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Update and current situation in the aftermath of the COVID-19 pandemic

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Summary

This is the third update of the Equivalent Fiscal Pressure (EFP) database of Latin America and the Caribbean (LAC) for the period 1990-2021 based on the IDB-CIAT methodology. The EFP measures more precisely the total resources collected in the region and has four components: i) traditional general government tax revenues, including those of subnational governments; ii) public social security contributions; iii) mandatory contributions to private social security schemes; and iv) non-tax revenues from the exploitation of natural resources. In line with the growing trend since the 1990s, the average EFP for 25 countries increased by more than 6 percentage points of gross domestic product (GDP), from 17.3% to 23.6% between 1990 and 2021. The medium-term dynamics are mostly explained by tax revenues, which grew from 13.5% to 18.0% of GDP in that period. Individually, there is a high degree of heterogeneity in the evolution and level of tax revenues and EFP. All countries, except for Panama and Trinidad and Tobago, show growth in EFP between 1990 and 2021. Regarding the structure of the EFP, three fiscal pillars have been consolidated: a) general taxes on goods and services, b) social security contributions, and c) income taxes. However, due to the high diversity of cases, it is feasible to find exceptions in all the regularities pointed out. Finally, a slow convergence of the average EFP level towards the comparative benchmark of the Organization for Economic Cooperation and Development (OECD) countries was observed. This rapprochement has materialized thanks to the strengthening of the first of the aforementioned fiscal pillars in LAC countries, although significant gaps persist with respect to the other two fiscal pillars identified.

This document is complemented by the complete and synthetic country databases from 1990 to 2021.

Content

Acknowledgments

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This update of the Equivalent Fiscal Pressure (EFP) database has benefited from the joint work of CIAT and the IDB with the other two institutions participating in the "Revenue Statistics in Latin America and the Caribbean 2023" project, namely: the Organization for Economic Cooperation and Development (OECD) and the Economic Commission for Latin America and the Caribbean (ECLAC). In this context, special thanks are due to Emmanuelle Modica and Alexander Pick (OECD) and Michael Hanni (ECLAC).

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Executive summary

With more than a decade of validity, the Equivalent Fiscal Pressure (EFP) database has become a statistical reference for tax revenues in Latin American and Caribbean (LAC) countries. **The EFP is made up by four components: i) general government tax revenues, including those of subnational governments; ii) contributions to public social security schemes; iii) mandatory contributions to private social security schemes; and iv) non-tax revenues associated with the exploitation of natural resources**. In this update, quantitative information has been compiled and systematized for 27 LAC countries for the period 1990-2021.

In line with an increasing trend since the 1990s, **the average EFP for 25 countries in the region (excluding Cuba and Venezuela) increased by more than 6 percentage points of gross domestic product (GDP), from 17.3% to 23.6% of GDP between 1990 and 2021**. The medium-term dynamic is explained by tax revenues, which increased by 4.5 percentage points to 18.0% of GDP in 2021, and public social security contributions (SSCs), which grew by 1.3 percentage points to 3.9% of GDP that year.

The analysis by subregion shows a general upward trend, although there are disparities among them. Between 1990 and 2021, the "Caribbean" countries increased their average EFP by 3.9 percentage points, reaching 23.0% of GDP in 2021; the "Andean Community" increased by 9.3 percentage points, reaching 23.3% of GDP; "Central America and Dominican Republic", as well as the group of countries of the Southern Common Market (Mercosur) plus Chile and Mexico ("Mercosur, Chile and Mexico"), showed an increase of close to 7 percentage points of GDP, although at very different EFP levels (21.4% and 27.3% of GDP, respectively).

Individually, there is a high degree of heterogeneity in the evolution and level of tax revenues (TR) and EFP. All countries, with the exception of Panama and Trinidad and Tobago, show growth in EFP between 1990 and 2021. The largest increases, in percentage points of GDP, were observed in

Argentina (+16.2), El Salvador (+15.3), Ecuador (+13.0) and Bolivia (+12.5). In addition, there is a large gap between the country with the highest EFP level in 2021 (Brazil; 34.6% of GDP) and the one with the lowest level (Guatemala; 14.2% of GDP).

From the most recent information, the impact of the COVID-19 pandemic on EFP can be ascertained. After reaching record highs between 2018 and 2019, most countries showed a negative evolution in the EFP/GDP ratio in 2020. The most significant declines, in percentage points of GDP, were in Belize (-5.4), Trinidad and Tobago (-4.1), Bolivia (-3.4), Brazil (-2.4), Ecuador (-2.3) and Honduras (-2.3). In other countries, the EFP increased in 2020, which was associated with the sharp fall in GDP, which turned out to be relatively greater than that experienced by fiscal revenues in nominal terms.

The behavior of the EFP/GDP ratio in 2021 allows for two reflections. With respect to 2020, most countries showed year-on-year increases and the main improvements, in percentage points of GDP, were observed in Belize (+5.0), Chile (+3.5), Peru (+3.5) and Brazil (+2.6). In LAC -except Bahamas- tax revenues grew nominally, but in eight of them there was a year-on-year reduction in EFP. When comparing with 2019, it can be seen that 12 countries increased their EFP and 13 reduced it, especially those affected by the cumulative fall in world commodity prices and demand in the 2020-2021 biennium.

The evolution of the EFP in the last three decades was based on three pillars: i) general taxes on goods and services; ii) income tax and complementary taxes; and iii) public and private social security contributions (SSCs). In the first case, its average collection increased from 3.2% of GDP in 1990 to 7.0% in 2021, with a percentage share of 29.7% of the total. As for the second pillar, it went from 3.5% to 5.8% of GDP and from 18.3% to 24.4% of the average EFP between those years. As for the third pillar, average revenues for public SSCs rose from 2.6% to 3.9% of GDP, while for private SSCs they rose from 0.3% to 0.9% of GDP in the same period.

The maximum value of the average EFP for LAC was reached in 2019 (23.9% of GDP). However, the impact of the COVID-19 pandemic caused it to contract by 1 percentage point in 2020 to 22.9% of GDP. Most EFP components declined, mainly general and excise taxes on goods and services and non-tax resources from extractive industries, although they were marginally offset by public and private SSCs. **In 2021, there was a partial recovery of the regional EFP (+0.7 percentage points of GDP), with a preponderant contribution from general taxes on goods and services (mainly Value Added Tax, VAT)**.

Regional heterogeneity in the structure of the EFP and the relative weight of each component is confirmed by subregion. Although the three main fiscal pillars are relevant in all of them, in the Caribbean, excise taxes on goods and services (14% of EFP) and taxes on international trade (12%) have a significant importance. On the other hand, non-tax revenues associated with natural resources have greater weight in the Andean Community (7%) and in “Mercosur, Chile and Mexico” (6%).

At the individual level, there is a high degree of heterogeneity, with visible gaps in the main fiscal pillars. In general taxes on goods and services, Brazil (12.3% of GDP), Argentina (10.9%), El Salvador (9.7%) and Chile (9.5%) stand out in 2021. In income tax, Trinidad and Tobago (10.8% of GDP), Jamaica (9.0%), Barbados (8.8%), Chile (8.5%) and Nicaragua (8.3%) stand out. On the public SSCs side, the cases of Costa Rica (9.9% of GDP and 39% of total EFP), Panama (5.6% of GDP and 34% of the total) and Uruguay (8.9% of GDP and 28% of the total) stand out. Private SSCs reach a very significant level in Chile (4.6% of GDP), El Salvador (3.6%) and Uruguay (3.2%).

As for the rest of the EFP components, the diversity of cases is also consistent. Excise taxes show an outstanding performance in countries such as Belize or Barbados, with revenues of 5.1% and 4.2% of GDP, respectively, in 2021. The relevance of taxes on international trade is more concentrated in some particular cases: Saint Lucia, Belize and Argentina, respectively, collect 4.3%, 4.1% and 3.1% of GDP. Non-tax revenues from the exploitation of natural resources show a significant relative weight in Panama (3.3% of GDP), Mexico (4.4%) and Bolivia (3.7%). Property taxes contribute acceptable revenues only in a few countries, such as Barbados (2.0% of GDP), Uruguay (1.9%) and Brazil (1.6%), while “Other taxes” are relevant in Bolivia (2.4% of GDP), Bahamas (1.9%) and Jamaica (1.5%).

In order to weigh up the evolution of tax revenues over the last three decades, a convergence indicator was calculated as a percentage of the average tax collection of the 38 member countries of the Organization for Economic Cooperation and Development (OECD). Starting from an initial value of 52.0% (if LAC TR are considered exclusively) and 56.2% (if EFP is used), that indicator remained relatively constant in the 1990s and grew strongly in the 2000s, while its growth slowed down and stagnated during the past decade, although in 2019 it reached historical maximum values: 66.0% (TR) and 71.6% (EFP). The negative effects associated with the COVID-19 pandemic reduced the convergence indicator for the LAC average in 2020; this could not reflect a significant recovery in 2021 and ended at 64.0% and 69.0% at the end of that year, respectively.

The differences in resource levels among LAC subregions translate into an unequal current position and an uneven evolution of convergence indicators with respect to the OECD. The subregion of Central America and the Dominican Republic shows the slowest and most limited growth rate up to 2021, reaching 57.7% in terms of TR and 62.5% in terms of EFP. The other sub-regions peaked in 2010, with a decline in convergence with respect to the OECD in the most recent decade. The “Mercosur, Chile and Mexico” countries reached a level of 79.6% (taking the EFP) in 2021. In the “Andean Community”, the accelerated growth of the convergence indicators between 2000 and 2010 (from 53.3% to 75.3%), as well as the cumulative fall in the last decade and up to 2021 (68.1%), expose the crucial influence of non-tax revenues linked to natural resources for these countries. The Caribbean experienced growth in the commodity boom years, with a decline in convergence between 2010 and 2021 (67.1%, taking the average EFP as a benchmark for comparison).

As for the differences in the tax structures of LAC and the OECD, progress has been made, although gaps persist that are difficult to close in the short term. The greatest rapprochement is in general taxes on goods and services, where the average collection for LAC and OECD is almost the same. In addition, in excise taxes and taxes on international trade, LAC achieves average revenues that are higher than those of the OECD. **The calculation of convergence by EFP instrument exposes the three fundamental gaps between regions: i) public SSCs (40.2%); ii) property taxes (34.9%); and iii) income taxation (49.2%), particularly that levied on individuals**. In 2021, average personal income tax collection amounted to 1.9% of GDP in LAC, compared to 8.3% of GDP in the OECD, with low convergence (23.3%), which has serious revenue and distributional implications for the tax systems of the countries in the region.

ntroduction

This document supplements the third update of the Equivalent Fiscal Pressure (EFP) database for Latin America and the Caribbean (LAC) for the period 1990-2021, with official figures for 27 countries in the region, within the framework of the work project between the Inter-American Development Bank (IDB) and the Inter-American Center of Tax Administrations (CIAT).

As has been shown in previous editions, LAC is a very heterogeneous region in terms of level and composition of tax revenues mobilized in each of the countries and used for public financing. Although it is possible to identify general trends in this area at the regional level, the different instruments that the countries of the region have adopted to capture these resources often make it difficult to classify them by type of tax and, therefore, to compare cases in quantitative terms. This includes not only the wide diversity of taxes in force in the countries, but also the different social security financing schemes and the particular tax regimes of sectors linked to exploitation of natural resources, such as hydrocarbons and minerals.

In this sense, the EFP represents an alternative methodology for calculating the tax burden in LAC and seeks to measure more accurately the total resources collected by the countries of the region, which would be underestimated under traditional methodologies. By incorporating typical elements of public financing in the countries of the region, this form of measurement also makes it possible to standardize and make the tax burden more comparable between countries and regions.

