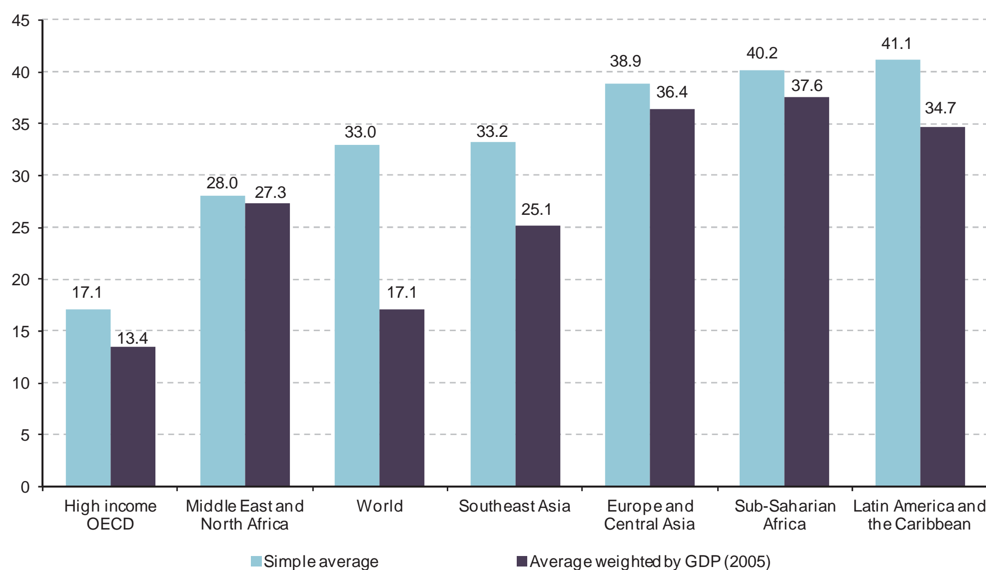
[55] Perry et al. (2007).
[56] For a detailed analysis, see Gómez Sabaíni and Morán (2012).

Several studies provide clear evidence that the tax system influences the informal economy.[57] Taxes and social security contributions are added to labor costs, which are a key determinant of informality. Thus, the greater the difference between the total cost of labor in the official economy and the return on labor after taxes are deducted, the greater the incentive for both employers and employees to sidestep this difference by immersing themselves in the informal economy as a way to avoid or evade their tax obligations. The issue of labor informality involves not only purely economic factors, but also institutional quality, governance, tax morale and the link between taxpayers and the State through the adequate provision of public goods and services. Thus, if changes are to be introduced in the region's tax systems, all these factors need to be fully analysed from an integrated perspective.

According to Perry et al. (2007), informality is not that much higher in Latin America than in other developing countries with similar per capita income levels. In recent years, however, the issue has become increasingly important in the countries of the region in the context of macroeconomic policy design, given the negative connotations associated with the informal sector (poor working conditions, low productivity, lack of compliance with the law and tax obligations, etc.).

Figure 5 shows the estimated size of the informal economy in different regions or groups of countries in 1999–2007 (Schneider, 2012). Based on the simple average of the countries (the left-hand columns in the figure), there is a clear difference between high-income countries (OECD) and other, less developed regions. Furthermore, while the worldwide simple average (162 countries) is around 33% of official GDP, some regions are higher, at around 40%, such as Europe,[58] Central Asia and sub-Saharan Africa. Finally, Latin America and the Caribbean has the largest informal economy at the international level at 41.1% of GDP, on average.

FIGURE 5
THE INFORMAL ECONOMY IN DIFFERENT WORLD REGIONS, AVERAGE FOR 1999-2007
(Percentage of official GDP)



Source: Author's elaboration based on Schneider (2012).

[57] See Gerxhani (2004), who surveys an extensive series of studies on the subject; OECD (2008), which analyses the fiscal implications of informality; and Vuletin (2008), who assesses the relevance of the tax system as a determinant of informality in Latin America.

[58] This group includes the less developed European countries, which are mainly in Eastern Europe, and not the OECD members.

When the 1999-2007 average is weighted by the 2005 GDP of each country, the results do not change significantly although the gap between developed and developing countries widens (the right-hand columns in figure 5). The African countries are the most informal in the world according to this measure, while the OECD is around a third of that level.

Thus, the developed counties record informality levels that are below the international average (17.1%). In second position are the countries of South-East Asia, the Middle East and North Africa, with an average of around 25-27%. Finally, the size of the informal economy is twice the GDP-weighted world average in Latin America (34.7%), Eastern Europe and Central Asia (36.4%) and sub-Saharan Africa (37.6%), which reflects the severity of the problem of informality in many of these underdeveloped countries.

At the same time, the magnitude of informality in Latin America varies considerably among countries. Countries such as Bolivia, Panama and Peru have some of the highest informality levels in the world, while countries such as Chile, Argentina and Costa Rica have considerably lower levels that are much more in line with international parameters and only slightly higher than more developed countries. Nevertheless, all the countries in the region recorded a reduction in informality in 2006-2007 relative to 1999-2000 (Gómez Sabaíni and Morán, 2012).

One of the areas of the economy where informality is most evident is in the labor market, more specifically in the labor contract between employers and employees and, in virtue of that contract, in the provision of social security benefits by the State and its institutions.

Two conventional definitions are often used to measure labor informality, which, while similar, reflect different aspects of the labor market.[59] The productive definition is related to the type of work: informal workers are defined as those employed in marginal, low-skilled, low-productivity jobs. The legal (or social protection) definition is based on compliance with labor laws; it centres on the lack of worker protection and social security benefits that are usually afforded in the formal sector.

Figure 6 shows that labor informality is a very significant problem under both definitions in at least four countries (and probably Honduras, although there is a lack of available data). In all these countries, current data indicate that a majority of workers (over 60%) are in the informal sector, regardless of whether the definition is by the type of job held (low productivity) or by the lack of labor protection.

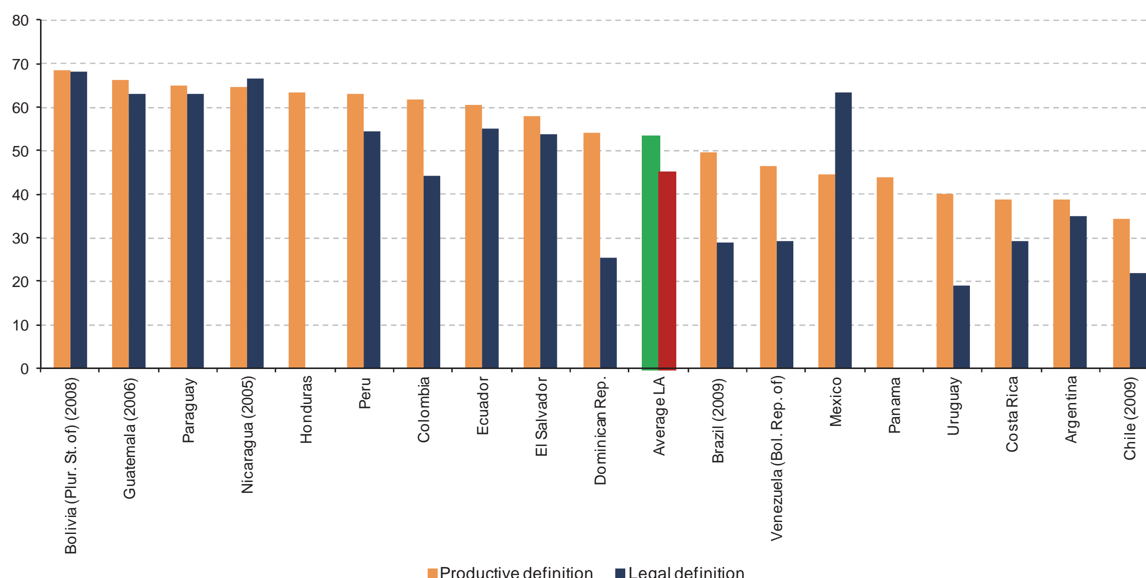
For the 18 countries in the region on average, 53.4% of workers are informal according to the productive definition, while only 55% are legally entitled to a work-related pension at retirement. Several countries in the region display large differences in labor market informality depending on the definition used. In these cases, such as in Uruguay, Brazil and Costa Rica, the estimate is much lower under the legal definition due to the extensive coverage of the social security systems.[60]

Gómez Sabaíni and Morán (2012) highlight that the downward trend in informality in Latin America in recent years has been accompanied by a simultaneous, substantial and generalized increase in tax revenues generated basically from the VAT and the income tax, which to some extent reflects the relationship between taxation and informality. The gradual reduction in evasion rates (at least in the VAT, where some periodic estimates are available for some countries in the region) is another trend that reflects the decrease in informality.

[59] Under the productive definition, workers are considered informal if they pertain to one of the following categories: (i) unskilled self-employed workers; (ii) wage workers in small businesses; and (iii) unpaid workers. According to the legal or social protection definition, wage workers are informal if they are not entitled to a job-related pension after they retire. (source: SEDLAC -CEDLAS and World Bank).

[60] Mexico is an exception in the region in that informality is higher under the legal definition than under the productive definition; this is largely explained by the low coverage and structural deficiencies of the current pension system (Levy, 2008).

FIGURE 6
LABOR INFORMALITY IN LATIN AMERICAN COUNTRIES, 2010[a]
(Percentages)



Source: Author's elaboration based on data from SEDLAC (CEDLAS-World Bank).

[a] Except in the cases where is made explicit the last year available for the estimates.

The high levels of tax evasion, in a context of widespread informality, prompted the implementation of simplified tax regimes for small taxpayers in almost all Latin American countries over the last 15 years. These instruments are a clear example of the adaptation of tax administration at the regional level. They address the need to guarantee the voluntary tax compliance of a large group of taxpayers who are difficult to audit and monitor, minimizing the implicit costs to small businesses and the public cost of the associated tax administration, which increase in less developed countries.

The design of special regimes for small taxpayers, whether individuals or businesses, based on excluding the general standards of the VAT and/or the income tax, establishing presumptive methods for determining the tax and/or taxing these entities at lower rates, has been one of the main roads followed by Latin American countries to lighten the work load of their tax administration systems and improve their oversight and auditing capacities.

Table 18 shows that these regimes generate few revenues, bringing in less than 1% of the total in most of the countries where they are applied (with the exception of Brazil and Argentina). Far from having a negative connotation, this result highlights the possibility that these instruments offer for freeing up resources that can then be re-oriented towards administering other, more profitable taxes such as the VAT or auditing the income tax of large taxpayers. Thus, as Gómez Sabaíni and Morán (2012) point out, the success of these regimes should be measured on the basis of their ability to incorporate informal workers into the formal sector, while ensuring that they do not become an artificial tax shelter used for evasion, but rather serve as a transition mechanism ("a temporary bridge") towards the general tax regime.

However, there is wide variation among the simplified regimes that are currently in force in the region, which complicates the task of comparison. Each regime has had to be adapted to the framework of the local tax system, in accordance with the characteristics of the taxpayers to be covered and the concrete possibilities of each tax administration. The systems thus vary in terms of the taxes considered, the taxpayers reached and the presumptive techniques for determining the taxable income, among other characteristics.

TABLE 18
TAX REVENUES FROM THE SIMPLIFIED REGIMES IN SELECTED COUNTRIES OF LATIN AMERICA, 2010

Countries	Percentages of GDP	Percentages of total revenues
Argentina	0.34	1.16
Bolivia (Plurinational State of)	0.02	0.10
Brazil	0.94	2.86
Chile	0.01	0.02
Costa Rica	0.02	0.08
Ecuador	0.01	0.05
Guatemala	0.07	0.59
Mexico[a]	0.02	0.05
Paraguay[b]	0.01	0.07
Peru	0.05	0.09
Dominican Republic	0.01	0.05
Uruguay	0.10	0.40

Source: Pecho Trigueros (2012); "Regímenes Simplificados de Tributación para Pequeños Contribuyentes en América Latina", CIAT and official sources.

[a] Corresponds to the Regime of Small Taxpayers (REPECOS), which was derogated in October 2013.
[b] Includes income from the Single Tax (*Tributo Único*), which is no longer in force.

While all of these schemes aim to promote the formalization of small businesses and independent workers, they generally do not guarantee the inclusion of these taxpayers in the social security system. Therefore, a few countries have designed simplified regimes that, in addition to replacing a series of taxes, include the optional or mandatory provision of basic pension coverage and, in some cases, health insurance: namely, Argentina (Monotributo), Brazil (SIMPLES and SIMEI) and Uruguay (Monotributo and Monotributo Social MIDES). These particular cases have shown promising results in terms of their scope and appear to be interesting alternatives to consider, especially for countries with high levels of informality and low social coverage (Cetrángolo et al., 2013).

C. Tax expenditures: the need to level the playing field

As described by Cornia et al. (2011), the Washington Consensus had a strong influence on the region's tax systems in the 1980s and 1990s largely based on the pursuit of greater horizontal equity, to which end countries were advised to gradually eliminate a long list of tax benefits and exemptions in order to expand and generalize the tax base of their main taxes. Despite progress in this area, however, most countries continued to have significant "tax expenditures" (that is, foregone revenue deriving from tax concessions) aimed at achieving a wide range of objectives, which had an impact across the whole tax spectrum of the countries in question.

Table 19 summarizes the results on tax expenditures for selected countries. The revenue losses deriving from these tax concessions are significant (over 2% of GDP in most cases). Over time, tax expenditures have only increased in Brazil[61] in recent years and in Uruguay[62] after the 2007 tax reform. There is no clear trend for the rest of the sample, although tax expenditures have tended to be fairly stable over the years despite efforts to reduce them.

[61] Tax expenditure estimates only include central government taxes. Consequently, tax expenditures in Brazil could be underestimated relative to the other unitary countries in the region, due to the large share of subnational taxes in total taxes.
[62] However, the changes in GDP terms may be due to the evolution of the applied methodology rather than an increase in tax concessions.

TABLE 19
TAX EXPENDITURES IN SELECTED COUNTRIES OF LATIN AMERICA, 2005-2013

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013
Argentina	2.21	2.11	2.20	2.14	2.08	1.99	2.47	2.52	2.49
Brazil	1.69	1.99	2.29	2.77	3.20	3.42	2.98	3.22	3.42
Chile	4.38	4.05	4.88	5.30	5.08	5.01	5.09	4.45	4.93
Colombia	3.70	3.96	3.52	3.20	3.15	3.20	3.65	3.41	-
Guatemala	8.40	8.03	8.06	8.01	7.97	7.90	8.10	8.40	4.30
Mexico	6.32	5.59	5.38	5.67	3.87	4.29	5.15	4.99	3.87
Peru	2.07	2.24	2.22	2.05	1.81	2.13	2.04	1.94	-
Uruguay	4.39	4.23	4.30	5.67	5.69	6.31	6.31	6.40	-

Source: Author's elaboration based on country official reports. Although there are official estimates for other countries of the region, in this table only cases in which information is available for the selected years are presented (in some cases, these measurements go back to the early years of the last decade but are hardly comparable). Starting in 2013 a new methodology was introduced in the case of Guatemala which no longer computes the amount of the non-taxable minimum income tax as an item of tax expenditure.

In the last decade, different international organizations have taken an interest in analysing and quantifying tax expenditures, whether to improve the general efficiency of the system, increase revenue collections or improve distributive equity. This has promoted the study of the economic effects of tax concessions in the region.[63]

The results show that these instruments not only did not translate into an increase in gross capital formation and output in the region, but in some cases provided an opportunity for corruption. They were largely used opportunistically by firms to increase their rates of return by reducing the cost implied in the payment of certain taxes. Consequently, the use of these incentives modified the regional or sectoral distribution of investment within the country, without substantially increasing the national investment rate.

According to Jiménez and Podestá (2009b), the tax incentives used in the region include the following: (i) tax holidays and rate reductions; (ii) investment incentives (accelerated depreciation, partial deductions, tax credits, tax deferments); (iii) duty-free zones with special tax treatment (on import duties, the income tax or the VAT); and (iv) employment incentives (tax credits for hiring labor).

Table 20 presents the official estimates of tax expenditures disaggregated by type of tax. While there is wide variation among the countries, most of these instruments are concentrated in the two most important taxes: the VAT and the income tax.[64] From a technical standpoint, VAT, in particular, is the least appropriate to be used in this way, given the disruption in the chain of credits and debits caused by these concessions. The countries also vary widely in terms of the relative size of tax expenditures as a share of the total tax revenues: Argentina, Brazil[65] and Peru have a relatively low share of around 10%; Colombia is next with a share of 17.4%; a large group of countries is in an intermediate range of 20% to 30% of total revenues; and finally Honduras and Guatemala record a share of over 30%.[66] Central America, in general, displays the greatest weaknesses in terms of both the high level of tax expenditures in the countries and the absence of regular, precise measures of the magnitude and composition of the concessions, which would provide the basis for an accurate assessment and analysis of their functioning and utility.

[63] The most important initiatives in this area include IDB (2008); Villela, Lemgruber and Jorratt (2009); CIAT (2011).

[64] Several countries in the region only show estimates exclusively for these two taxes.

[65] In the case of Brazil, the annual estimates by the Brazilian Federal Revenue Authority (*Receita Federal do Brasil*, or RFB) do not include subnational taxes such as the goods and services circulation tax (ICMS) and the services tax (ISS); the results may therefore be underestimated relative to the other countries. The same occurs for Colombia and Argentina, though to a lesser extent, due to the decentralized taxes on output levied by the lower levels of government.

[66] The case of Guatemala is unique in the region and illustrates the large methodological discrepancies between the estimates. Through 2012, a large share of the foregone taxes in Guatemala were explained by the decision to compute the non-taxable minimum income (exempt from the income tax) as a tax expenditure, which is contrary to the generally accepted methodological rule.

TABLE 20
TAX EXPENDITURES IN LATIN AMERICAN COUNTRIES BY TYPE OF TAX, 2012[a]
(Percentages of GDP and of total revenues)[b]

Tax	Argentina	Brazil [c]	Chile	Colombia [d]	Costa Rica	Ecuador (2011)	Guatemala [e]	Honduras (2011)	Mexico	Peru	Uruguay
VAT	1.17	0.48	0.83	2.51	3.54	2.4	1.96	3.44	1.53	1.32	2.95
Income	0.56	1.39	3.62	0.9	1.82	3.11	5.91	1.91	2.23	0.37	2.29
Individuals	n.d.	0.7	2.77	0.3	n.d.	0.71	n.d.	0.95	0.84	0.15	0.63
Corporations	n.d.	0.69	0.85	0.6	n.d.	2.4	n.d.	0.96	1.39	0.22	1.66
Social Security	0.33	0.91	-	-	-	-	-	-	-	-	-
Excise taxes	0.31	-	-	-	0.14	-	0.02	0.68	1.15	0.07	0.08
International trade	0.12	0.07	-	-	0.07	-	0.15	0.10	-	0.17	-
Other taxes	0.03	0.37	-	-	0.06	-	0.37	0.86	0.08	-	1.08
Total (% of GDP)	2.52	3.22	4.45	3.41	5.62	5.5	8.40	6.99	4.99	1.94	6.40
Total (% of revenues)	6.76	8.88	21.36	17.4	26.8	27.18	68.25	39.91	25.45	10.70	24.40

Source: Author's elaboration based on country official reports.

[a] Except in cases where a different year of estimate is indicated.
[b] Although official values were used for GDP, figures from OECD/ECLAC/CIAT (2014) were used in this work for the weighting of the total revenue, adjusted for the year corresponding to the official estimate considered in each one of the countries.
[c] In the case of Brazil the estimate only includes taxed administered by the Secretariat of the Federal Revenue of Brazil.
[d] Data and criteria from the National Customs and Tax Agency (DIAN).
[e] Due to the reform introduced in the income tax (Decree No. 10-2012) and to the methodological changes in the estimates of the tax administration authority (SAT), the tax expenditure in 2013 would be reduced to almost half of the value presented in this table (4,3% of GDP).

The methodological discrepancies between the different studies hinder comparison between countries. For example, Chile's tax expenditures are much higher than Argentina's in GDP terms. However, the Chilean internal revenue service includes in the estimate deferments deriving from the difference between the marginal corporate income tax rate and the top personal income tax rate applied to distributed dividends, whereas Argentina does not. Excluding this item would reduce Chile's total tax expenditures by around 1.6% of GDP in 2012, bringing it very close to Argentina's level in the same year.

A recent comparative study by the CIAT (2011) confirms that exemptions, exclusions and deductions are the type of tax expenditure that, in general, represents the greatest fiscal cost in the countries analysed, together with the application of reduced VAT rates on specific goods, services, sectors and/or regions. In terms of sectoral distribution, tax expenditures in Latin American countries are highest in sectors such as social security and social services (including private pension and adoption systems); health and sanitation (including nutrition and maternity); housing and urban development (including construction and infrastructure); and investment, decentralization and regional development.

Although they may be justified in some specific cases, tax expenditures have a negative impact on both equity and efficiency. The waiver of a share of tax revenues limits the fiscal space and, with it, social investment. By granting concessions to a certain group of taxpayers or activities, tax expenditures reduce horizontal equity. In terms of efficiency, tax expenditures have created problems of inter-jurisdictional tax competition and other distortions in decisions involving industrial production and localization. The lack of studies and accurate estimates of the real effects of tax expenditures on investment and output raises further doubts on the need for and effectiveness of these concessions for achieving these objectives and reinforces the disadvantages discussed above.

Finally, the existence of tax expenditures provides opportunities to manipulate the tax system and promotes tax evasion and avoidance. There are four main reasons for this: (i) there is greater uncertainty about the correct interpretation of the legal regulations; (ii) the oversight capacity of the tax

administration decreases because the complexity of the regulations necessitates more rigorous audits; (iii) in the face of this greater complexity, taxpayers tend towards non-compliance with their tax obligations, either out of ignorance or to offset the costs imposed by the system; and (iv) the application of tax expenditures increases the complexity of the tax system and creates room for evasion and elusion (Villela et al., 2009).

D. The new paradigm of tax administration

The structural changes in the economy that began after the Second World War, albeit with different intensity and scope over time in the countries of Latin America, have had substantive consequences for the current role of the region's tax administrations.

In the mid-1940s, taxes on international trade (import tariffs and/or export taxes) contributed a large share of total tax revenues perceived by the governments of almost all the countries in the region. On average in 1940-1949, these customs revenues accounted for 13% (6%) of total central government revenues in Argentina, 15% (1%) in Brazil, 26% (9%) in Chile, 23% (10%) in Colombia, 27% (5%) in Mexico, 29% (10%) in Peru, 29% (4%) in Uruguay and 24% (9%) in Venezuela (the average for the 1990s is included in parentheses for comparison).[67] The remainder of tax financing came mainly from the contribution of selective taxes (soft drinks, tobacco, fuels) and, to a lesser extent, income taxes on export firms (Gómez Sabaíni, 2011).

Based on this income structure, the tax administration was responsible for taking in the bulk of the resources necessary for running the government, mainly by controlling the customs agency. At the same time, countries were forming their internal revenue services, although these generally had less power within the State administrative structure. In some cases, they controlled the collection of both selective taxes and income taxes, although the latter carried very little institutional weight. In other countries, consumption taxes and income taxes were administered independently by separate tax offices, with no connection between the different entities.

Two additional economic features are central to understanding tax collection strategies in the region. First, consumption taxes were basically centred on taxing the volume of production of goods such as soft drinks, tobacco, fuels and other regional goods that had a very small number of producers, possibly fewer than five or ten taxpayers for each good, which generated the total revenues for each item. Second, income taxes were concentrated on commodity export firms.

This economic structure generated, first, the establishment of independent tax administration offices; second, the development of strategies based on controlling "taxes or taxable items", namely, the import of goods, the local production of certain consumption goods or the volume of exports; and, third, a clear disconnection between the different tax offices, which competed to be first in terms of the amount of revenues collected.

The new economic model prevailing in the region starting in the 1960s was characterized by trade opening and, later, financial liberalization, as well as strong growth in domestic consumption. This model led to deep changes in the countries' tax administration and was responsible for generating a new paradigm in tax management.

Tax administration shifted from a "tax by tax" division of control to one based on controlling "subjects or taxpayers" that could simultaneously include both importers and local producers of goods and services destined to satisfy final demands, which were subject to general consumption taxes (and which came to replace tariff duties), and from there to a "functional" administrative structure.