Next, the EFP concept will be defined and the global results of the latest update will be presented, with a description of medium-term trends in tax revenue levels and structures, comparing between sub-regions and countries in the region. The analysis will also focus on the behavior of EFP in the most recent years with the aim of testing the negative impact, in 2020, of the COVID-19 pandemic and the subsequent recovery in 2021. It will also assess the trend and current situation in terms of absolute and relative convergence with OECD countries, highlighting the main gaps identified (particularly in terms of income tax) between the two groups of countries.

1 Equivalent Fiscal Pressure (EFP): definitions and analysis in terms of levels

The tax burden is a crucial variable for public policies. It is defined as the amount of monetary resources that a jurisdiction manages to raise through the application of different taxes and other similar instruments and, in general, constitutes the fundamental basis for financing the State. Conventionally, this indicator is usually expressed in relation to the gross domestic product (GDP) of each country to ensure a comparable unit of measurement.

However, the importance of tax systems can be relativized when there are other alternative sources of public resources or different configurations of the basic functions of the State in different countries. Thus, the widespread availability of strategic natural resources -whether renewable or non-renewable- may allow some governments to supplement public financing by implementing tax regimes to ensure state appropriation of part of the revenues generated by related activities. The best known case is the economic exploitation of hydrocarbon and mineral deposits, of great relevance in several Latin American and Caribbean (LAC) countries, although there are also others, such as the revenues associated with the operation of the Transoceanic Canal in Panama or the sale of hydroelectric power from the Itaipú and Yacyretá plants in Paraguay.

In a similar vein, the existence of broad public social security systems in certain countries of the region requires the provision of a large flow of tax resources to ensure their proper functioning and financial sustainability. However, it is also possible to find other countries with private systems -no less extensive- of individual capitalization, both in the area of health and social security, which replace, complement or compete with the alternative of a public scheme (also of a mandatory nature, established in the legislation). Therefore, although they are not included in public financing and are administered by private entities, these payments form part of the overall amount of resources mobilized in a coercive manner within a territory and their consideration allows for more homogeneous comparisons between countries.

The concept of "Equivalent Fiscal Pressure" (EFP) includes two additional sources of revenue beyond those traditionally considered (tax revenues plus public social security contributions), which represent a fiscal effort required from taxpayers when they are mandatory: contributions to the private social security system (pensions and health, as appropriate), and non-tax resources (dividends, royalties, among others) from the exploitation of natural resources. The following scheme presents the elements included in the EFP definition.

Equivalent Fiscal Pressure (EFP)
+ General government tax revenues (includes subational governments)
+ Social security contributions (public systems)
+ Social security contributions (private systems)
+ Non-tax income from the exploitation of strategic natural resources

As noted in previous editions of this regional statistical project[1], EFP has been on an upward trend since the 1990s. Over the past three decades, this indicator has experienced an increase of just over

1 For more detail about the methodological and legal basis of the EFP and previous analysis of the figures available during the last decade, see: Morán, D. and A. Rojas (2019), " Equivalent Fiscal Pressure in Latin America and the Caribbean: An analysis of the stylized facts in the past decade," IDB-CIAT. Available at: https://www.ciat.org/Biblioteca/DocumentosdeTrabajo/2019/DT_05_2019-ciat-bid.pdf; Barreix A., L.F. Corrales, S. Díaz de Sarralde y C. Garcimartín (2017), "Updating of the Equivalent Fiscal Pressure in Latin America and the Caribbean," IDB-CIAT. Available at: https://publications.iadb.org/es/publicacion/17309/actualizacion-de-la-presion-fiscal-equivalente-en-america-latina-y-el-caribe; Barreix A., F. Velayos, M. Pecho y J.C. Benítez (2013), "Metiendo Presión: Estimando la Verdadera Carga Fiscal de América Latina y el Caribe", BID-CIAT-IEF. Available at: https://www.ciat.org/Biblioteca/Estudios/2013_Metiendo_Presion_ief_ciat_bid_es.pdf. The nominal GDP data applied were updated in the cases of re-estimation based on the splices of the series provided by official sources and the gross national product (GNP) has not been considered for consistency with other international estimates of the tax burden, which, additionally, presents very small differences in the countries of the region.

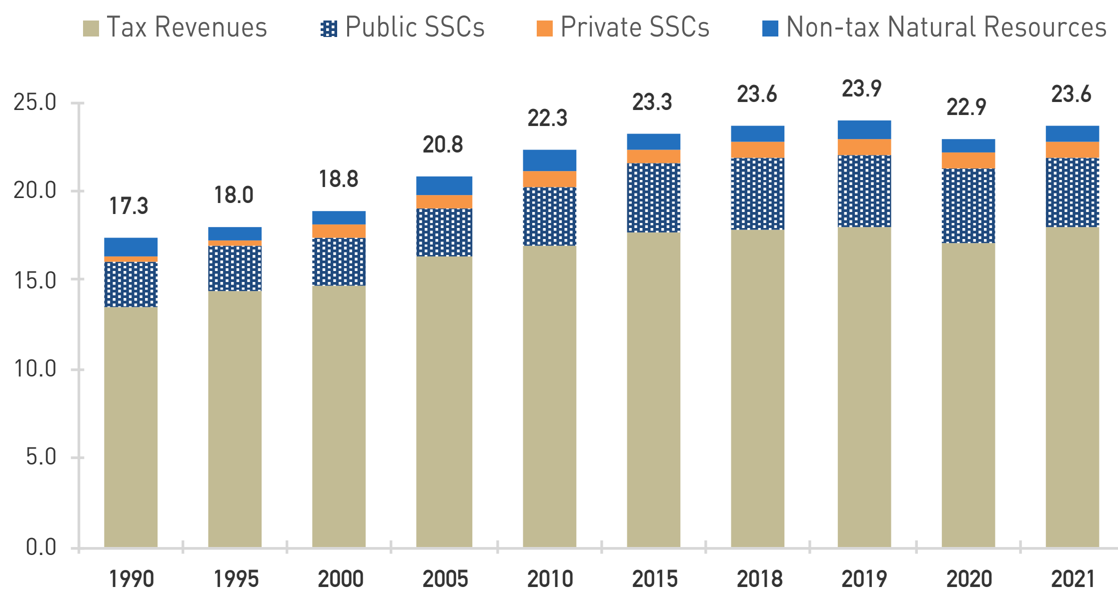
6 percentage points of GDP, rising from a regional average for 25 countries[2] of 17.3% of GDP in 1990 to 23.6% of GDP in 2021 (Figure 1)[3]. The historical maximum was recorded in 2019 (23.9% of GDP), followed by a sharp decline, on average, of almost 1 percentage point of output by the end of 2020, after enduring the most negative impacts of the COVID-19 pandemic on LAC economies. The medium-term dynamics for the EFP are mainly explained by the behavior of tax revenues, which increased by 4.5 percentage points during the reference period, to a value of 18.0% of GDP in 2021 (76% of the average total EFP), while public social security contributions (SSCs) increased by 1.3 percentage points, reaching a figure equivalent to 3.9% of GDP in the last year available.

A similar trend was seen in contributions to private social security systems, which increased by 0.6 percentage points of GDP since 1990, remaining at a value equivalent to 0.9% of GDP over the last five years. On the other hand, non-tax resources from the exploitation of strategic natural resources showed a contraction of 0.3 percentage points of GDP, going from 1.1% of GDP in 1990 to 0.8% in 2021, with an even greater decline with respect to the figures recorded for this type of resources in 2008 and 2013 (1.5% of GDP).

2 Throughout this report, regional and sub-regional averages refer to 25 countries in the region and do not include Cuba and Venezuela. In the first case, a recent monetary reform and the inflation triggered by the COVID-19 pandemic led to a sharp increase in GDP between 2020 and 2021 (more than five times in nominal terms) and caused a disruptive change in the country's tax level and structure. This resulted in an unprecedented drop in EFP from 37.5% of GDP in 2020 to 17.7% of GDP in 2021, which is mainly explained by the drop in the sales tax rate and the reclassification of extraordinary revenues as non-taxable. In a medium-term analysis, this would undoubtedly introduce an artificial bias in the averages calculated for the region as a whole. In the second case, no official information is available from 2016 to the present. However, figures compiled at the individual level are included (in Cuba until 2021 and in Venezuela until 2015), which are made available to interested users in the EFP online database. There is also no official statistical information available for certain countries and particular years, namely: Antigua and Barbuda (1990), Ecuador (1990-92), Nicaragua (1990) and St. Lucia (1990-91).

3 It is important to note that, throughout this document, older figures may differ slightly from those presented in previous versions of this statistical project, since each update revises and, if more accurate information is available, corrects the previous data for the entire period under analysis.

Figure 1. **Equivalent Fiscal Pressure in Latin America and the Caribbean, 1990-2021**
(simple average for 25 countries, selected years, in percentages of GDP)



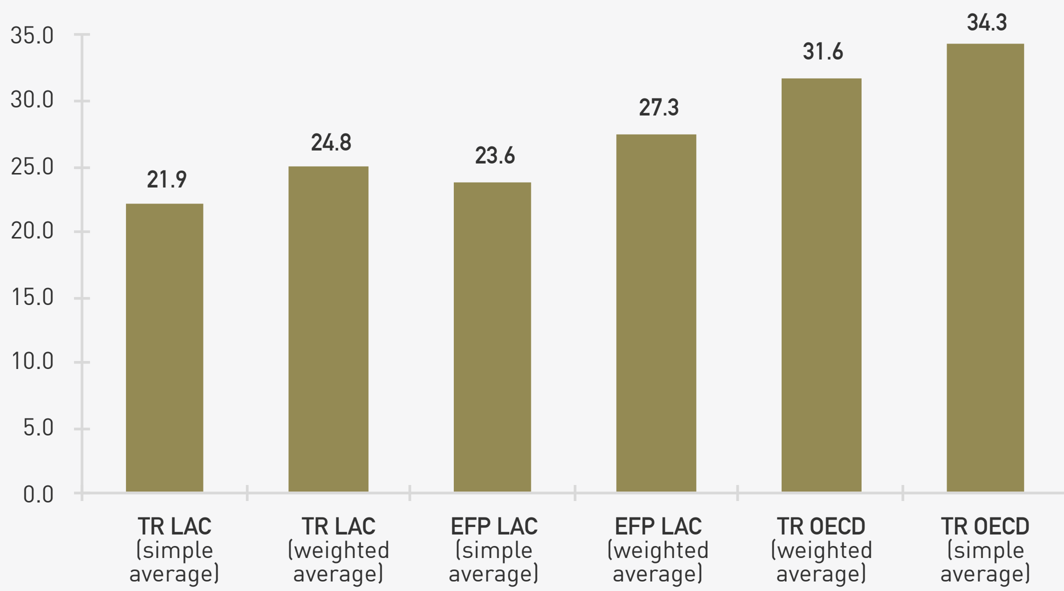
Source: Prepared by the authors with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023).

Box 1. **An alternative way of comparing the level of fiscal resources between LAC and the OECD**

Despite the favorable evolution of EFP in the region over the last three decades, there are still differences with more economically developed countries. For example, among OECD member countries, the simple average of TR ratio -including public SSCs- is around 34.3% of GDP, while in LAC the resources that traditionally make up the tax burden together reach 21.9% of GDP (a difference of close to 12.4 percentage points). However, if an average weighted by the size of each economy[4] is used, this difference is reduced to 6.8 percentage points, since the average TR ratio in LAC is equivalent to 24.8% of GDP, compared to a figure of 31.6% for the OECD average (Figure 2). If additional resources from private SSCs and non-tax revenues derived from natural resources are also considered, in 2021 LAC EFP, in simple average, would have reached 23.6% and, in weighted average, 27.3% of GDP. The gap between the averages of both groups of countries, after making a series of adjustments to achieve a more homogeneous comparison, would be reduced to 4.2 points, in which case only a part (21%) of this approach is strictly attributable to the EFP definition itself (1.7 percentage points).

4 According to each country's current GDP expressed in United States dollars (Source: World Bank).

Figure 2. Tax Revenues and Equivalent Fiscal Pressure in LAC and OECD, 2021
(simple and weighted averages as a percentage of GDP)



Source: Own elaboration with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023) and OECD.Stats (preliminary data for the year 2021, as of May 31, 2023).

When analyzed by subregion, the EFP of each subregion shows an upward trend, although disparities can be seen in the "speed" of adjustment (Figure 3). Between 1990 and 2021, while the "Caribbean" countries experienced a variation of 3.9 percentage points and reached an average value of 23.0% of GDP in the last year available, the average EFP of the "Andean Community" increased by 9.3 percentage points and reached a similar level (23.3% of GDP), which is even in line with the average calculated for the entire LAC region (23.6%). In the particular case of the Andean Community, there was a significant variation in the EFP between 2009 and 2013, which is mainly explained by the dynamics of revenues from the hydrocarbon and mineral sectors, as a result of the boom in commodity prices, the nationalization of companies, the re-establishment of mines and the renegotiation of contracts in countries such as Bolivia and Ecuador[5].

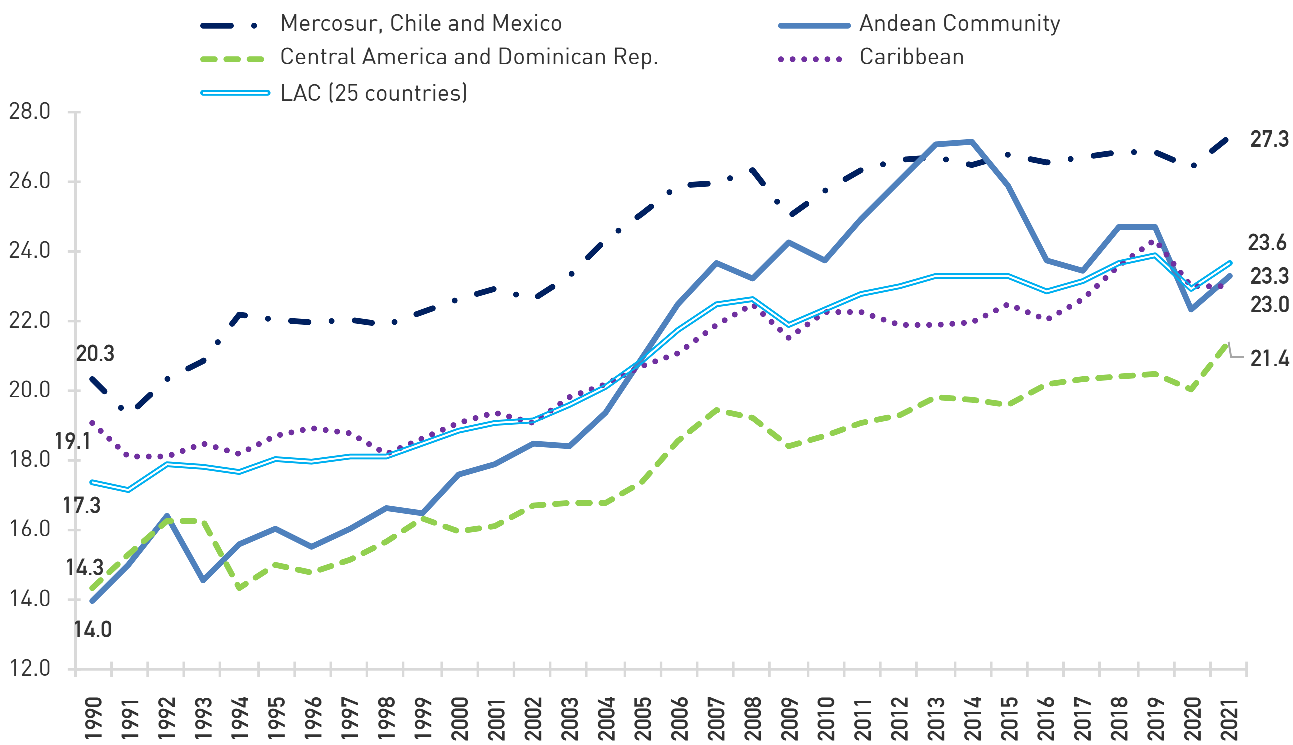
On the other hand, the countries of "Central America and the Dominican Republic" and "Mercosur, Chile and Mexico" showed an increase of around 7 percentage points of GDP each, and both sets of

5 ECLAC (2013), "Panorama Fiscal de América Latina y el Caribe: Reformas tributarias y renovación del pacto fiscal ". Santiago, Chile, Economic Commission for Latin America and the Caribbean. Available at : http://repositorio.cepal.org/bitstream/handle/11362/3097/1/S2013105_es.pdf

countries approached historical maximum average values in 2021, albeit at very different EFP levels (21.4% and 27.3% of GDP, respectively). Indeed, practically throughout almost the entire reference period, the "Mercosur, Chile and Mexico" countries exhibited higher average EFP figures than the rest of the subregions. As for the most recent years, all groups of countries seem to have felt the impact of the COVID-19 pandemic during 2020 on their respective EFP levels, with a rapid recovery in 2021, with the exception of the "Caribbean", where values remained unchanged in the last year.

Figure 3. Equivalent Fiscal Pressure by subregions of Latin America and the Caribbean, 1990-2021

(simple averages, as a percentage of GDP)



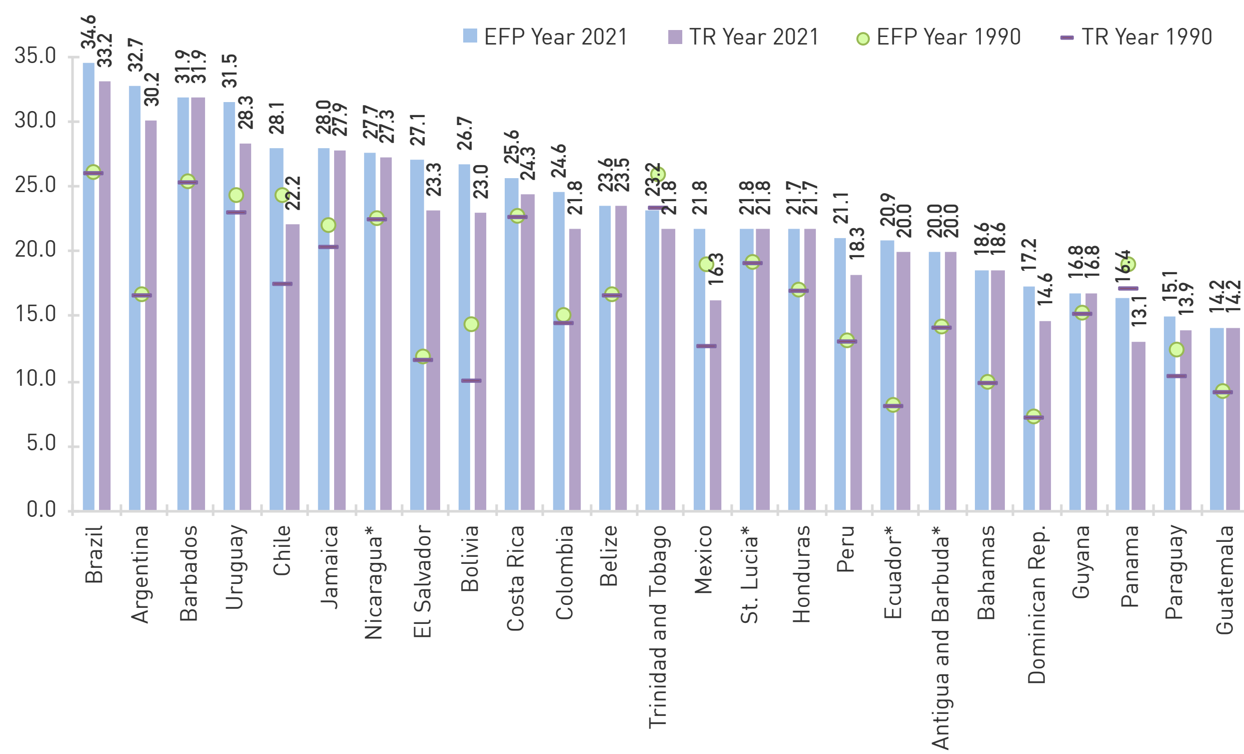
Source: Prepared by the authors with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023).

Note: Mercosur countries are Argentina, Brazil, Paraguay and Uruguay (plus Chile and Mexico). The Caribbean countries are Antigua and Barbuda, Bahamas, Barbados, Belize, Guyana, Jamaica, St. Lucia and Trinidad and Tobago. The Andean community are Bolivia, Colombia, Ecuador and Peru. The Central American countries are Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua, plus Panama and the Dominican Republic.

Individually, the LAC region shows a high degree of heterogeneity in terms of the evolution and current level of tax revenues (TR) and EFP. First, all the countries analyzed, with the exception of Panama and Trinidad and Tobago, show a growth in their TR over the period 1990-2021 (Figure 4). However, the magnitude of the change is very uneven in the different cases, with Argentina (+13.7 percentage points of GDP), Bolivia (+13.0 percentage points), Ecuador (+12.1 percentage points) and El Salvador (+11.7 percentage points) showing more limited positive variations. Something similar can be noted with respect to EFP levels in the countries. With the exception of Panama and Trinidad and Tobago (whose EFP fell by 2.4 and 2.5 percentage points of GDP, respectively, between 1990 and 2021), all the countries in the region show an increase in this variable. Measuring the variation for the entire period under analysis in percentage points of GDP, the cases of Argentina (+16.2), El Salvador (+15.3), Ecuador (+13.0), Bolivia (+12.5), Dominican Republic (+10.2) and Colombia (+9.8), among others, stand out.

Figure 4. Tax Revenues and Equivalent Fiscal Pressure, Latin American and Caribbean Countries, 1990-2021

(as a percentage of GDP)



Source: Prepared by the authors with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023).

Note: Countries were ordered from highest to lowest according to the level of the Equivalent Fiscal Pressure (EFP) in 2021. For countries marked with an asterisk (*) there is no data for 1990. In these cases, both for tax revenues (TR) and EFP, the first year with available information was used as a reference, namely: 1991 in Antigua and Barbuda and Nicaragua; 1992 in St. Lucia; and 1993 in Ecuador. This figure does not present the cases of Cuba (according to official figures, in 1990 the EFP stood at 29.1% of GDP and in 2021 it was 17.7%) or Venezuela (due to lack of official information from 2016 to date), although the figures collected can be consulted in the updated EFP database.

From Figure 4 it is also possible to observe two characteristics that illustrate the most recent situation in LAC countries. On the one hand, there is a large gap of more than 20 percentage points of GDP in 2021 between the country with the highest EFP level (Brazil; 34.6% of GDP) and the country with the lowest EFP level (Guatemala; 14.2% of GDP). This distance is somewhat smaller (19.1 percentage points) between the same countries when referring to the level of TR ratio. On the other hand, although the figure shows the ordering of the countries according to the level of EFP in 2021, the heterogeneous regional picture would be different if the countries were ordered according to the respective level of the traditional tax burden (TR). This particularity is due to the significant gap between both concepts for some cases in particular, such as Chile (with a difference of 5.9 percentage points of GDP), Mexico (5.5), El Salvador (3.8) and Bolivia (3.7).