A determining factor in the process was the application of the VAT in the first countries of the region (Brazil in 1967; Ecuador in 1970; Bolivia in 1973; Argentina, Chile, Colombia, Costa Rica and

[67] Data are from the OxLAD database (*http://oxlad.qeh.ox.ac.uk*). The figures in parentheses are the simple averages for 1990-1999 for each country.

Nicaragua in 1975) and its extension to the rest of Latin America in subsequent years. This contributed to the change in tax administration strategies from having to oversee just a few taxpayers to having to encompass a broad spectrum of cases that fell under the domain of different taxes.

This change has manifested in three key ways: in the need to identify potential taxpayers through their incorporation in a single taxpayer registry; in the need to know the tax obligations that applied to each of these taxpayers and the taxes they paid, that is, the tax current account; and in the differentiation of tax administration based on their economic and fiscal importance.

This resulted in the establishment of two typical strategies in all the countries. First, special departments were created exclusively for the direct treatment of large taxpayers, following the realization that a large share of tax revenues (70 to 80%) was concentrated in a small number of taxpayers (10 or 20%). Second, as discussed above, a solution was needed for the mass of taxpayers with little relative individual weight in revenues, which led to the implementation of different "alternative or presumptive regimes" given the tax administration's limitations in terms of overseeing small taxpayers (ITD, 2007).

The strategy adopted of taking the easy road by applying taxes that could feasibly be monitored by the tax administrations, that would generate the least resistance among taxpayers, that would discourage evasion, and that implied lower costs for the tax administration offices, also led to the adoption of other reform measures for corporate income taxes. As discussed, these measures included the application of minimum taxes that acted as a floor, based on the value of assets or on total gross sales or gross earnings.

This process also translated into a change in the functional structure of the tax system, which can basically be divided into four systems: executive (management, coordination and supervision), regulatory (legislative treatment, programming and operating systems), operations (collections, auditing and billing) and support (registration, data processing and statistics). This structure has been followed in almost all the Latin American countries.

Concretely, in terms of tax administration, the strategies for preventing tax evasion and improving voluntary compliance were focused on some common elements. Almost all the countries in region created semi-autonomous collections agencies, incorporated more qualified human resources, created "large taxpayer units" dedicated to overseeing large companies and important individual taxpayers and began to use new information technologies.

With the advances in new information technologies, the global monitoring of taxpayers (or "subjects") was integrated through two channels. First, countries implemented regimes for withholding at the source and for capturing (by the tax administrations) information from external "sources" other than the taxpayers themselves. The significant advances in automatic data processing supported cross-referencing information on different subjects, and some countries implemented the settlement of individual income taxes directly from the tax administration offices, as is currently the case in Chile.

Second, the databases of the different collections agencies (customs, income, internal) were integrated, with the behaviour of the taxpayer (or the "taxed subject") as a control parameter covering all actions, through the application of discriminate functions based on the fiscal conduct of each taxpayer.

The advances in management strategy, oriented towards deterring evasion and reducing the costs of tax administration, led to a process of integration into a single Tax Administration that covers customs taxes, domestic taxes and in some cases (currently Argentina, Brazil and Peru) social security contributions (Gómez Sabaíni and Jiménez, 2011b).

Based on the benefits of operational simplification, uniformity and tax specialization, these agencies have also contributed to achieving greater independence from political bodies and improving organizational accountability. At the same time, this institutional unification has been accompanied by initiatives promoting the financial independence or autonomy of these entities, often with the allocation of an operating budget in relation to the revenues collected. Table 21 summarizes the main recent reforms in tax administration and the countries in which they have been effectively implemented.

TABLE 21
MAIN REFORMS IN TAX ADMINISTRATION STRUCTURE

Characteristics	Countries
Functional organization	Argentina, Bolivia (Plurinational State of), Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Peru, Dominican Republic, Uruguay
Semi-financial autonomy	Argentina, Bolivia (Plurinational State of), Colombia, Ecuador, Guatemala, Mexico, Peru, Dominican Republic
Large taxpayer unit	Argentina, Bolivia (Plurinational State of), Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Peru, Dominican Republic, Uruguay
Presumptive or simplified taxation for small taxpayers	Argentina, Bolivia (Plurinational State of), Brasil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Peru, Dominican Republic, Uruguay
Integration with customs	Argentina, Brazil, Colombia, Guatemala, Peru, Venezuela (Bolivarian Republic of)

Source: Cornia, Gómez Sabaíni and Martorano (2011).

The results achieved in these areas are still under evaluation, especially considering that the institutional processes for unifying the different administrative entities are at different stages. Thus, while some countries have achieved physical integration (several functions in a single building), others have achieved database integration, with the merger of the information systems of the different entities in charge of revenues and collections.[68] This trend towards functional integration is also found in representative OECD countries, although with their own specificities in terms of the stage and scope of institutional unification in their respective tax administrations (OECD, 2011).

Finally, as tax administration strategies have evolved, many of the collection responsibilities have been transferred to financial institutions, which provide an extensive network of tax intake points either through direct collections or Internet transfers.

This strategy has required significant efforts to modernize data- and information-processing systems throughout the region and has facilitated the monitoring of delinquent taxpayers that are registered in the administrations' databases, which promotes voluntary compliance. Several countries in the region, including Argentina, Chile and Brazil, have gone a step further in recent years by establishing the electronic filing of income tax statements and VAT declarations (via Internet).

In sum, the administrative improvements also stemmed from new information technologies, which had an effect on the work and capacity of public administration and thus contributed to modernizing operations and reducing costs, corruption and evasion. For example, in Chile "the simplification of the system was indeed accompanied by a noteworthy development in the computerization of the taxation process, which reached in Chile a higher degree than in OECD countries" (Cominetta, 2007). To ensure the optimal application of the new technologies, countries introduced merit-based selection for hiring civil servants. For example, "in Brazil, the strengthening of the meritocracy in the federal government has raised the proportion of officials with university degrees from 39% in 1995 to 63% in 2001. In Costa Rica, about half the jobs in central government are covered by merit-based selection —a result of the relative independence enjoyed by the agency that controls these processes" (Lora, 2007).

[68] Zambrano (2010).

However, international openness, with its effect on the proliferation of multinational companies (both goods producers and financial companies), has led some countries to adopt a series of tax measures aimed at protecting their tax systems from harmful international competition. This includes regulations on transfer prices between related companies (which have been adapted by several Central American countries, Peru and Colombia in recent years), limitations on the interest deduction between local and foreign firms, changes in the jurisdictional principles on income tax and a series of protectionist measures to avoid the harmful effects of tax havens.

Of particular interest for the region's tax administrations are the recent regulatory developments of the U.S. Foreign Account Tax Compliance Act (FATCA); the intergovernmental agreements (IGA) proposed by the United States to facilitate compliance with FATCA by foreign financial institutions without violating local laws in their countries of residence, which aim to establish the automatic and reciprocal exchange of bank information; and the multilateral agreements, which seek to establish three forms of tax information exchange (automatic, spontaneous and "on request"). Similarly, the OECD has very recently proposed a new global standard on the "automatic exchange" of information to address international tax fraud and evasion manoeuvres. Given the unequal and sometimes unclear progress in these areas, all these measures will require changes in the Latin American tax administration in order to adapt their actions to the new challenges.

The phenomena of globalization and regional integration have generated the need to obtain information on taxpayers who operate beyond national borders, which has led to the signing of double taxation agreements and institutional agreements to facilitate the exchange of information between countries, at both the regional and international levels. Here again, however, Latin American countries have implemented this type of tax harmonization instrument to varying degrees. With regard to double taxation agreements, according to CIAT data for December 2013, Latin American countries together had 200 agreements in effect, of which 46 corresponded to Mexico (in addition to 12 information exchange agreements). Venezuela (31), Brazil (31), Chile (25) and Argentina (15) had also signed a number of double taxation agreements, which, like Mexico, mainly involved ties with OECD countries. The members of the Andean Community of Nations have made encouraging progress on various aspects of international taxation. However, the acceptance and implementation of bilateral agreements is still scarce in Central American countries where, despite the recent introduction of various tax reforms, there is a lack of consensus on how to move forward in the direction taken by developed countries on this type of international tax issue.

E. Tax evasion in Latin America: past advances and pending improvements

In Latin America, the main problem facing the national tax systems is undoubtedly the high level of evasion or noncompliance. Many factors contribute to this situation, as described throughout this report, with more in-depth analysis of the elements considered to be the main causes.

The issue of evasion in Latin America is rooted in some elements that have endured over the years throughout the tax tradition of countries in the region. It is associated with the lack of social commitment to the need to generate funds in order to finance social spending, the complexity of the systems for certain economic sectors and, among other reasons, the level of indirect tax rates and the existence of extensive tax benefits and exemptions for certain taxpayers.

The basic distinction between the past and the present is that now there is a greater awareness of the phenomenon as an endemic issue, that must be tackled with all available means, on both the domestic and international fronts.

The region's tax administrations currently face the challenge of the new paradigm analysed above. They have to fight, often with obsolete strategies, new forms of evasion such as money laundering, capital flight, the existence of multinational companies, international tax planning and, even further, the legal restrictions being questioned in many countries on reporting relevant financial information.

However, the problem of tax evasion cannot be addressed solely through improving the tax administration and the mechanisms for overseeing and auditing taxpayers. Rather, it requires taking into account how fiscal attitudes relate to individual actions. In particular, there is a relationship between tax morale and the degree of tax compliance (Torgler, 2007). Thus, the tax administration must be an advocate in raising citizen awareness on the social responsibility involved in duly paying the taxes established by the State. The legitimacy of the State and its institutions condition people's ability to accept their duty to pay taxes, that is, their degree of tax morale (Bergman, 2009).

In the area of tax evasion, what stands out is the obvious lack of knowledge and information. In short, the tax administration agencies in Latin America do not have access to sufficient information to combat this phenomenon. In many cases, the actions pursued amount to little more than swimming in dark waters, occasionally catching something by chance but missing the bigger fish.

In recent years, collections agencies have made significant progress in terms of the available financial resources, the professionalization of the staff and the processing and exchange of information (Gómez Sabaíni and Jiménez, 2011b). While there is still room for improvement, these achievements have contributed to increasing the agencies' efficiency and their capacity to oversee and audit taxpayers.

Nevertheless, the task of quantifying evasion and diffusing the results is still pending. In the region, only a few countries measure evasion regularly and consistently, which seriously impedes surveillance of the problem and the possibility of using this type of information to set goals for reducing non-compliance and to monitor the efficacy and efficiency of the tax administration. Moreover, in the few countries that do conduct a regular measurement, it is generally focused on the VAT, and the sectoral estimates of the VAT and the business income tax are in some cases reserved for internal use, while evasion of other taxes goes practically unanalysed. This is the case in Chile, for example, where the internal revenue service measures VAT evasion annually and has ambitious goals for reducing tax non-compliance, which are set at the government level.

Mexico is a case worth imitating. For many years now, the tax administration service is legally obligated to publish annual studies on tax evasion, with the participation of at least two national academic institutions. The reports published to date have provided a detailed analysis of different aspects of the problem of tax evasion in the country, from both a partial focus, examining some of the main taxes such as the VAT or the income tax, and from a general perspective, looking at the full set of current taxes as a whole.

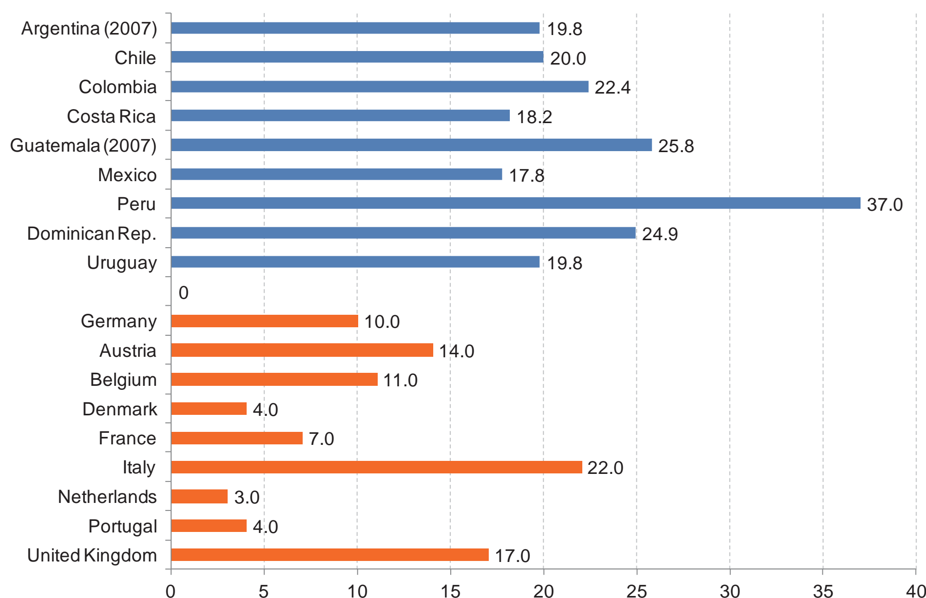
In general, studies on tax evasion focus on quantifying the amount of lost potential resources, and none to date provide a broader analysis of the reasons, circumstances, effects and consequences of the problem. Additionally, in most cases, the results are very sensitive to methodological changes, which in turn are often determined by statistical limitations. Consequently, the lack of consensus on a standard estimation approach impedes the international comparability of the results.