It should not be forgotten that the current EFP of LAC countries went through the drastic negative impacts of the COVID-19 pandemic, particularly in terms of tax[6] collection. Just as at the regional level, between 2018 and 2019 most countries had reached historic highs in their EFP relative to their respective GDPs, in 2020, and after enduring the most recessionary effects of the crisis, the year-on-year balance was negative for 17 of the 25 countries analyzed (Figure 5). The most significant declines, in percentage points of GDP, were observed in Belize (-5.4), Trinidad and Tobago (-4.1), Bolivia (-3.4), Brazil (-2.4), Ecuador (-2.3) and Honduras (-2.3). However, it should be kept in mind that the EFP concept is a quotient between two nominal variables, which can be affected in different ways by events of such magnitude. Therefore, the increase observed in the EFP of the remaining nine LAC countries during 2020 would not necessarily have been due to a strengthening of fiscal resources in that year (in nominal terms, the amount of revenues included in the EFP fell in six of them[7]) but, instead, to a relatively greater negative impact on the level of output of the respective countries[8].

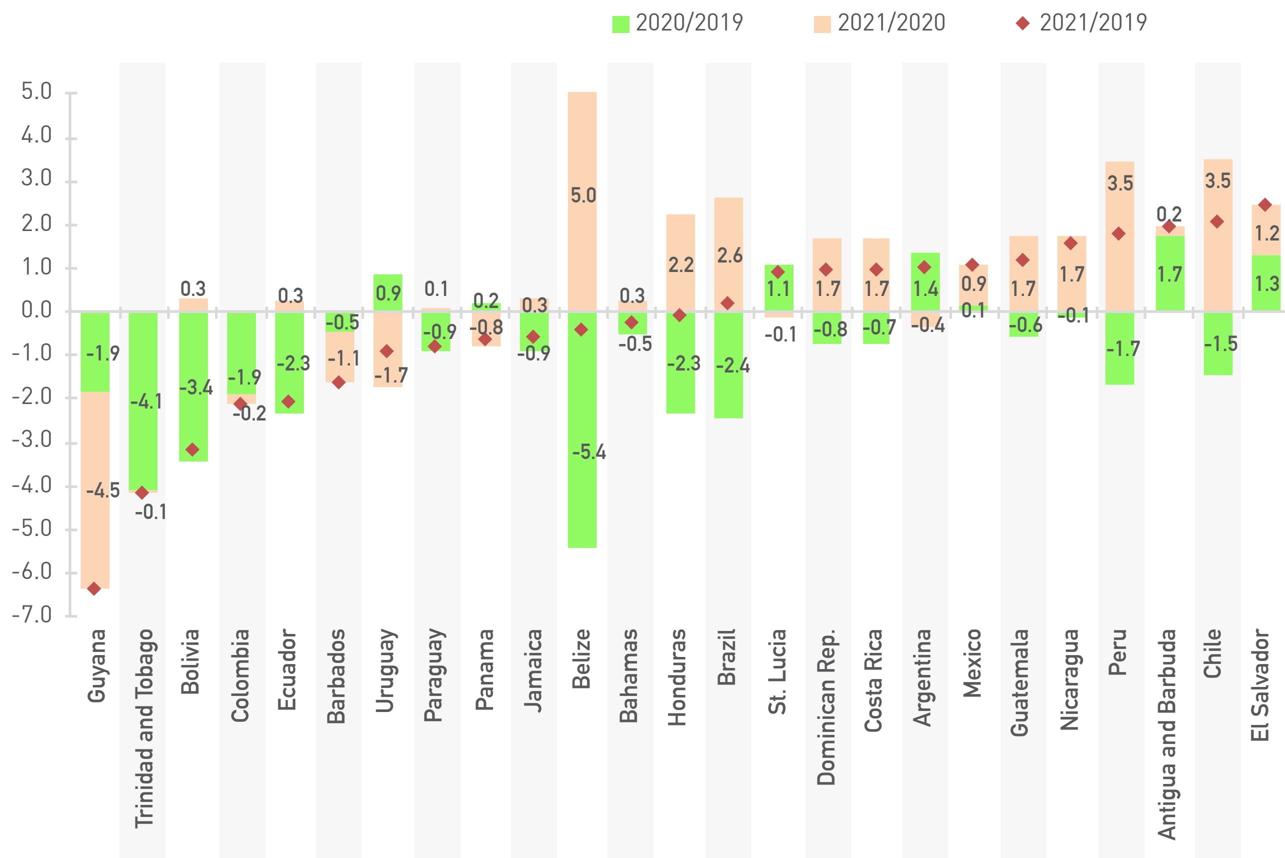
6 For a detailed analysis of the performance of tax collection since the outbreak of the COVID-19 pandemic, on a monthly basis and in real terms, it is recommended to consult the series of "Revenue Report COVID-19 " published by CIAT, available at: https://www.ciat.org/reporte-de-recaudacion-covid-19-ciat/

7 The two exceptions were Argentina, with very high inflation levels that were passed on to tax revenues, and Uruguay, which managed to contain the decline in revenues for most of 2020, although in both cases the EFP, in real terms, ended up accumulating a moderate year-on-year fall.

8 This analysis, which evaluates the year-on-year performance of the EFP by differentiating the behavior of its components in nominal terms, follows that carried out by the OECD in relation to the tax burden of the same countries in the region, within the framework of a regional statistical project developed simultaneously. See: OECD/ECLAC/CIAT/IDB (2023), "Revenue Statistics in Latin America and the Caribbean 2023 (1990-2021)", OECD publication, Paris; available at: https://doi.org/10.1787/5a7667d6-es

Figure 5. **Recent changes in the level of the Equivalent Fiscal Pressure, Latin America and the Caribbean countries, 2019-2021**

(individual data, changes in percentage points of GDP)



Source: Prepared by the authors with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023).

Note: Countries were ordered from lowest to highest according to the cumulative change (in percentage points of GDP) in the EFP level between 2019 and 2021. The cases of Cuba and Venezuela are not presented in this figure, although the corresponding figures are available in the updated EFP database. In the first case, recent changes in tax revenues, derived from a monetary reform and a reduction in the sales tax rate, stand out: the EFP was 42.1% of GDP in 2019, fell to 37.5% of GDP in 2020 (-4.6 percentage points year-on-year) and then fell to 17.7% of output in 2021 (in percentage points of GDP, -19.8 with respect to 2020 and -24.4 with respect to 2019). In the second case, there is no official information available since 2016.

The analysis of the behavior of the EFP/GDP ratio in 2021 allows us to introduce two additional reflections. On the one hand, by considering year-on-year variations (with respect to 2020 figures), it can be seen that in most (16) cases there were increases in this variable, which in several of them meant a reversal of varying magnitude of the declines experienced during the year most affected by the pandemic (Figure 5). The recovery in the level of activity and imports, the rebound in commodity prices and the deactivation of temporary tax relief measures such as deferrals or postponements in the payment of tax obligations all contributed in this regard. The main year-on-year increases, in percentage points of GDP, occurred in countries such as Belize (+5.0), Chile (+3.5), Peru (+3.5) and Brazil (+2,6).

However, here it is also necessary to consider the, sometimes in contrast, movement of the fiscal revenues that make up the EFP and current GDP in each particular case. Although in all LAC countries– except the Bahamas–[9] total fiscal revenues grew in 2021 in nominal terms, in eight of them the level of GDP grew at a higher rate, which translated into a reduction in EFP (as a percentage of GDP) with respect to the figures reached in the previous year. In percentage points of GDP, Guyana (-4.5), Uruguay (-1.7) and Barbados (-1.1) were the cases with the largest year-on-year declines in this indicator[10].

Incidentally, the individual EFP figures for LAC countries in the last available year can also be weighted in relation to the values recorded in a more "normal" year, i.e., less affected by the exceptionality represented by the COVID-19 pandemic. Whether the situation in 2019 is considered, when the regional average EFP reached its historical maximum, it can be verified that the number of countries that increased their EFP amounts to 12 and those that showed a decrease in their value are 13 (Figure 5). The cases with the largest declines in the most recent time period (2019-2021) correspond to countries directly affected by the fall in international prices and global demand for commodities such as hydrocarbons and minerals (from Guyana to Ecuador, with a balance of -6.4 to -2.0 percentage points of GDP, respectively). At the other end, the countries that accumulated the largest increases in EFP between 2019 and 2021, in percentage points of GDP, were Chile (+2.1) and Peru (+1.8), whose increases in 2021 far exceeded the deterioration suffered in 2020, and Antigua and Barbuda (+2.0) and El Salvador (+2.5), which strung together two years of consecutive increases in the value of their EFP.

9 This particular case was the only one in the region in which the year-on-year variation in 2021 was negative, both for the nominal tax revenues that make up the EFP (-12%) and for current GDP (13%), resulting in a slight increase of 0.3 percentage points in the EFP/GDP ratio.

10 This is without considering the case of Cuba, which, as noted, suffered an extraordinary reduction in the level of its EFP in 2021 as a result of a monetary reform that drastically altered the country's tax structure.

2 Structure of the Equivalent Fiscal Pressure in the countries of the region

As with the analysis in terms of levels, the aggregation of countries also allows us to identify a series of trends in terms of the structure of EFP by its main instruments or components.

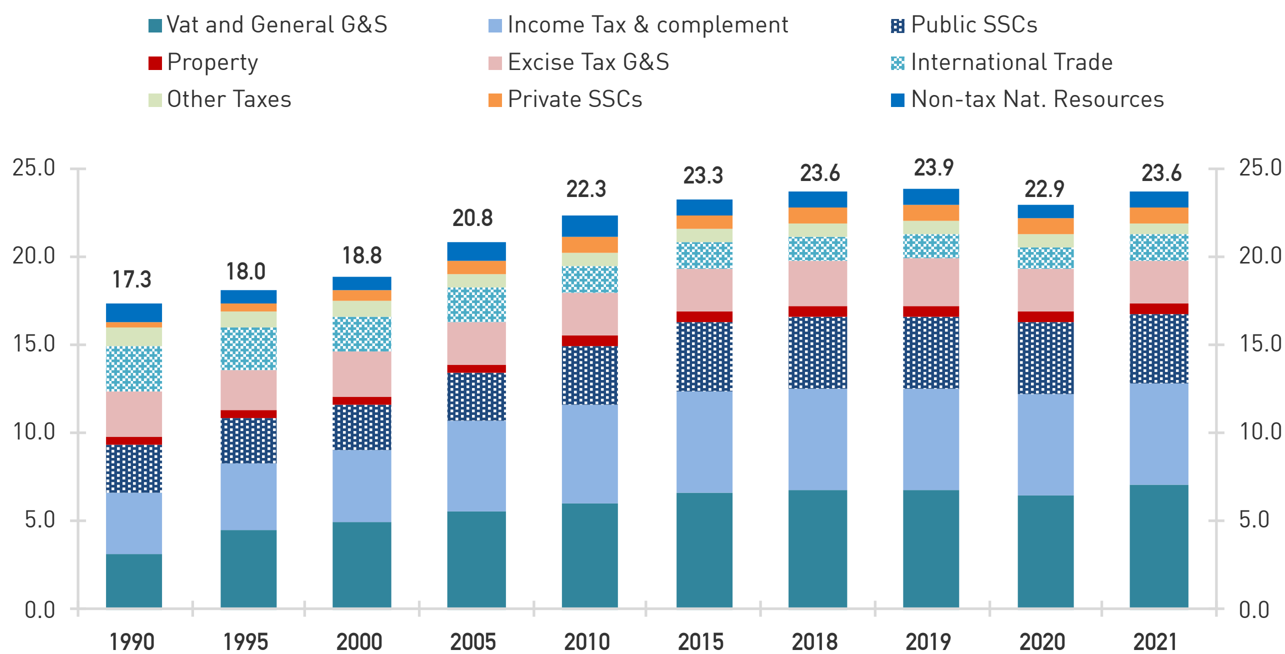
Considering the averages for 25 LAC countries, it can be seen that over the last three decades the evolution of the EFP was based on three fiscal[11] pillars (Figure 6). First, the main source of tax collection is the set of general taxes on goods and services, the most representative element of which is the Value Added Tax (VAT)[12]. With an accelerated increase in collections since the early 1990s (3.2% of GDP in 1990), its relative importance has gradually increased over the last two decades to reach a relatively stabilized value of between 6.5 and 7.0% of GDP (historical maximum in 2021), with a cumulative growth of 3.8 percentage points of GDP and a percentage share that rose from 18.3 to 29.7% of the total in the period analyzed.

11 The definition of "fiscal pillars" for the Latin American and Caribbean region is associated with those taxes or sets of similar taxes that have a broad base of application and have been able to generate a significant amount of tax revenues in a sustained and stable manner over decades. For more detail, see Barreix A. and J. Roca (2017), "Reforzando un pilar fiscal: el impuesto a la renta dual uruguaya", CEPAL Review No. 92. Santiago, Chile, Economic Commission for Latin America and the Caribbean. Available at: https://repositorio.cepal.org/handle/11362/11195

12 In general, this fiscal pillar refers mainly to tax revenues associated with Value Added Tax (VAT). However, in some cases this component also includes other general taxes on goods and services: in Argentina it includes net VAT (central government) and Gross Income Tax (provincial); in Brazil it includes COFINS and PIS/PASEP (federal government), ICMS (state) and ISS (municipal); in Colombia it includes net VAT (central) and Industry and Commerce Tax (municipal); in Costa Rica, net VAT (national) plus Goods and Services Tax (municipal); in Nicaragua, the net VAT (national) and the Goods and Services Tax (municipal); in Paraguay, the net VAT of the central government and the Patent of Commerce, Industries, Professions and Trades of the municipal governments; in Uruguay, the net VAT and the Social Security Financing Contribution Tax (COFIS, between 2001 and 2011) both of the central government. In the cases of Barbados and Guyana, the VAT replaced a general sales tax as of 1997 and 2007 respectively, therefore, revenues from both taxes over the period 1990-2021 are considered in a joint series.

A second fiscal pillar in order of importance is the Income Tax (IT) and all its complementary[13] variants. This item experienced a strong development since the mid-2000s, supported by the strengthening of the income of companies (especially those linked to the export sector) and families, in a regional context of accelerated economic growth. The average collection of this item, which was equivalent to 3.5% of GDP in 1990, accumulated an increase of 2.3 percentage points until the most recent years, and remained at 5.8% of GDP in 2021, showing remarkable resilience to the contractionary effects of the COVID-19 pandemic and maintaining a relative weight of 24.4% of the average total EFP for the region.

Figure 6. **Evolution of the Structure of the Equivalent Fiscal Pressure, Latin America and the Caribbean, 1990-2021**
(simple average for 25 countries, selected years, as a percentages of GDP)



Source: Prepared by the authors with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023).

13 In general, this fiscal pillar refers to the net tax collection related to Income Tax (IT) (including supplementary taxes to certain sectors when they exist), whether for personal income tax, corporate income tax or other non-classifiable items (e.g., advances withheld at source). In some cases, this pillar also includes other direct taxes levied by the central or subnational governments, whether they are levied on the income of a particular sector, have an alternative calculation base (assets), are of a temporary and extraordinary nature and/or are levied on capital gains or specific income not covered by traditional IT.

The third fiscal pillar in the region, always in order of importance, is constituted by contributions for financing social security systems. This refers mainly to the public schemes administered by the State, which, on average, contribute 3.9 percentage points of GDP (16.7% of the total), a slightly lower figure than in more recent years, but clearly higher than the values observed around 1990 (2.6% of GDP and 15.1% of the total EFP). All this without considering one of the unique elements incorporated in the EFP calculation, namely, SSCs through private schemes. As commented above, these resources, which in some countries are very significant in terms of their amount, averaged 0.9% of GDP in recent years, including in 2021 (+0.6 percentage points with respect to 1990), when they represented 3.7% of total resources. Thus, together, the resources linked to the financing of social security, regardless of the institutional form -public or private- in which they are organized, account for more than 20% of the resources that make up the average EFP for the LAC region and have explained a significant part (2.0 percentage points of GDP) of the cumulative growth of that variable between 1990 and 2021.

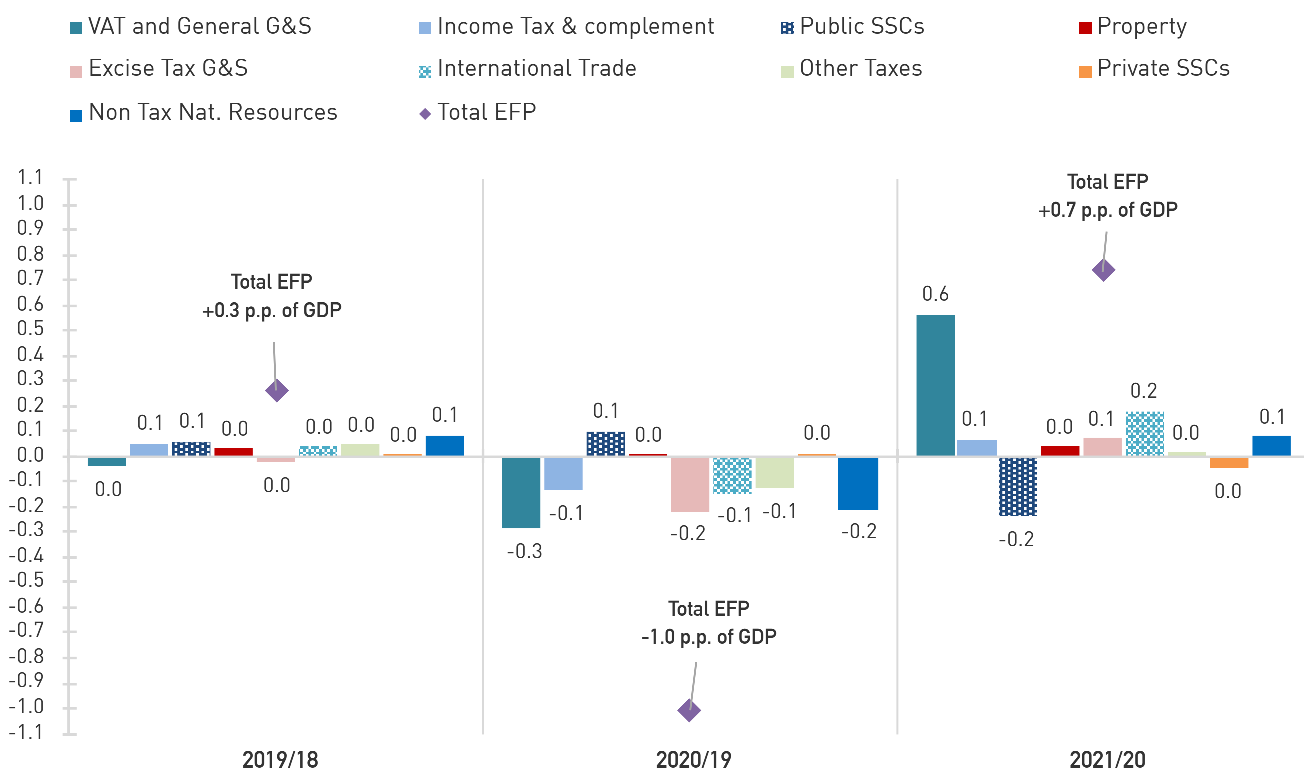
The structure of the EFP in LAC is completed by a set of instruments that deserve some comments. In addition to VAT, some taxes on consumption and production are noteworthy, particularly excise taxes on certain goods and services -including those levied on financial transactions- whose average collection, even with fluctuations, has remained at around 2.5% of GDP, equivalent to 10.4% of total EFP in 2021. In addition, taxes levied on international trade also show some relevance, whose associated resources have been decreasing over the last decades, and have gone from representing 2.6% of GDP in 1990 to 1.4% in 2021 (-1.1 percentage points), reaching an average of 6.0% of the total (Figure 6).

The other component that characterizes the EFP from other forms of measuring fiscal resources mobilized in LAC is represented by those derived from the wide range of non-tax instruments linked to the exploitation of natural resources. Although this usually refers to the extractive industries (hydrocarbons and minerals), it also includes fiscal revenues from other sources, such as, for example, income from the operation of the Transoceanic Canal in Panama or those associated with the generation of hydroelectric power in Paraguay. These resources tend to be relatively more volatile than other tax revenues, since they are more closely linked to the dynamics of international prices of export commodities. This is evident from the fact that they reached a regional average of 0.8% of GDP and 3.6% of total EFP in 2021 (Figure 6).

Finally, property taxes show a poor collection performance throughout the entire period under analysis, as they have remained at an average of 0.6% of GDP during the last decade. Moreover, in 2021, a remaining set of very varied instruments, such as payroll taxes, simplified regimes (when they are not integrated into a particular tax) and other unclassifiable taxes (at all levels of government), contributed, on average for LAC, an amount equivalent to 0.7% of GDP, a value that has remained almost constant over the last two decades (although it reached 1.2% of GDP in 1990).

It is interesting to focus the analysis on the last three years with available figures (2019-2021), specifically in terms of the variations observed in the main fiscal instruments. As mentioned above, in 2019 the average EFP of the region reached a historical maximum value equivalent of 23.9% of GDP, which meant a slight increase of approximately 0.3 percentage points with respect to the previous year (Figure 7). This result was influenced by the limited increase in several instruments, mainly non-tax resources from the natural resources sectors, income tax, SSCs from public schemes and other tax revenues as a whole. In sum, this was enough to offset the also limited year-on-year reductions (compared to 2018) in taxes on goods and services, both general sales and excise taxes.

Figure 7. **Recent Changes in the Main Components of the Average Equivalent Fiscal Pressure in Latin America and the Caribbean, 2019-2021**
(simple average for 25 countries, changes in GDP percentage points)



Source: Prepared by the authors with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023).

The recessionary impacts of the COVID-19 pandemic caused the region's average EFP to fall by almost 1 percentage point to 22.9% of GDP. This negative year-on-year balance stems from the sum of partial reductions of 0.1 percentage points of GDP in income tax, taxes on international trade and other levies, together with falls of 0.3 percentage points of GDP in general taxes on goods and services (VAT) and 0.2 percentage points in excise taxes -which have accumulated two years of declines- and in non-tax instruments of state appropriation of revenues from the exploitation of natural and/or strategic resources. The increase, for the second consecutive year, in public SSCs, as well as slight improvements in private SSCs and property taxes, cushioned, but did not fully offset, the significant decline in the average level of EFP in 2020.