The situation is even worse in the case of direct taxation, where, with few exceptions, there is no information even about the size of the potential gap or the loss of revenue to the Treasury. The existing studies are partial and discontinuous, the methodology changes over the years, and the general results do not contribute the knowledge necessary for clearing the waters. In sum, the challenge of controlling evasion continues to be the eternal problem of tax administration.

This situation is serious enough on its own, given the economic consequences for market development and competitiveness, as well as the inequity it generates since the only ones evading their taxes are the ones who have or consume. An even greater consequence, however, is the impossibility of the State to adequately apply its tax policies in the context of each country and at the necessary time. That is, tax evasion weakens the ability of public policies to carry out changes that drive development and distributive equity and that could avoid the need to apply alternative tax instruments that only generate quantitative benefits in the short term to escape the financial difficulties of the moment.

Some of the available studies in this subject provide interesting results. Figure 7 summarizes a series of results on VAT evasion for a sample of Latin American countries (in 2008) and European countries (in 2006) (Reckon, 2009). Despite advances in the administation and oversight of the VAT, most of the countries continue to record a high level of non-compliance that is well above the rates found in the European countries. In fact, most estimated tax evasion rates stand at around 20% and even exceeds 30% in some countries, such as Guatemala and Peru.

FIGURE 7
VAT EVASION IN LATIN AMERICA, 2008 AND THE OECD, 2006
(Percentages)



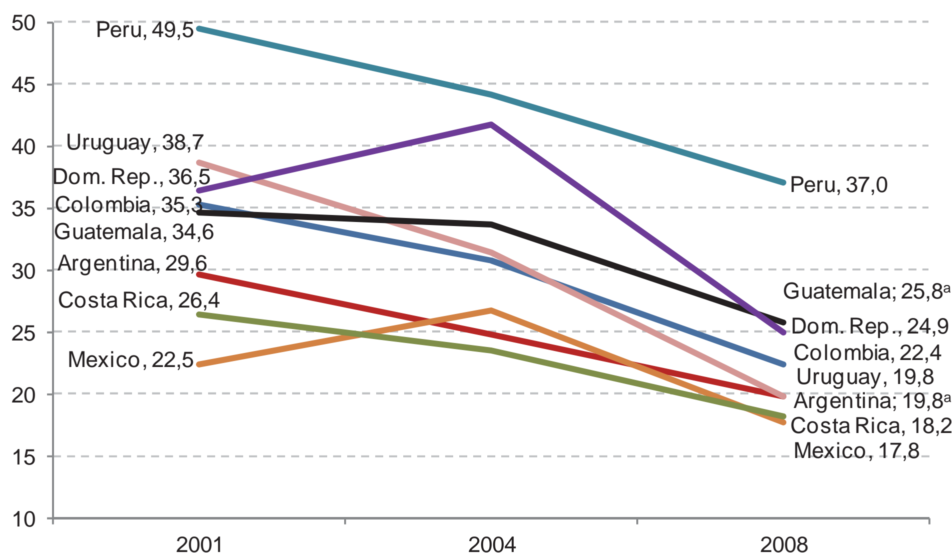
Source: Author's elaboration based on SII (2012), AFIP (2008), SUNAT (2010), DGI (2011), Fuentes Castro *et al.* (2010), SAT (2008), DGII (2008), Contraloría General de la República (2010), Cruz Lasso (2009), for Latin American countries, and Reckon (2009) for countries of the OECD.

Note: For Chile despite the study conducted by the Internal Revenue Service (SII, 2010) for the period 2003-2009, here it was taken as a reference the VAT evasion rate recently recalculated by the IRS, where the new model Input-Output 2008 was used (SII, 2012).

However, some available measures incorportate temporal analysis to show the evolution of non-compliance rates over time, and these point to a gradual reduction of VAT evasion rates since 2000. While evasion probably increased in 2009-2010 due to the international crisis (this, at least, is the impression given by data published in Colombia[69] and Chile[70]), the downward trend reflects the concrete advances in the monitoring of taxpayers by the respective tax administrations (at least with regard to the VAT). Figure 8 illustrates this encouraging trend for a sample of countries in the region.

[69] Cruz Lasso (2011).
[70] SII (2012).

FIGURE 8
THE EVOLUTION OF VAT EVASION RATES IN LATIN AMERICA, 2000-2010
(Percentages)



Source: Own elaboration based on AFIP (2008), SUNAT (2010), DGI (2011), Fuentes Castro *et al.* (2010), SAT (2008), DGII (2008), Contraloría General de la República (2010) and Cruz Lasso (2009).

Note: In the case of Chile, the evasion rates estimated by the SII (2012) show values ranging from 20% to 23% for the period 2008-2011. Since this measurement only covers recent years, the evolution of the evasion rates is not presented in this graph although it should be noted that other estimates (using the Input-Output model of 2003) account for a gradual reduction in the level of non-compliance from a 15% in 2003 to 8% in 2007, increasing sharply in 2008 and 2009 (SII, 2010).

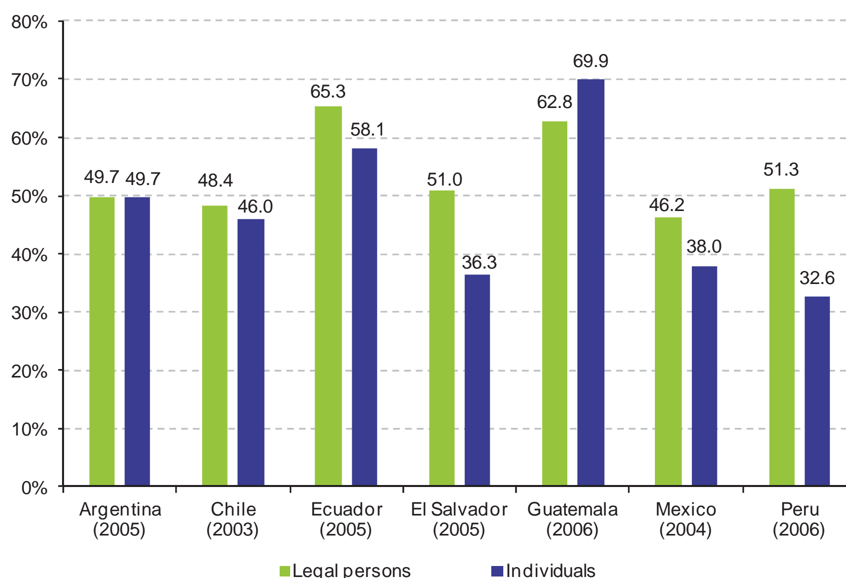
[a] In Argentina and Guatemala, the last available data corresponds to 2007.

As the tax enforcement mechanisms are probably much more limited, tax evasion estimates for the income tax are much scarcer to date and are primarily focused only on corporations. However, a study by Jiménez, Gómez Sabaíni and Podestá (2010) identifies some basic patterns at the regional level. Using a small sample of seven case studies for Latin America[71] (figure 9), they estimate the income tax evasion rates for both individuals and corporations and find that evasion is lower for personal income taxes than for corporate income taxes (with the exception of Guatemala). This particular result could be explained by the high rate of withholding taxes for wage workers, who account for the bulk of personal income tax revenues, since most other sources of income (dividends, interest, income from public securities and captial gains) are exempt from the tax in many countries in the region.

Despite the statistical weaknesses mentioned above, in recent years the severity of the problem has motivated research on tax evasion in the region. One recent contribution in this area is a study by Pecho et al. (2012), who undertook the arduous task of compiling the existing estimates (from both official sources and private organizations) on evasion of the VAT and the business income tax for the majority of Latin American countries. These authors also estimated the non-compliance rate for the business income tax using the theoretical potential method based on the national accounts.

[71] The authors of the case studies are O. Cetrángolo and J.C. Gómez Sabaíni (Argentina), M. Jorratt (Chile), J. Roca (Ecuador), M. Cabrera and V. Guzmán (El Salvador), M. Cabrera (Guatemala), D. Álvarez Estrada (Mexico) and L. A. Arias Minaya (Peru).

FIGURE 9
ESTIMATED INCOME TAX EVASION RATES IN SELECTED COUNTRIES
(Percentages)



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

Beyond the large differences among countries, the study reveals two stylized facts. First, the non-compliance rates for the business income tax are relatively higher than the VAT evasion rates at the regional level, which has to do with the greater efforts —and achievements— of the tax administration over the past few decades. Second, the study confirms that in all countries (except the Dominican Republic), the evasion rates for both taxes appear to have fallen in recent years: a comparison of the simple averages for the region in 2000-2005 and 2006-2010 indicates that evasion rates dropped from 36.1% to 27.3% for the VAT and from 52.5% to 46.4% for the business income tax between the two periods. While this trend is encouraging, efforts to prevent tax evasion need to be redoubled, as in most cases the estimated evasion rates are still unacceptable, especially in terms of the income tax.

IV. Tax reform guidelines for Latin America

A. Current main priorities in the area of taxation

A country's tax system derives from two basic facts: its history and changes over time. While nothing can be done about the former, changes that are introduced to the system are the result of a complex set of political decisions.

What is the appropriate level of tax pressure in any given moment? How much of a redistributive impact is expected from the taxes? How general (or not discretional) must the system be to be considered efficient? What institutional structure is needed to implement the tax decisions adopted? These and many other questions must be negotiated by policy makers and the different actors involved (the executive power, members of congress, pressure groups, civil society, etc.) when faced with the need to adopt reforms that will affect the tax life of each country.

The preceding sections laid out some recent facts about Latin American tax systems, which are already incorporated and are part of the region's tax history. This section asks whether the current situation is satisfactory in terms of the future outlook and, if not, whether the introduction of new reforms is merited.

The reforms introduced in the countries of the region in the 1980s and 1990s addressed certain objectives, such as increasing the revenues generated, simplifying the tax structure and expanding the tax base in pursuit of tax neutrality. As documented by Focanti et al. (2013), VAT reforms were very popular in Latin America in that period, both to expand the tax base and to increase the standard rate, which reinforced the position of the VAT as the main tax at the regional level. Income tax reforms were aimed primarily at reducing the tax rate, especially for individuals. Numerous minor reforms were also introduced to specific taxes on goods and services (selective taxes and tariffs), while a series of tax incentives were cut back in the respective systems.

In recent years, Latin American countries have introduced a series of reforms to strengthen and modernize their tax systems. While these reforms are part of an ongoing process, they stand out for having a definite renewed focus on distribution issues, which contrasts sharply with the spirit of the reforms implemented in the region in past decades toppling strong, well-rooted theoretical conceptions on the potential of public policy in this area.

The redistributive role of the tax system has had to withstand two main theoretical objections, which have long formed the basis for policy recommendations in the more conservative segments of the countries.

First, the paradigm that preferences public spending as a vehicle for redistribution and relegates taxation to a secondary role that is strictly limited to public financing, appears to have become obsolete in the modern debate. According to Agostini (2013), both in developed countries, where direct taxes predominate and have a significant effect on redistribution, and in Latin America, where the tax structure is biased towards indirect taxes and where there is a high evasion rate, the empirical evidence shows that (i) progressive taxes do have the capacity to redistribute income, and when countries change to less progressive taxes, the distribution worsens; (ii) redistribution through the tax system is most efficiently achieved through a progressive income tax; and (iii) as a tool for redistribution, taxes are a complement to targeted social spending, not a substitute. Fortunately, the general consensus in the region has grown in that direction, and there is currently a strong tide of opinion that considers joint action of fiscal policy the right road towards that objective.