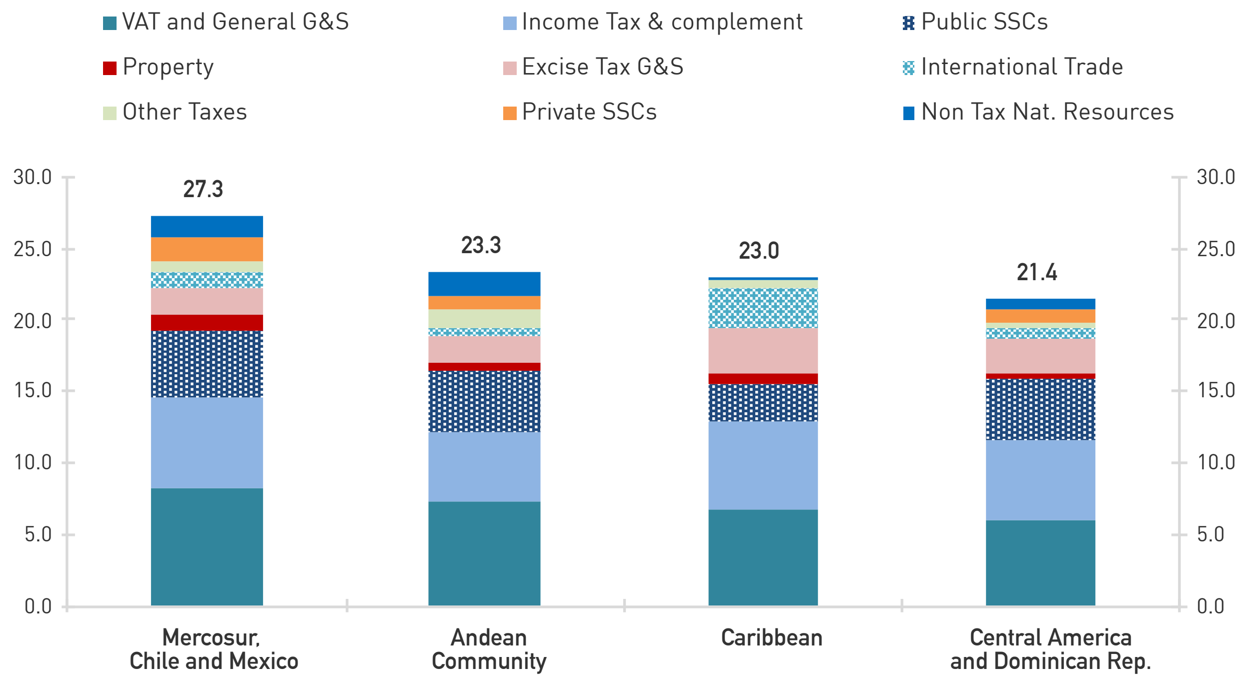
Finally, in 2021 there was a partial recovery in the region's average EFP (+0.7 percentage points of GDP), with a preponderant role of general taxes on goods and services (+0.6 percentage points of GDP) and a lesser contribution from taxes on international trade, excise taxes, income tax and non-tax revenues linked to natural resources (Figure 7). All of this was favored by a context of a strong rebound in the level of activity, tourism and international trade, and the price of raw materials. The components that moved in the opposite direction were SSCs, both public and private, which was more linked to the effect of a high base of comparison in previous years than to possible specific reforms in these instruments.

Beyond the medium-term trends at the regional level and the changes observed in more recent years, the available data make it possible to identify major differences between four subregions or groups of countries. The subregion comprising the Mercosur countries, together with Chile and Mexico, is the one that recorded the highest EFP figure in 2021 (27.3% of GDP), in which case the relevance of the three main fiscal pillars is clearly noticed (Figure 8). Together, VAT and general taxes on goods and services, Income Taxes and complementary taxes, and SSCs (public and private) account for more than 77% of the total fiscal resources considered. However, this percentage is also high in the other subregions, such as the "Andean Community" (75%), "Central America -including Panama to simplify the figure- and the Dominican Republic" (79%) and the "Caribbean" (68%).

Precisely, it is among the Caribbean[14] countries where excise taxes on goods and services are most representative (they reached an average of 3.3% of GDP and 14% of the total in 2021), and taxes on international trade (with 2.7% of GDP and almost 12% of the total EFP in the same year). In Central American countries, excise taxes are also relevant (2.4% of GDP and 11% of the total). Non-tax resources associated with the exploitation of natural resources are most notable in terms of their relative amount in the subregions of the "Andean Community" (1.6% of GDP and close to 7% of the total) and "Mercosur, Chile and Mexico" (1.5% of GDP and 6% of their EFP), and it is also in this last group of countries where property taxes reach, on average, the highest collection level in the region (around 1.0% of GDP and slightly less than 4% of total EFP in 2021).

14 It should be noted that in some of these countries the VAT has been introduced relatively recently; this is the case, for example, of Belize (2006), Guyana and Antigua and Barbuda (2007), St. Lucia (2012) and Bahamas (2014).

Figure 8. **Structure of the Equivalent Fiscal Pressure by subregion in Latin America and the Caribbean, 2021**
(simple averages, as a percentage of GDP)



Source: Prepared by the authors with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023).

Note: Mercosur countries are Argentina, Brazil, Paraguay and Uruguay (plus Chile and Mexico). The Caribbean countries are Antigua and Barbuda, Bahamas, Barbados, Belize, Guyana, Jamaica, St. Lucia and Trinidad and Tobago. The Andean community are Bolivia, Colombia, Ecuador and Peru. The Central American countries are Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua, to which are added Panama and the Dominican Republic.

At the individual level of the countries considered, there is a high degree of heterogeneity, although, broadly speaking, the main trends identified at the regional level are maintained (Figure 9). For example, the fiscal pillar represented by general taxes on goods and services (VAT and other similar taxes) is the main source of fiscal resources in 14 of the 25 countries surveyed, including Brazil[15] (12,3% of GDP), Argentina[16] (10,9%), El Salvador (9,7%) and Chile (9,5%), with figures that exceed the regional average and even from most of the developed OECD[17] countries. In several of these countries, even

15 This includes COFINS and PIS/PASEP (federal government), ICMS (state) and ISS (municipal) taxes.

16 Considering both VAT (national) and Gross Income Tax (provincial).

17 According to the Global Tax Statistics Database (https://stats.oecd.org/).

with a more limited collection, the relative weight of these resources is very significant, as can be seen in 2021 for Antigua and Barbuda, Bahamas and Guatemala, where this component reaches about 40% of tota total[18] EFP Resources.

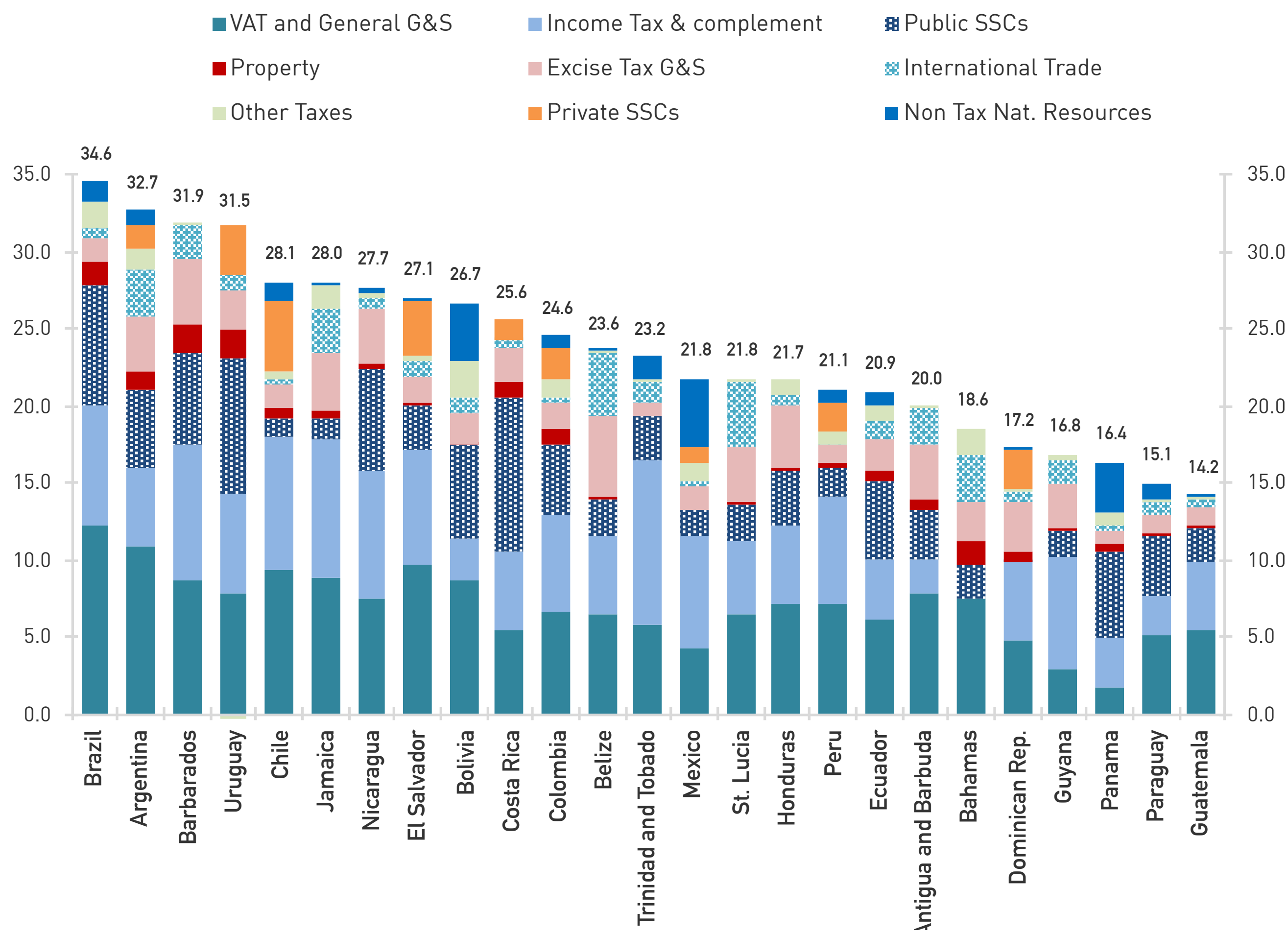
In eight of the remaining eleven countries, most of the EFP is explained by the second regional fiscal pillar, made up of IT and its complementary taxes, in which case Trinidad and Tobago (10.8% of GDP), Jamaica (9.0%), Barbados (8.8%), Chile (8.5%) and Nicaragua (8.3%) stand out. However, in relative terms, this set of taxes also shows great relevance in countries such as Guyana (7.4% of GDP), where it contributes almost 44% of total EFP, or Mexico and Peru, where its collection is equivalent to 7.2% and 7.0% of GDP, respectively, and represents a third of total EFP in both cases.

On the other hand, in three countries of the region, the main source of resource mobilization is constituted by the different social security financing schemes (Figure 9). If contributions to public schemes (public SSCs) are considered, in 2021 the cases of Costa Rica (9.9% of GDP, representing 39% of the total EFP), Panama (5.6% of GDP and 34% of the total) and Uruguay (8.9% of GDP and 28% of the total)[19] stand out. In addition, when adding the component of private schemes (private SSCs), the resources linked to the financing of social security in the Uruguayan case increase by an amount equivalent to 3.2% of GDP, which brings their total relative weight to 38% of the EFP. Something similar happens in Costa Rica, where resources should be added for an amount close to 1.2% of GDP. However, private SSCs, for the most recent year, show an even more significant importance also in other countries, such as Chile (4.6% of GDP and 16% of the total EFP), El Salvador (3.6% of GDP and 13% of the total) and the Dominican Republic (2.6% of GDP and 15% of the EFP).