Second, while taxes are the most appropriate instrument for financing the provision of public goods by the State and redistributing income, they can generate substantial costs in doing so. Very high, or very progressive, taxes could discourage employment, savings and investment and distort the organization of economic activities. Therein lies the constant dichotomy between the efficiency and equity of the tax system, wherein any effort to reduce inequality generally implies efficiency losses (Okun, 1975).

However, very recent evidence shows the existence of some relationships that, at the very least, cast doubt on the structuring of an oppositional debate between redistribution and economic growth. Ostry et al. (2014) use a standardized database on inequality indicators and redistributive impact (SWIID v.4.0) and reach three interesting conclusions: (i) more unequal societies tend to redistribute more; (ii) less inequality after the implementation of tax policy (or a greater redistributive capacity of tax policy) is strongly correlated with faster, longer-lasting growth processes, for a given level of redistribution; and (iii) after taking direct and indirect effects into account, the redistribution of income appears to be benign in terms of its impact on growth, and the opposite is true only in certain extreme cases. At the same time, it has been argued that high inequality, as in Latin America, has negative effects on economic growth, in terms of both the growth rate and its sustainability in the medium term (Bourguignon and Walton, 2007; Berg and Ostry, 2011).

Even given the statistical limitations of the studies and the lack of a generalized consensus or conclusive empirical evidence, the data show that the dichotomy between redistribution and growth should be taken with caution, and the use of policies that have positive effects on both dimensions should not be limited a priori. In an analysis of OECD countries, Journard et al. (2012) find that some tax reforms can offer double benefits by strengthening medium-term economic growth processes while also reducing market income inequality, similar to what has been the case with education and labor policies. However, many of the tax measures that are considered necessary in Latin American countries can imply trade-offs between the two policy objectives. Ultimately, the final result of these complementarities will depend in each case on the depth of the measures adopted, on the degree of moderation in their implementation and, most importantly, on the time horizon for achieving the proposed objectives, all of which affect the incentives and behaviour of economic agents.

Before developing any proposals, a caveat is in order. Throughout this report, we have shown that some of the characteristics described are found fairly frequently in the majority of the region's tax systems, although some countries also display individual characteristics, such as the strong dependence on revenues from non-renewable natural resources, and some sub-regions share a range of economic and institutional similarities, as in Central America. This has allowed us to identify the main general trends in tax policy that differentiate Latin America from other world regions, especially relative to developed countries.

At the same time, the paper has emphasized that any analysis of taxation in Latin America must take into account the high degree of diversity or heterogeneity among the countries, which can vary substantially in terms of the level and composition of tax revenues, the degree of decentralization, the size of the pension system and other features. Recognizing these differences is essential both for

carrying out an adequate assessment that identifies the key weaknesses and for designing reform strategies that can be adapted to the particular needs in each case.

Given this regional heterogeneity, care must be taken in laying out general reform guidelines. The specificity of the cases analysed goes against the development of a one-size-fits-all recipe for all the countries in the region. Rather, some of tax policy options will apply to all the countries, some to the majority, and some to just a group of Latin American countries that share some common characteristics in their tax systems that merit the introduction of changes to the current situation.

Consequently, any tax reform proposal needs, as a fundamental first step, to establish certain basic objectives so that the countries of the region can adapt their respective tax systems in accordance with their specific domestic context. Specifically, reform proposals should aim to include improvements in the following areas:

- Adjust the level of tax revenues to ensure macroeconomic stabilization and allow the genuine financing of public spending required by the society.
- Reinforce the role of fiscal policy as a redistributive tool, in terms of both public spending programs and the impact of taxes on the distribution of market income. With regard to the former, priorities include increasing the quality of education and health, expanding the coverage of public pension systems and improving the targeting of transfers. For taxes, the focus should be on strengthening the redistributive impact of income and wealth taxes, expanding the existing tax base and reducing tax evasion (Bastagli et al., 2012).
- Place a priority on the principles of horizontal and vertical equity in taxation so as to improve both citizens' acceptance of the tax system and the positive impact on economic growth of a better distribution of income among the different income brackets. In this regard, the recent phenomenon of a growing middle class in Latin American countries (Ferreira et al., 2012) requires governments to reinforce the personal income tax in order to adequately tax these sectors and thereby improve distributive equity.
- Ensure the financing of subnational governments and promote the principle of shared responsibility through the wealth tax and an adequate complementarity in income and sales taxes between the central and local governments.
- Reduce income volatility and dependence on income from natural resource exploitation in countries that specialize in these commodities to avoid possible negative effects on the financing of public spending in the face of changes in international market prices.
- Make employment and labor formalization policies viable, taking advantage of the available tax tools focused on small taxpayers, which would have positive effects in terms of controlling evasion, given the close link with informality in the region.
- Improve local and international competitiveness in order to boost economic growth, increasing economic efficiency and avoiding the distortions caused by discretional tax measures, except where necessary to correct market failures.
- Stimulate constant assessment of the efficiency and efficacy of the tax administration in order to be able to identify the main achievements and the more prominent deficiencies over time.

B. Tax reform proposals for the countries in the region

As shown in previous sections, the basic pillars of taxation in all countries, whether developed or developing, are the income tax and consumption taxes. Over the last three decades, reform measures have focused on expanding and strengthening the VAT. Thus, the main instrument for generating tax revenues at the regional level appears to have reached an acceptable level of maturity in most cases (although some countries such as Mexico have a long way to go in terms of the tax design). Going

forward, efforts should centre on introducing alternatives to mitigate the regressive impact of the VAT, for example, through compensation via conditional transfer programmes for lower-income households.[72]

Without discouraging the introduction of improvements in VAT compliance, the imbalance between direct and indirect taxes that has characterized the countries of the region for many years needs to be gradually corrected. To achieve this, the weight of a second generation of tax reforms in Latin America should essentially be concentrated on the income tax, for both individuals and businesses or corporations, and complemented by a strengthening of the wealth tax.

The dynamics of this reform process should be adapted to the particular circumstances of each country, but all countries should work towards the gradual implementation of a synthetic or global income tax, where all types of income are treated progressively. In the short term, however, a country may choose to apply a scheme that differentiates between types of income for a given period. The main guidelines for the proposed tax reforms are as follows:

- The low redistributive effect is one of the main shortcomings of the tax systems in Latin America. To change that, it is imperative to increase the weight of direct taxation in the tax structure. Thus, strengthening the personal income tax represents the main challenge for all the countries in the region, and that requires taking two parallel paths. First, the tax base for this tax must cover all income flows perceived by the taxpayer, whether from wage labor, business activity, financial operations or mixed sources. That is, it is necessary to expand and effectuate the broad, general application of the principal of horizontal equity in terms of the tax base. Second, the structure and level of the tax rates to be applied in each case can be subject to a number of considerations. While some countries have opted for a dual tax structure (moderately progressive for labor income and proportional, with a lower rate, for capital income), a regime that on its own does not address horizontal equity, others have maintained a single rate for all types of income (although, in some cases, capital gains are excluded from the income tax base and are subject to special treatment).

- The capacity for an efficient tax administration and the desired distributive impact are the variables that will determine the type of tax used. The dual scheme, which has recently been adopted by countries such as Uruguay, Peru and most of Central America, constitutes a mid-point between the adverse current situation of the personal income tax and a "final destination" represented by a global tax scheme that effectively reflects the principles of horizontal and vertical equity. The concrete proposal is thus based on consolidating all the income of a given taxpayer, from both labor and capital income, under a single progressive rate treatment. Corporate dividends and financial (interest) income should also be equalized in terms of their tax treatment in order to avoid biases in the financing structure of business projects. In the interim, the dual system can represent a step in the right direction, to break down the strong political-economic barriers the generalization of the tax structure in many of the countries of Latin America.

- The development of information technologies and the management of large databases, together with systems for withholding at the source, now allow a tax design that was outside the reach of Latin American tax administrations until just a few decades ago. Additionally, the possibilities for exchanging information among countries expand their sphere of influence even further and push out the frontier for tax monitoring. Therefore, the best rate structure for each country should not be conditioned exclusively on administrative issues, but rather should be the result of an exchange between the different sectors involved in the tax reform process.

- In view of the results, some countries need to lower the threshold for applying the personal income tax, at least to a level that is in line with their per capita GDP. This would expand the tax base, incorporate a numerous group of upper-middle-class taxpayers and improve the redistributive capacity of taxation. Given the importance of this issue for the general

[72] Barreix et al. (2010) discuss different alternatives for achieving this objective.

population, it should be considered a key point on the fiscal pact agenda, and the joint participation of direct and indirect taxation should be debated. Similarly, lowering the income level for applying the top rate can lead to gains in progressivity. This can be accompanied by the elimination or reduction of allowable deductions that increase in line with income (for example, interest on home mortgages); alternatively, they can be treated as a credit against the tax due instead of being deducted from the tax base.

- To maintain the personal character of the individual income tax, the specific design of the tax should emphasize the taxpayer's family structure and other personal characteristics. Recognizing these factors is essential since they are key determinants of both the tax capacity and the progressive tax incidence of the tax. In past decades, many countries sought to simplify their tax administration by eliminating these personal characteristics, without taking into account (or simply ignoring) the fact that this implied an erosion of the basic features of the individual income tax. In this regard, the data on personal income tax collection and estimated evasion rates in no way indicate that this was the right approach or that tax administrations have been more successful in achieving greater compliance on this tax.
- In addition, the treatment of regular personal income should be complemented with a tax on capital gains, which are occasional. Business income does not need to be differentiated by regular versus occasional income, since it is assumed that all income has been earned in the line of business and with the objective of generating profits over the course of the period; that is, a broad definition of business income is recommended. In the case of individuals, capital gains are paid at a given point in time, but they accrue over several years. Consequently, a proportional rate, related to average regular income, is more equitable than a progressive rate.
- Future reforms should also focus on carrying out a detailed cost-benefit analysis on maintaining the multiple series of tax incentives and special treatments that are currently in force in Latin America. After years of use, there is still a lot of uncertainty about the results of these programs. It is known that tax expenditures complicate tax administration, promote corruption to be granted the concessions and stimulate tax fraud strategies, in addition to having a clearly regressive impact on the system. It must therefore be a priority to produce assessment reports on the effects of these special regimes in order to determine beyond a doubt whether they are justified given the high revenue costs they imply for the Treasury. Furthermore, the additional tax revenues would provide some fiscal space for reducing business income tax rates, thereby promoting domestic and foreign direct investment.
- The globalization process has changed the way income tax reform is considered, proposed and implemented. It would currently be impossible not to take into consideration the different mechanisms available for establishing that the income earned in the country is effectively taxed where it was generated and is not transferred to other jurisdictions through transfer prices between related companies or that the tax bases are not emptied of content via interest deductions through harmful tax planning by multinational companies. The reform process thus needs to incorporate a broad set of provisions on these and other dimensions that are absolutely indispensible for carrying out the reform. In this regard, the OECD member countries (and the majority of the European Union) have moved forward with a series of recommendations on international taxation that are highly useful for trying to avoid harmful fiscal practices in a globalized context. The recommended measures include the following (OECD, 1998): (i) the restriction of deduction for payments to tax haven entities; (ii) the imposition of withholding taxes on certain payments to residents of those countries; (iii) the modification of the definition of corporate residence to counteract the use of foreign corporations to avoid domestic tax; (iv) the effective application (and incorporation in the tax legislation) of transfer pricing rules; (v) the introduction of rules to avoid the thin capitalization of resident companies by non-residents and prevent the tax-free repatriation of domestic profits to entities that may be located in tax havens or in countries with preferential tax regimes for interest income from foreign subsidiaries; (vi) the monitoring of innovative financial products that can be used to avoid the due payment of tax obligations; (vii) the

adoption of rules to increase the exchange of information between countries and access to bank information for tax purposes; and (viii) the development of coordinated compliance programmes with regard to income or taxpayers who benefit from harmful tax competition.