18 In the first two cases, the high relative weight of VAT is closely linked to the weakness of the traditional fiscal pillars: in Antigua and Barbuda, IT is levied only on corporates, while in the Bahamas there is no such tax, and in both cases, the collection linked to the financing of the respective national social security schemes is also limited.

19 These resources are also very relevant in cases such as Brazil (7.7% of GDP in 2021), a country that has the particularity of including contributions to social security (SSCs) from the federal government and subnational governments (states and municipalities).

Figure 9. **Structure of the Equivalent Fiscal Pressure, Latin American and Caribbean Countries, 2021**
(individual data, as a percentage of GDP)



Source: Prepared by the authors with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023).

Note: The countries were listed from highest to lowest according to the total EFP level in 2021. The cases of Cuba and Venezuela are not presented in this figure, although they can be consulted in the EFP database. From 2016 to date there is no data available for the latter case, while in the former the introduction of a monetary reform and a lowering of the sales tax rate (which brought its collection from 15.5% to 1.9% of GDP between 2020 and 2021) produced extraordinary changes in the level and structure of tax revenues that would distort the analysis of regional trends.

As for the rest of the EFP components, the diversity of cases is also evident. Indeed, although it is possible to identify a set of excise taxes on specific goods and services in all the countries under analysis, the revenue associated with these taxes, as well as their relative weight in the total EFP resources, is very different from one country to another. In general, there is a contrast between

“Caribbean” countries, such as Belize or Barbados, with revenues in 2021 equivalent to 5.1% and 4.2% of GDP and 22% and 13% of their total EFP, respectively, and others, such as Chile (1.5% of GDP) or Peru (1.1% of GDP), where the contribution is less than 5% of the total (Figure 9). On the other hand, the relevance of taxes on international trade is more limited in some particular cases that stand out from the rest, including most Caribbean countries (especially St. Lucia and Belize, both with a collection of 4.3% and 4.1% of GDP in 2021, respectively) and even Argentina (3.1% of GDP in the last year and 10% of the total).

Likewise, it is also worth highlighting the regional heterogeneity in terms of non-tax revenues from the exploitation of strategic natural resources. This source of fiscal resources, which contains information for 17 of the 25 countries surveyed, is very significant in three cases particulary: in Panama, where revenues associated with the operation of the Transoceanic Canal reached 3.3 percentage points of GDP (20% of EFP in 2021); in Mexico, where hydrocarbon revenues (other than those captured through traditional taxes) reached 4.4% of GDP and 20% of the total in 2021; in Bolivia, whose revenues from royalties and other non-tax instruments applied on hydrocarbons and minerals contributed 3.7% of GDP and 14% of total EFP in the last year surveyed.

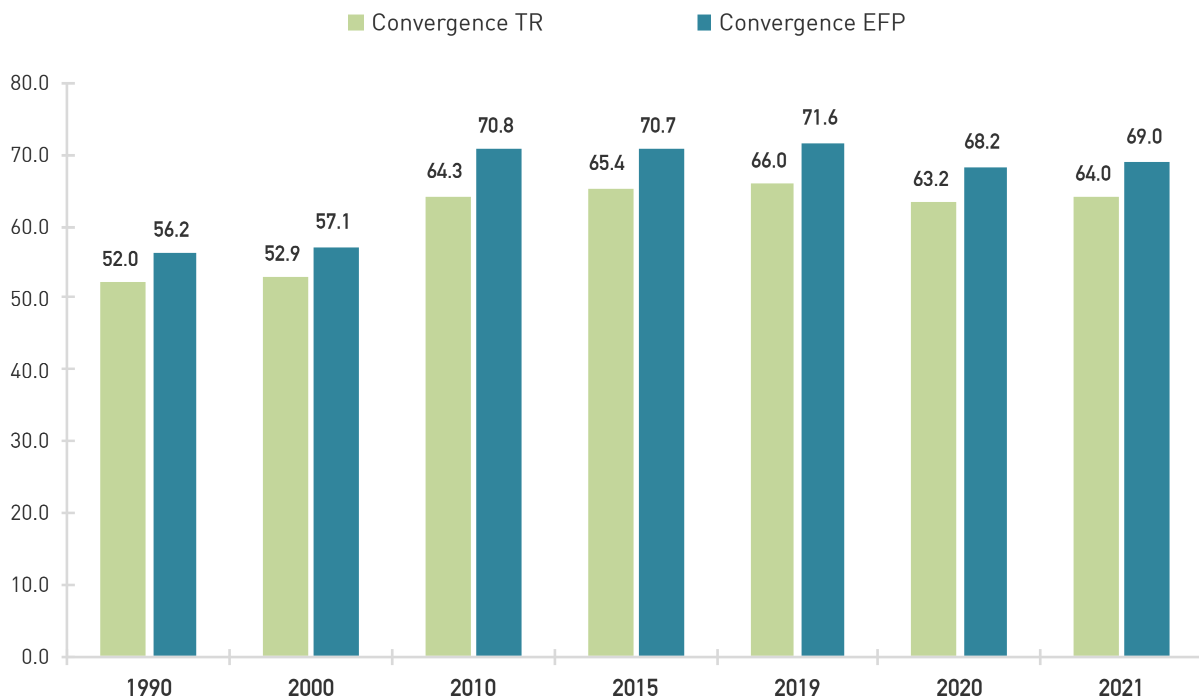
Finally, property taxes show an acceptable collection performance in a few specific cases and very limited in most countries. Barbados (2.0% of GDP in 2021), Uruguay (1.9%), Brazil (1.6%), Bahamas (1.5%) and Argentina (1.3% of GDP) stand out above the rest in quantitative terms, although in none of the cases the representation of this set of taxes reach 10% of total EFP (Figure 9). Similarly, the remaining component of “Other taxes”, whose relative weight is directly linked to the practical difficulty of classifying certain specific taxes, is only significant in some countries, such as Bolivia (2.4% of GDP and 9% of total EFP), the Bahamas (1.9% and 10%), Brazil (1.6% and 5%) and Jamaica (1.5% and 5%), among others.

3 Convergence between Equivalent Fiscal Pressure in Latin America and the Caribbean and Tax Revenues in the Organization for Economic Cooperation and Development

In order to weigh up the evolution of tax revenues in LAC over the last three decades, a relative convergence indicator has been calculated as a percentage of the total tax revenue -including public SSCs- (TR) of the 38 OECD countries (both in simple averages and in terms of the corresponding GDP). Thus, it can be seen (Figure 10) that, starting from an initial value of 52.0% (if LAC tax revenues alone are considered) and 56.2% (if EFP is used for comparison with the simple OECD average), such indicator remained almost unchanged in the 1990s, rose sharply in the 2000s, and slowed its growth and stagnated during the past decade, although in 2019 it reached historical maximum values of 66.0% and 71.6%, depending on the reference variable considered. This result, which can find several explanations, has been influenced by the adverse international context, the inability to advance in structural tax reforms and the reduction in demand for the region's natural resources, which would affect both tax and non-tax revenues associated with the extractive sectors.

With the outbreak of the COVID-19 pandemic, the negative effects associated with it would have had a greater impact, on average, on the tax revenues of the countries of the region. This is evidenced by the reduction of the convergence indicator for the LAC average, which reached 63.2% (TR) and 68.2% (EFP) of the OECD average total tax burden at the end of 2020 (a relative drop of 5% with respect to 2019), with a slight rebound during 2021. In any case, throughout the period analyzed the convergence between average (simple) figures, considering the EFP for LAC and the TR for the OECD, accumulated an increase of almost 13 percentage points (+23%), and in the last year reached a level of 69.0% in relative terms.

Figure 10. **Convergence of fiscal resources (level) between Latin America and the Caribbean and the Organization for Economic Cooperation and Development, 1990-2021**
(simple averages, selected years, as a percentage of the average tax revenue (TR) of OECD countries)

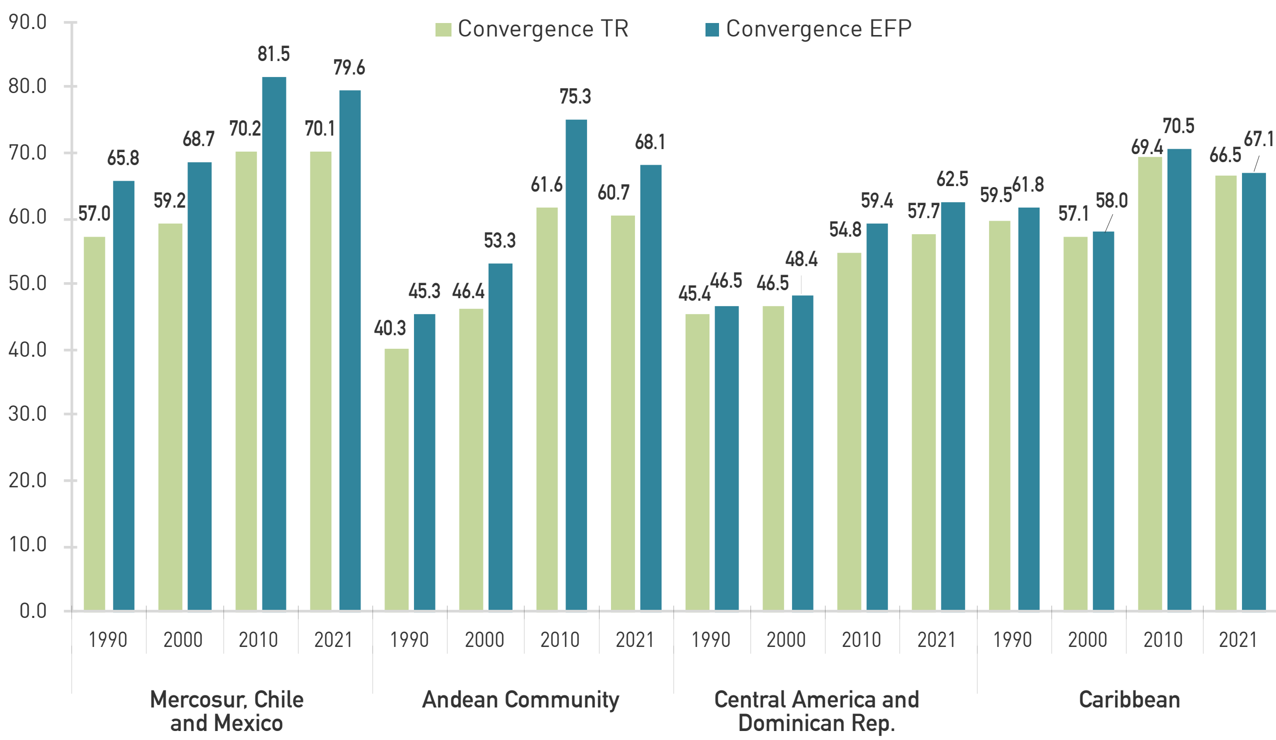


Source: Prepared by the authors with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023) and OECD.Stats (preliminary data for year 2021, as of May 31, 2023).

As might be expected, the differences in resource levels among LAC subregions lead to an unequal current position and an uneven evolution of convergence indicators with respect to the average values recorded in the OECD countries (Figure 11). In 1990, the "Mercosur, Chile and Mexico" and "Caribbean" subregions, on the one hand, showed figures of around 60-65% convergence, which made clear the gap with the other two subregions considered (taking the EFP, 45.3% for the "Andean Community" and 46.5% for "Central America, Panama and the Dominican Republic"). In terms of evolution over the period analyzed, the latter subregion is the one that shows the slowest and most limited growth, although sustained and stable, until the most recent years (in 2021 it reached 57.7% if the TRs are taken and 62.5% in relation to the EFP). To some extent, this highlights the difficulties of the countries in this group to strengthen their fiscal revenues, even in favorable contexts such as the one experienced during the first decade of the century.