- Given the importance and degree of openness that foreign trade and financial operations have acquired in all the countries in the region, it would be regretful to try to expand the tax base without first making progress on modifying the countries' tax border in order to include operations conducted outside their territory. One item on the agenda should therefore be to change the source criterion (national income) in order to include all income generated in the country (resident and non-resident) as well as income earned by residents overseas, that is, effectively adopting the principle of global income, especially in the case of passive income. Given the difficulties in defining the tax base allocation criteria among companies, it is considered best to extend the jurisdictional principle only for passive income (that is, income generated from operations related to financial investments), as is the case in several countries in the region.
- In order to strengthen the growth of the economy's global investment rate, even given the doubts about its effectiveness, and thus to dispense with the granting of tax concessions based on tax benefits, countries should gradually move towards a reduction in the tax rates on business profits, combined with an increase in the tax rate on dividends, with a credit for the income tax paid by the company. Under this system, the combined rate would not fluctuate substantially, while the desired objectives would be achieved. These changes must also be coordinated with the treatment of other financial income in order to avoid arbitrage that distorts the sources of business financing.
- Special attention must be given to the taxation of specific activities or sectors. The taxation of income from financial activities and the exploitation of natural resources, for example, could require a different set of special tax regulations due to the particular characteristics of these activities. There are many possible alternatives in each particular case, and it is not feasible in this report to define precise criteria beyond highlighting the need for a more detailed analysis.[73]
- As part of a necessary process of strengthening tax decentralization, the countries of the region must make a serious effort to reassess the role of the wealth tax as a source of subnational resources. In the vast majority of cases, the problems are the same, and they can be addressed through a series of general recommendations such as the expansion of the tax base (eliminating exemptions and special treatment), an increase in rates and the modernization of the tax register and the subnational tax administration. Given the strong dependence on central government transfers, it is critical to reinforce the institutional capacity and incentives of local governments to increase the volume of their own resources. Alternatives such as the allocation of new tax authority (surcharge rates on the income tax, the VAT or selective taxes) should be explored in the framework of a mutual commitment between the different levels of government.
- To foster the equity that should characterize the tax system and despite the arduous political negotiations it implies, the application of a tax on the free transfer of goods (gifts, estate and inheritance) should be more seriously considered. Whether defined as a national tax (as in Chile, Ecuador and Uruguay) or a subnational tax (as in Brazil and Argentina), the importance of this type of levy (which is in effect in most developed countries) does not derive from its generally small revenues, but from its low efficiency costs and clearly progressive impact on the income distribution. Therefore, it is essential to secure a tax design that is both personal and global, with minimal exemptions.

[73] These issues were analysed in the recent seminar, "Taxation and Economic Growth in Latin America", organized by the CIAT, the IMF and the Brazilian Federal Revenue Authority. Available online at *http://www.imf.org/external/np/seminars/eng/2012/taxecon/index.htm.*

- Given the high levels of informality in the region, it is necessary to consider the possibility of using tax instruments not only to increase tax collections, but to facilitate the process of formalizing small taxpayers (including microenterprises and independent workers), in order to register their activities and enable their incorporation in social protection schemes. Argentina, Brazil and Uruguay have achieved encouraging results in terms of formalizing taxpayers, after designing simplified tax regimes that, in addition to substituting a series of taxes, include provisions for basic pension coverage and, in some cases, health insurance. However, in order to avoid inequity and tax distortions, these instruments should be conceived as a "temporary bridge" for transitioning from informality to voluntary compliance in the countries where they are applied, limiting the requirements and benefits granted, attaining a steady reduction in the duration of the taxpayers' participation in these systems and ultimately tending towards their exit from the program in the long term (given that a broad general regime better respects the conditions of equity and tax neutrality).
- To address the growing social concerns about the harmful effects of environmental pollution and traffic congestion in the main urban centers of Latin America, environmental taxes offer some advantages —within the wide range of available instruments— that deserve to be considered in future tax reforms. Taking a number of OECD countries as a point of reference, concrete efforts could be make to strengthen the link between the motor vehicles tax (the most representative of this type of taxes) and environmental policies through the adaptation of traditional taxes to reflect motor fuel efficiency, gas emissions, urban planning and transport policies. Given the diversity of criteria applied, countries should establish harmonized rules on the registration and tax treatment of motor vehicles. In addition to trying to change the harmful behavior of private agents, the possibility of obtaining additional tax revenues would increase the fiscal space of several countries in the region, even implementing compensatory measures to eliminate possible regressive effects of these taxes (fuels) on the lower-income segments of the population.
- Much can be done to address the issue of tax evasion. Periodic estimates and public diffusion of tax non-compliance are necessary for all the taxes applied. For the personal income tax in particular, regular studies must be institutionalized, conducted either by a public entity specializing in this type of work or by public or private researchers (universities preferably). At the same time, reducing tax evasion critically requires strengthening the legal powers and enforcement capacities of the national tax administration in order to effectively monitor multinational corporations. Current international efforts to eliminate bank secrecy and promote the automatic exchange of information between tax administrations are crucial measures for achieving steady progress in the fight against tax evasion.
- Finally, tax reforms that are put forth as necessary in Latin American countries not only require higher efforts on the specific design of current taxes, but also hinge on the taxpayers' perception of the "justice" of the tax system and the State's efficient use of the resources obtained from its application. Thus, the high levels of tax evasion that affect the countries of the region can only be reduced if, in addition to improving the tax administrations' efficiency in monitoring and auditing taxpayers, the governments commit to respecting the fiscal pact with its citizens based on reciprocity and the consolidation of its institutions.
- A second generation of tax system reform in Latin America cannot be a fast or easy task. To be successful and to ensure that the changes are permanent, it must occur within a complex process of political negotiation (fiscal pact) between different social actors, in a framework of consensus on the fundamental objectives —beyond increasing the available resources— that will govern the State's public finances in future years. Any satisfactory first step that helps overcome current obstacles and tends towards the medium-term horizon would be welcome and can be taken as a point of reference by the other countries in the region, which should adapt them to their own specific economic, social and institutional context.

Bibliography

AFIP (Argentine Tax and Revenue Agency) (2008), “Estimación del incumplimiento en el IVA”, Buenos Aires, June.

Aghón, Gabriel and Hubert Edling (eds.) (1997), *Descentralización fiscal en América Latina: nuevos desafíos y agenda de trabajo* (LC/L.1051), Santiago, Chile, Economic Commission for Latin America and the Caribbean/German Agency for Technical Cooperation (ECLAC/GTZ), August.

Agosín, M., A. Barreix, and R. Machado (2005), *Recaudar para crecer: bases para la reforma tributaria en Centroamérica*, Washington, D.C., Inter-American Development Bank (IDB).

Agostini, C. (2013), “Una reforma eficiente y equitativa del impuesto al ingreso en Chile”, *Tributación para el desarrollo. Estudios para la reforma del sistema chileno*, J.P Arellano and V. Corbo (eds.), Santiago, Chile, Centro de Estudios Públicos (CEP)/Corporation of Studies for Latin America (CIEPLAN), January.

Alvaredo, F. (2010), “The rich in Argentina over the twentieth century, 1932-2004”, *Top Incomes: A Global Perspective*, Anthony B. Atkinson and Thomas Piketty (eds.), Oxford, Oxford University Press.

Alvaredo, F. and J. Londoño (2013), “High incomes and personal taxation in a developing economy: Colombia 1993-2010”, *Working Paper*, No. 12, Commitment to Equity Project, Center for Inter-American Policy and Research, Tulane University.

Amarante, V., R. Arim and G. Salas (2007), “Impacto distributivo de la reforma impositiva en Uruguay”, paper prepared for Poverty and Social Impact Analysis (PSIA)-Uruguay Development Policy Loan (DPL) II.

Aquatella, J. (2012), “Rentas de recursos naturales no-renovables en América Latina y el Caribe: evolución 1990–2010 y participación estatal”, paper presented at the Seminar Natural Resources Governance in Latin America and the Caribbean, Santiago, Chile, 24-25 April.

Baer, K. (2006), “La administración tributaria en América Latina: algunas tendencias y desafíos”, *Tributación en América Latina. En busca de una nueva agenda de reformas* (LC/G.2324-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), December.

Bahl, R. and J. Martínez-Vázquez (2007), “The property tax in developing countries: current practice and prospects”, *Working Paper*, No. WP07RB1, Lincoln Institute of Land Policy.

Barde, J.P. (2005), “Reformas tributarias ambientales en países de la Organización de Cooperación y Desarrollo Económicos (OCDE)”, *Política fiscal y medio ambiente: bases para una agenda común*, Libros de la CEPAL, No. 85 (LC/G.2274-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC). United Nations publication, Sales Nº S.05.II.G.140.

Barreix, A. and J. Roca (2007), "Strengthening a fiscal pillar: the Uruguayan dual income tax", *CEPAL Review*, No. 92 (LC/G.2339-P/E), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), August.

Barreix, A., M. Bès and J. Roca (2009), *Equidad fiscal en Centroamérica, Panamá y República Dominicana*, Inter-American Development Bank (IDB)/EUROsociAL.

_____ (2010), "El IVA personalizado. Aumentando la recaudación y compensando a los más pobres", Joint project Inter-American Development Bank, Fiscal Studies Institute, EUROsociAL and Planning and Budget Office of Uruguay, July.

Barreix, A., C. Garcimartín and F. Velayos (2012), "El impuesto sobre la renta personal: un cascarón vaciado", *Desarrollo en las Américas (DIA): el futuro de los impuestos en América Latina y el Caribe*, Washington, D.C., Inter-American Development Bank (IDB), forthcoming.

Barreix, A., J. Roca and L. Villela (2006), "La equidad fiscal en los países andinos", Inter-American Development Bank (IDB)/EUROsociAL.

Bastagli, F., D. Coady and S. Gupta (2012), "Income inequality and fiscal policy", *IMF Staff Discussion Note*, No. 12/08 (Revised), Washington, D.C., September.

Berg, A. and J. Ostry (2011), "Inequality and unsustainable growth: two sides of the same coin?", *IMF Staff Discussion Note*, No. 11/08, Washington, D.C., April.

Bergman, M. (2009), *Tax Evasion & The Rule of Law in Latin America*, Pennsylvania State University Press, University Park, Pennsylvania.

BID-CIAT (Banco Interamericano de Desarrollo – Centro Interamericano de Administraciones Tributarias) (2012), "Carga fiscal ajustada de América Latina y el Caribe", Base de datos.

Bird, R. (2003), "Taxation in Latin America: reflections on sustainability and the balance between equity and efficiency", *International Tax Program Papers*, No. 0306, J.L. Rotman School of Management, University of Toronto.

Bird, R. and E. Zolt (2005), "Rethinking redistribution: tax policy in an era of rising inequality", *UCLA Law Review*, vol. 52.

Bourguignon, F. and M. Walton (2007), "Is greater equity necessary for higher long-term growth in Latin America?", *Economic Growth with Equity: The Challenges for Latin America*, R. French-Davis and J.L. Machinea (eds.), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC).

Brosio, G. and J. P. Jiménez (2010), "The intergovernmental assignment of revenue from natural resources: a difficult balance between centralism and threats to national unity", Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), unpublished [online] http://www.eclac.cl/ilpes/noticias/paginas/1/41751/brosio_jimenez_fiscal_policy_seminar.pdf.

Burdín, G., F. Esponda and A. Vigorito (2013), "Desigualdad y altos ingresos en Uruguay. Un análisis en base a registros tributarios y encuestas de hogares para el periodo 2009–2011" [online] http://www.cef.org.uy/images/TallerDesigualdad2013/desigualdadyaltosingresos.pdf.

CAF (Development Bank of Latin America) (2012), *Finanzas públicas para el desarrollo: fortaleciendo la conexión entre ingresos y gastos*, Bogota, May.

Cantallopts, J., M. Jorratt and D. Sherman (2007), "Equidad tributaria en Chile: un nuevo modelo para evaluar alternativas de reforma" [online] http://siteresources.worldbank.org/PSGLP/Resources/Jorrat.pdf.

Cetrángolo, O. (ed.) (2009), "La seguridad social en América Latina y el Caribe. Una propuesta metodológica para su medición y aplicación a los casos de Argentina, Chile y Colombia", *Project Documents*, No. 258 (LC/W.258), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), May.

Cetrángolo, O. and others (2013), "Regímenes tributarios simplificados e informalidad en América Latina, con especial referencia a los casos de Argentina, Brasil y Uruguay", Lima, FORLAC Programme, International Labour Organization (ILO), December, unpublished.

Cetrángolo, O. and J.C. Gómez Sabaíni (2007), "La tributación directa en América Latina y los desafíos a la imposición directa en América Latina", *Macroeconomía del Desarrollo series*, No. 60 (LC/L.2838-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), December.

Cetrángolo, O., J.C. Gómez Sabaíni and P. Velasco (2012), "Los caminos alternativos elegidos para aumentar el nivel de carga tributaria en los países de la región", Inter-American Development Bank (IDB), unpublished.

Cetrángolo, O., J.P. Jiménez and A. Goldschmit (2009), "El financiamiento de políticas para la cohesión social y descentralización en América Latina" [online] http://www.urb-al3.eu/uploads/descargas/financiacion.pdf.

CIAT (Inter-American Centre for Tax Administrators) (2011), *Manual de buenas prácticas en la medición de gastos tributarios: una experiencia iberoamericana*, Panama City.

Coelho, I. (2009), "Taxing bank transactions. The experience in Latin America and elsewhere", paper presented at the Third International Tax Dialogue (ITD) Conference, Beijing, October.

Coelho, I., L. Ebrill and V. Summers (2001), "Bank debit taxes in Latin America: an analysis of recent trends", *IMF Working Paper*, No. WP/01/67, Washington, D.C., International Monetary Fund (IMF).

Cominetta, M. (2007), "Chile", *Tax Systems and Tax Reforms in Latin America: Country Studies*, L. Bernardi and others (eds.), MPRA Paper, No. 5223.

Cornia, G.A. (2013), "Inequality trends and their determinants: Latin America over the period 1990–2010", *Falling Inequality in Latin America. Policy Changes and Lessons*, G. Cornia (ed.), Oxford University Press.

Cornia, G.A, J.C. Gómez Sabaíni and B. Martorano (2011), "New fiscal pact, tax policy changes and income inequality: Latin America during the last decade", *Working Paper*, No. 2011/70, World Institute for Development Economics Research (WIDER), United Nations University, November.

Cruces, G. and L. Gasparini (2008), "A distribution in motion: the case of Argentina", *Working Papers*, No. 0078, Center for Distributive, Labour and Social Studies (CEDLAS), Universidad Nacional de La Plata, November.

Cruz Lasso, A. (2011), "Medición de la evasión del IVA en Colombia. Actualización nueva base de cuentas nacionales 2005. Suplemento: período 2005–2010", *Documento Web*, No. 043, Cuadernos de Trabajo, Directorate of Customs and National Taxes (DIAN), July.

______ (2009), "Evasión del Impuesto al Valor Agregado (IVA) en Colombia: 2000 – 2008. Versión 2. Actualización con la nueva base de cuentas nacionales año 2000", *Documento Web*, No. 036, Cuadernos de Trabajo, Directorate of Customs and National Taxes (DIAN), September.

Cubero, R. and I. Vladkova Hollar (2010), "Equity and fiscal policy: the income distribution effects of taxation and social spending in Central America", *IMF Working Paper*, No. WP/10/112.

De Cesare, C.M. and J.F. Lazo Marín (2008), "Impuestos a los patrimonios en América Latina" *Macroeconomía del Desarrollo series*, No. 66 (LC/L.2902-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), May.

DGI (Tax Administration Department) (2011), "Estimación de la evasión en el impuesto al valor agregado mediante el Método del Consumo. 2000–2010. Asesoría económica", Montevideo, November.

DGII (Directorate General of Internal Revenue) of Dominican Republic (2008), "Análisis de la recaudación. Enero – diciembre 2007", *Estudios Económicos y Tributarios*, January.

Ebrill, L. and others (2001), *The Modern VAT*, Washington, D.C., International Monetary Fund (IMF).

ECLAC (Economic Commission for Latin America and the Caribbean) (2014), *Panorama Fiscal de América Latina y el Caribe 2014: hacia una mayor calidad de las finanzas públicas* (LC/L.3766), Santiago, Chile, January.

______ (2013), *Fiscal Panorama of Latin America and the Caribbean: tax reform and renewal of the fiscal covenant* (LC/L.3580), Santiago, Chile, February.

______ (2010), *Time for equality: closing gaps, opening trails* (LC/G.2432(SES.33/3)), Santiago, Chile.

______ (2006), *Shaping the Future of Social Protection: Access, Financing and Solidarity* (LC/G.2294(SES.31/3)), Santiago, Chile.

Engel, E., A. Galetovic and C. Raddatz (1998), "Taxes and income distribution in Chile: some unpleasant redistributive arithmetic", *NBER Working Paper*, No. 6828.

European Union (2012), *Taxation Trends in the European Union. 2012 Edition*, Brussels, Directorate-General for Taxation and Customs Union (DG TAXUD)/Eurostat.

Fenochietto, R. and C. Pessino (2010), "Determining countries' tax effort", *Review of Public Economics*, vol.195, No. (4/2010), Hacienda Pública Española.

Ferreira, F.H.G. and others (2012), *Economic Mobility and the Rise of the Latin American Middle Class*, Washington, D.C., World Bank.

Fjeldstad, O., L. Katera and E. Ngalewa (2009), "Maybe we should pay tax after all? Citizens' views on taxation in Tanzania", *REPOA Special Paper*, No. 29.

Focanti, D., M. Hallerberg and C. Scartascini (2013), "Tax reforms in Latin America in an era of democracy", *IDB Working Paper Series*, No. IDB-WP-457, December.

Fuentes Castro, H. and others (2011), "Estudio de evasión fiscal en el régimen de pequeños contribuyentes", Mexico City, Monterrey Institute of Advanced Technological Studies (ITESM), October.

Fullerton, D., A. Leicester, S. Smith (2008), "Environmental taxes", *NBER Working Paper*, No. 14197, Cambridge, Massachussets, July.

Gaiger Silveira, F. and others (2013), "Fiscal equity: distributional impacts of taxation and social spending in Brazil', *IPC-IG Working Paper*, No. 115, Brasilia, International Policy Centre for Inclusive Growth, United Nations Development Programme (UNDP)/Government of Brazil, October.

Gasparini, L., and others (2009), "A turning point? recent developments on inequality in Latin America and the Caribbean", *CEDLAS Working Papers*, No. 0081, Center for Distributive, Labour and Social Studies (CEDLAS), Universidad Nacional de La Plata.

Gerxhani, K. (2004), "The informal sector in developed and less developed countries: a literature survey", *Public Choice*, vol. 120, No. 3-4, Springer.

Gómez Sabaíni, J.C. (2011), "Tributación en América Latina: ¿Qué hemos aprendido? (Un análisis del período 1990/2009)", paper prepared for the project "The future of taxation in Latin America and the Caribbean", Washington, D.C., Inter-American Development Bank (IDB), November.

______ (2006), "Cohesión social, equidad y tributación. Análisis y perspectivas para América Latina", *Políticas sociales series*, No. 127 (LC/L.2641-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC).

Gómez Sabaíni, J.C. and D. Morán (2012), "Informalidad y tributación en América Latina: explorando los nexos para mejorar la equidad", *Macroeconomía del Desarrollo series*, No. 124 (LC/L.3534), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), September.

Gómez Sabaíni, J.C. and D. Rossignolo (2014), "La tributación sobre las altas rentas en América Latina", *Estudios y Perspectivas series*, No. 13 (LC/L.3760), Montevideo, ECLAC office in Montevideo.

Gómez Sabaíni, J.C. and J.P. Jiménez (2011a), "El financiamiento de los gobiernos subnacionales en América Latina: un análisis de casos", *Macroeconomía del Desarrollo series*, No. 111 (LC/L.3336), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), May.

______ (2011b), "Estructura tributaria y evasión impositiva en América Latina", *Documento de Trabajo*, No. 2011/08, Latin American Development Bank (CAF), August.

Gómez Sabaíni, J.C., J.P. Jiménez and D. Rossignolo (2012), "Imposición a la renta personal y equidad en América Latina: nuevos desafíos", *Macroeconomía del Desarrollo series*, No. 119 (LC/L.3477), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), April.

Gómez Sabaíni, J.C., M. Harriague and D. Rossignolo (2013), "La situación fiscal en Argentina y sus efectos sobre la distribución del ingreso. Una estimación para el año 2008", *Revista Desarrollo Económico*, vol. 52, No. 207–208, Buenos Aires.

González, D. (2009), "La política tributaria heterodoxa en los países de América Latina", *Gestión Pública series*, No. 70 (LC/IP/L.298), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), January.

Goñi, E., López, H. and L. Servén (2008), "Fiscal redistribution and income inequality in Latin America", *Policy Research Working Paper*, No. 4487, World Bank, January.

Goulder, L.H. (1995), "Environmental taxation and the double dividend: a reader's guide", *International Tax and Public Finance*, vol. 2, No. 2, August.

Graetz, M. and E. Sunley (1988), "Minimum taxes and comprehensive tax reform", *Uneasy Compromise: Problems of a Hybrid Income-Consumption Tax*, H.J. Aaron, H. Galper and J. Pechman (eds.), Washington, D.C., The Brookings Institution.

Gutiérrez, P. and others (eds.) (2010), *Global Corporate Tax Handbook 2010*, Amsterdam, IBFD.

Hines, J.R. Jr. and L.H. Summers (2009), "How globalization affects tax design", *NBER Working Papers*, No. 14664, Cambridge, January.

Huber, E. (2009), "Including the middle classes? Latin American social policies after the Washington Consensus", *Doing Good or Doing Better: Development Policies in a Globalizing World*, M. Kremer, P. van Lieshout and R. Went (eds.), Amsterdam, Amsterdam University Press.

ICEFI (Central American Institute for Fiscal Studies) (2011), "Evolución de las reformas tributarias recientes en América Central", *Boletín de Estudios Fiscales*, No. 14, August.

IADB (Inter-American Development Bank) (2008), *IADB/IMF International Seminar on Tax Expenditures. Summary of Discussions and Presentations*, Washington, D.C., November.

International Tax Dialogue (2007), "Taxation of small and medium enterprises", Background paper for the International Tax Dialogue Conference, Buenos Aires, October [online] http://www.itdweb.org/documents/itd%20global%20conference%20-%20background%20paper.pdf.

Jenkins, G.P. (1995), "Tax reform: lesson learned", *Development Discussion Paper*, No. 281.

Jiménez, J.P. and A. Podestá (2009a), "Las relaciones fiscales intergubernamentales y las finanzas subnacionales ante la crisis" (LC/R.2155), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), September.

______ (2009b), "Inversión, incentivos fiscales y gastos tributarios en América Latina", *Macroeconomía del Desarrollo series*, No. 77 (LC/L.3004-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC).

Jiménez, J.P. and J. Viñuela (2004), "Marco institucional para la gestión del gasto público en países descentralizados", Department of Public Finances, International Monetary Fund (IMF).

Jiménez, J.P. and V. Tromben (2006), "Política fiscal en países especializados en productos no renovables en América Latina", *Macroeconomía del Desarrollo series*, No. 46 (LC/L.2521-P/E), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), April.

Jiménez, Juan Pablo, Juan Carlos Gómez Sabaíni and Andrea Podestá (comps.) (2010), "Evasión y equidad en América Latina", *Project documents*, No. 309 (LC/W.309/Rev.1), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC)/German Agency for Technical Cooperation (GTZ).

Jorratt, M. (2011), "Evaluando la equidad vertical y horizontal en el impuesto al valor agregado y el impuesto a la renta: el impacto de reformas tributarias potenciales. Los casos del Ecuador, Guatemala y el Paraguay", *Macroeconomía del Desarrollo series*, No. 113 (LC/L.3347), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC).

______ (2010), "Equidad fiscal en Chile. Un análisis de la incidencia distributiva de los impuestos y el gasto social", *Equidad Fiscal en Brasil, Chile, Paraguay y Uruguay*, Inter-American Development Bank (IDB)/EUROsociAL.

Joumard, I., M. Pisu and D. Bloch (2012), "Less income inequality and more growth – are they compatible? Part 3. Income redistribution via taxes and transfers across OECD countries", *OECD Economics Department Working Papers*, No. 926, Paris, OECD Publishing.

Kaldor, N. (1962), "The role of taxation in economic development" (UNESCO/SS/PED/11) [online] http://unesdoc.unesco.org/images/0015/001576/157615eb.pdf.

Levy, S. (2008), *Good Intentions, Bad Outcomes: Social Policy, Informality, and Economic Growth in Mexico*, Washington D.C., Brookings Institution Press.

López, R., E. Figueroa and P. Gutiérrez (2013), "La 'parte del león': nuevas estimaciones de la participación de los súper ricos en el ingreso de Chile", *Serie de Documentos de Trabajo*, No. STD 379, Faculty of Economics and Business, Department of Economics, University of Chile.

López-Calva, L. and N. Lustig (2010), "Explaining the decline in inequality in Latin America: technological change, educational upgrading and democracy", *Declining Inequality in Latin America: a Decade of Progress?*, L. López-Calva and N. Lustig (eds.), Brookings Institution Press/ United Nations Development Programme (UNDP).

Lora, E. (2007), *The State of State Reform in Latin America*, IABD, Stanford University Press.

Lustig, N. and others (2012), "The impact of taxes and social spending on inequality and poverty in Argentina, Bolivia, Brazil, Mexico and Peru: A Synthesis of Results", *Working Papers*, No. 1216, Department of Economics, Tulane University.

Mahon, J. (2004), "Causes of tax reform in Latin America, 1977–95", *Latin American Research Review*, vol. 39, No. 1, University of Texas Press, February.

Martínez-Vazquez, J. and C. Sepúlveda (2011), "Explaining property tax collections in developing countries: the case of Latin America", *International Studies Program, Working Paper*, No. 11-09, Andrew Young School of Policy Studies, Georgia State University, May.

Mesa-Lago, C. (2004), "Las reformas de pensiones en América Latina y su impacto en los principios de la seguridad social", *Financiamiento del Desarrollo series*, No. 144 (LC/L.2090-P/E), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC).

Oates, W.E. (1995), "Green taxes: can we protect the environment and improve the tax system at the same time?", *Southern Economic Journal*, vol. 61, No. 4, April.

OECD (Organisation for Economic Cooperation and Development) (2011), *Forum on Tax Administration. Tax Administration in OECD and Selected Non-OECD Countries: Comparative Information Series 2010*, Paris, Centre for Tax Policy and Administration (CTPA), March [online] http://www.oecd.org/ctp/administration/CIS-2010.pdf.

______ (2010), *Taxation, Innovation and the Environment*, Paris, October.

______ (2008), "Fiscal policy and Latin America's socio-economic reality: accounting for informality", *Latin American Economic Outlook 2009*, Paris, OECD Development Centre.

______ (2006), *The Political Economy of Environmentally Related Taxes*, Paris, OECD Publishing.

______ (1998), *Harmful Tax Competition: An Emerging Global Issue*, Paris.

OECD/ECLAC/CIAT (Organisation for Economic Cooperation and Development/Inter-American Centre for Tax Administrators) (2014), *Revenue Statistics in Latin America 1990-2010*, Paris, OECD Publishing.

Office of the Comptroller-General of Costa Rica (2010), "Impuesto sobre las ventas. Estimación de la base y la evasión: actualización", *Informe*, No. DFOE-SAF-IF-10-2010, San José, November.

Okun, A.M. (1975), *Equality and Efficiency: the Big Trade-Off*, Washington, D.C., Brookings Institution Press.

Ossowski, R. and A. Gonzales (2012), "Manna from Heaven: the Impact of Nonrenewable Resource Revenues on Other Revenues of Resources Exporters in Latin America and the Caribbean" *Working Paper* (IDB-WP-337), Washington, D.C., Inter-American Development Bank (IDB).

Ostry, J.D., A.Berg, and C.G. Tsangarides (2014), "Redistribution, inequality, and growth", *IMF Staff Discussion Note*, No. 14/02, Washington, D.C., February.

Pecho Trigueros, M. (2013), "Hechos estilizados de los impuestos sobre las transacciones financieras en los países de América Latina: 1990–2012", *Documento de Trabajo CIAT*, No. 2-2013, Panama City, Inter-American Centre for Tax Administrators (CIAT), May.

______ (2012), "Regímenes simplificados de tributación para pequeños contribuyentes en América Latina", *Documento de Trabajo CIAT*, No. 2-2012, Panama City, Inter-American Centre for Tax Administrators (CIAT).

Pecho Trigueros, M., F. Peláez Longinotti and J. Sánchez Vecorena (2012), "Estimación del incumplimiento tributario en América Latina: 2000–2010", *Documento de Trabajo CIAT*, No. 03-12, Panama City, Inter-American Centre for Tax Administrators (CIAT), September.

Perry, G. and S. Bustos (2012), "The effects of oil and mineral taxation on non-commodity fiscal revenues", *IDB Working Paper Series*, No. IDB-WP-348, Inter-American Development Bank (IDB).

Perry, G., S. Bustos and Sui-jade Ho (2011), "What do non-renewable natural resource rich countries do with their rents?", *CAF Working Papers*, No. 2011/06, Development Bank of Latin America (CAF).

Perry, G. and others (2007), *Informality: Exit and Exclusion*, Washington, D.C., World Bank.

Reckon LLP (2009), "Study to quantify and analyse the VAT gap in the EU-25 member states", *Taxation Studies*, No. 0029, Directorate General Taxation and Customs Union, European Commission.

Rezende, F. and J. Veloso (2010), "Intergovernmental transfers in Latin America subnational finances", *Decentralization and Reform in Latin America,* Giorgio Brosio and Juan Pablo Jiménez (eds.) Edward Elgar.

Roca, J. (2009), "Tributación directa en Ecuador. Evasión, equidad y desafíos de diseño", *Macroeconomía del desarrollo series*, No. 85 (LC/L.3057-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC).

______ (2010), "Equidad fiscal en Uruguay", *Equidad fiscal en Brasil, Chile, Paraguay y Uruguay*, Inter-American Development Bank (IDB)/EUROsociAL.

Sadka, E. and V. Tanzi (1993), "A tax on the gross assets on enterprises as a form of presumptive taxation", *Bulletin for International Fiscal Documentation*, vol. 47, No. 2.

SAT (Superintendent of Tax Administration) (2008), "Medición del Incumplimiento del IVA. Años 2001-2007", Guatemala.

Schneider, F. (2012), "The shadow economy and work in the shadow: what do we (not) know?", *Discussion Paper Series*, No. 6423, Institute for the Study of Labour (IZA), March.

SHCP (Secretariat of Finance and Public Credit of Mexico) (2011), "Presupuesto de gastos fiscales 2011-2012", Mexico City.

Shome, P. (1992), "Trends and future directions in tax policy reform: a Latin American perspective", *IMF Working Paper*, No. WP/92/43.

______ (2011), "Financial transactions taxes", *Working Paper*, No. 254, Indian Council for Research on International Economic Relations.

SII (Internal Revenue Service of Chile) (2010), "Evasión en el IVA. Serie 2003–2009", Santiago, Chile, May [online] http://www.sii.cl/aprenda_sobre_impuestos/estudios/EstimacionEvasionIVA_03_09.pdf.

______ (2012), "Evasión en el impuesto a la renta en Chile", paper presented at the workshop on evasion and income tax in Latin America, Montevideo, 22-23 November [online] http://www.cepal.org/uruguay/noticias/documentosdetrabajo/2/48442/Presentacion_Pantoja.pdf. Siqueira, R.B., J.R.B. Nogueira and E.S. Souza (2012), "O sistema tributário brasileiro é regressivo?", unpublished.

Stotsky, J. (1995), "Minimum taxes", *Tax Policy Handbook,* Parthasarathi Shome (ed.), Washington, D.C., International Monetary Fund (IMF).

Stotsky, J. and A. WoldeMariam (1997),"Tax effort in the Sub-Saharan Africa", *Working Paper*, No. WP/97/107, Washington, D.C., International Monetary Fund (IMF).

SUNAT (Office of the National Superintendent of Tax Administration) (2010), *Memoria Anual 2009*, Lima, March.
Torgler, B. (2007), *Tax Compliance and Tax Morale: A Theoretical and Empirical Analysis*, Edward Elgar Publishing.
USAID (United States Agency for International Development) (2011), "Collecting Taxes Database 2009-2010", Fiscal Reform and Economic Governance Project.
Villela, L., A. Lemgruber and M. Jorratt (2009), "Tax expenditure budgets: concepts and challenges for implementation", *IDB Working Paper Series*, No. IDB-WP-131, Inter-American Development Bank (IDB), December.
Vuletin, G. (2008), "Measuring the informal economy in Latin America and the Caribbean", *IMF Working Paper*, No. WP/08/102, International Monetary Fund (IMF), April.
Wang, Ch. and K. Caminada (2011), "Disentangling income inequality and the redistributive effect of social transfers and taxes in 36 LIS countries", *LIS Working Paper Series*, No. 567, Luxembourg Income Study (LIS), July.
Zambrano, Raúl (2010), "La fusión de funciones, la fusión de sistemas" [online] http://www.ciat.org/index.php/en/blog/item/6-la-fusi%C3%B3n-de-funciones-la-fusi%C3%B3n-de-sistemas.html.

ECLAC

Series: Macroeconomics of Development

Issues published

A complete list as well as pdf files are available at

www.eclac.org/publicaciones

133. Tax policy in Latin America: Assessment and guidelines for a second generation of reforms, Juan Carlos Gómez-Sabaíni and Dalmiro Morán (LC/L.3632), 2014.
133. Política tributaria en América Latina: agenda para una segunda generación de reformas, Juan Carlos Gómez-Sabaíni y Dalmiro Morán (LC/L.3632), 2013.
132. Descentralización, inversión pública y consolidación fiscal: hacia una nueva geometría del triángulo, Roberto Fernández Llera, (LC/L.3622), 2013.
131 La arquitectura financiera mundial y regional a la luz de la crisis, José Antonio Ocampo (LC/L.3584), 2013.
130. Política tributaria para mejorar la inversión en América Latina, Claudio Agostini y Michel Jorratt, (LC/L.3589), 2013.
129. La inversión y el ahorro en América Latina: nuevos rasgos estilizados, requerimientos para el crecimiento y elementos de una estrategia para fortalecer su financiamiento, Sandra Manuelito y Luis Felipe Jiménez, (LC/L.3584), 2013.
128. Interacciones intergubernamentales entre los impuestos sobre el petróleo y el gas y la protección ambiental, Giorgio Brosio, (LC/L.3583), 2013.
127. Política fiscal e inversión: Un enfoque sistémico y de crecimiento inclusivo, José María Fanelli, (LC/L.3556), 2012.
126. Elites económicas, desigualdad y tributación, Juan Pablo Jiménez y Andrés Solimano, (LC/L.3552), 2012.
125. La reforma tributaria uruguaya de 2006: Algunas consideraciones de economía política y comportamental, Andrés Rius (LC/L.3550), 2012.
124. Informalidad y tributación en América Latina: Explorando los nexos para mejorar la equidad, Juan Carlos Gómez-Sabaíni y Dalmiro Morán, (LC/L.3534), 2012.
123. Clase media y política fiscal en América Latina, Diego Avanzini, (LC/L.3527), 2012.
122. Crecimiento, empleo y distribución de ingresos en América Latina, Jürgen Weller (LC/L.3516), 2012.
121. Revenue sharing: the case of Brazil's ICMS, José Manuel Arroyo, Juan Pablo Jiménez and Carlos Mussi (LC/L.3489), 2012.
120. Estimación de la recaudación potencial del impuesto a la renta en América Latina, Darío Rossignolo (LC/L.3484), 2012.
119. Imposición a la renta personal y equidad en América Latina: Nuevos desafíos, Juan Carlos Gómez-Sabaíni, Juan Pablo Jiménez y Darío Rossignolo (LC/L.3477), 2012.
118. Tax structure and tax evasion in Latin America, Juan Carlos Gómez-Sabaíni and Juan Pablo Jiménez (LC/L.3455), 2012.
117. Commodities, choques externos e crescimento: reflexões sobre a América Latina, Ricardo de Medeiros Carneiro (LC/L.3435), 2012.
116. Fragilidad externa o desindustrialización: ¿Cuál es la principal amenaza de América Latina en la próxima década?, Roberto Frenkel y Martín Rapetti (LC/L.3423), 2011.

133

MACROECONOMICS OF DEVELOPMENT

ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN
COMISIÓN ECONÓMICA PARA AMÉRICA LATINA Y EL CARIBE
www.eclac.org