This contrasts with the rest of the LAC subregions, which show a peak in 2010 in terms of their convergence with the average TR of the OECD, with a unanimous decline in the most recent decade, although with significant quantitative differences between these TRs. On the one hand, the "Mercosur, Chile and Mexico" countries reached a convergence level of 81.5% in 2010, which declined slightly to 79.6% in 2021. As can be deduced, the convergence gap between the indicator that takes the TR of the countries as a reference and the one that considers the EFP (with its additional elements) highlights the great impact that non-tax revenues from the exploitation of natural resources -mainly hydrocarbons and minerals- have had on the fiscal accounts of the countries of this subregion during the boom years of the international prices of these products.

Figure 11. **Convergence of fiscal resources (level) between subregions of Latin America and the Caribbean and the Organization for Economic Cooperation and Development, 1990-2021**
(simple averages, selected years, as a percentage of the average tax revenue (TR) of OECD countries)



Source: Prepared by the authors with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023) and OECD.Stats (preliminary data for year 2021, as of May 31, 2023).

Note: The Mercosur countries are Argentina, Brazil, Paraguay and Uruguay (with the addition of Chile and Mexico). The Caribbean countries are Antigua and Barbuda, Bahamas, Barbados, Belize, Guyana, Jamaica, St. Lucia and Trinidad and Tobago. The Andean Community are Bolivia, Colombia, Ecuador and Peru. The Central American countries are Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama (with the addition of the Dominican Republic).

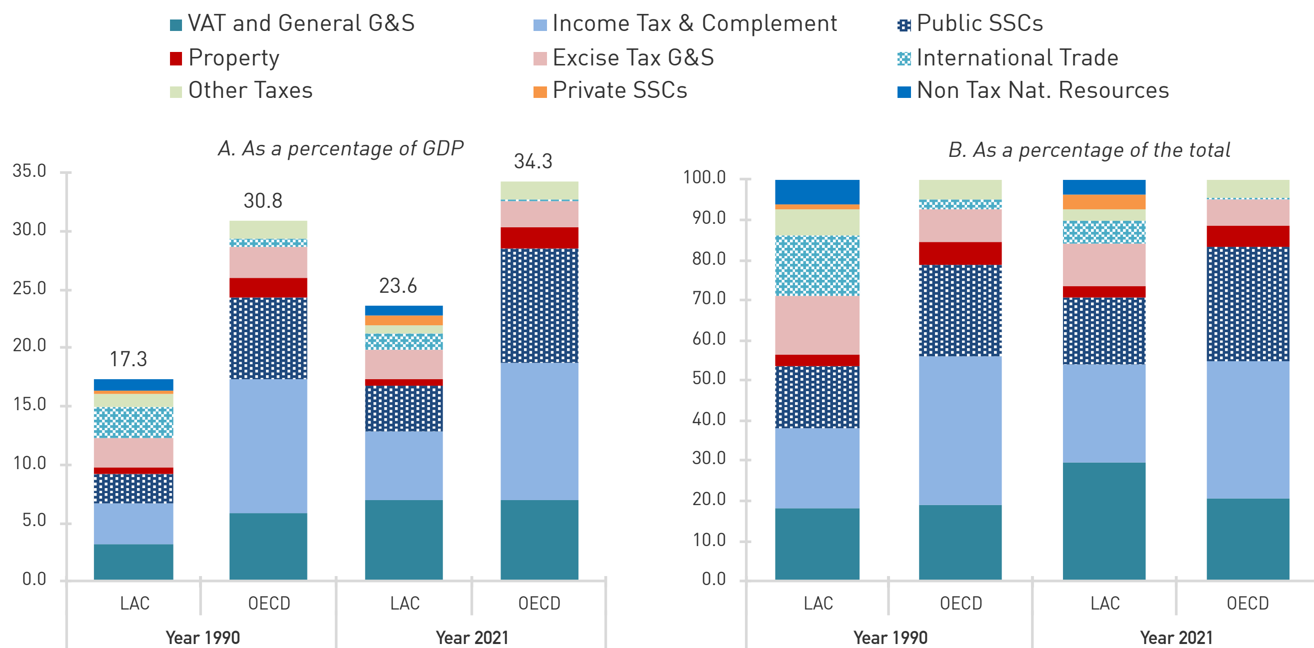
This phenomenon, according to which the fiscal performance of the countries shows a high dependence on the behavior of international commodity markets, can be seen more clearly in the results obtained in the countries of the “Andean Community”, given the accelerated growth of the convergence indicators linked to the EFP between 2000 and 2010 (from 53.3% to 75.3%), as well as the sharp accumulated drop in the last decade and up to 2021 (68.1%). On the other hand, if only the total TRs of each of these countries are considered, the notable, although somewhat more limited, improvement up to 2010 is confirmed (from 46.4% to 61.6%), but the decline is almost completely relativized during the most recent period (from 61.6% to 60.7%), which shows, to some extent, a greater resilience of the more consolidated traditional tax bases (Figure 11). Nevertheless, for the entire period, the Andean countries show, on average, the greatest relative progress in terms of regional convergence when the EFP is considered as a comparison variable with the average tax burden of the OECD.

The “Caribbean” subregion exhibits some particularities that deserve to be noted. This group is the only one where regional convergence with the OECD shows a drop between 1990 and 2000 (attributable to a decline in tax collection as opposed to the LAC regional context), although this is then reversed with clear growth during the following decade, due to the boom in international commodity prices (in 2010, convergence with the OECD was 70.5% and 69.4%, depending on whether the TR or EFP of the subregion is considered). Unlike what was observed in other subregions, this improvement was captured through tax instruments -especially corporate income taxes and their variants- so there was no significant gap in both convergence indicators (TR and EFP) for the period analyzed. Finally, there is also a moderate drop in these indicators between 2010 and 2021 (66.5% and 67.1%, respectively), in line with regional trends (Figure 11).

With regard to the tax structures between LAC and the OECD, as mentioned above, some progress can be identified along with the maintenance of gaps that are more complex to close in the short term. The increase in EFP between 1990 and 2021 (by 6.3 percentage points of GDP) and the consequent rapprochement towards the average figures observed in OECD countries have come about as a result of the strengthening of the three fundamental pillars of the region’s tax systems, which grew in a proportion that comfortably offset the decline experienced throughout the period in taxes on international trade and other more specific taxes (Figure 12, panel A). These trends not only modified total collection levels, but also the internal composition and relative weight of these resources. In

OECD countries, on the other hand, the increase in the total tax burden was more balanced among the available instruments, based on less pronounced variations, which resulted in a relatively stable tax structure (Figure 12, panel B).

Figure 12. Comparative structures between the Equivalent Fiscal Pressure in Latin America and the Caribbean and tax revenues in the Organization for Economic Cooperation and Development , 1990-2021
(simple averages, as a percentage of GDP and of total collections)



Source: Prepared by the authors with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023) and OECD.Stats (preliminary data for year 2021, as of May 31, 2023).

However, considering that the starting point (1990) per instrument was different in each case, the convergence by type of tax towards the current situation (2021) has also been different. The most evident rapprochement in absolute terms occurred in general taxes on goods and services, where the average collection for LAC and the OECD[20] is practically the same in the most recent year (7.0% of GDP), although this component shows a different relative weight within the total fiscal resources of each group (29.7% in LAC vs. 20.4% in the OECD).

20 As happens in LAC countries such as Argentina or Brazil, general taxes on goods and services not only include taxes such as VAT, but also, in a complementary or alternative manner, include taxes on final sales by the central government or lower levels of government (as in the United States, for example).

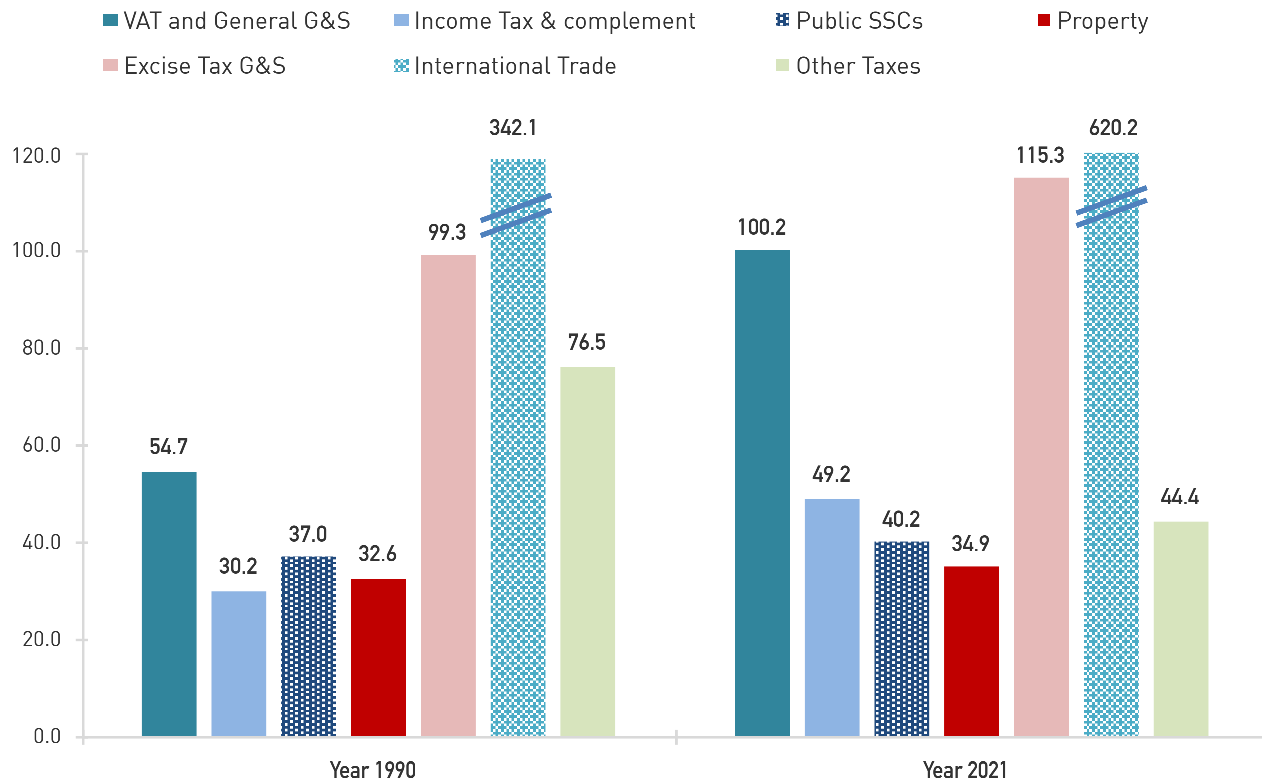
In SSCs, the differences are more significant between regions and, in parallel, convergence has been more limited. The OECD collects, on average, 9.8% of GDP (28.6% of the total), while in LAC resources of this type reached an average of 3.9% in 2021 (Figure 12). Income tax -and its complements- constitutes another element of contrast between the two groups of countries: in 2021 there was still a visible gap in relative terms (24.4% in LAC vs. 34.2% in the OECD, with respect to the total) and absolute terms (5.8% in LAC vs. 11.7% in the OECD, as a percentage of GDP).

To visualize with greater accuracy the relative differences between LAC and OECD tax structures, a convergence indicator by instrument can also be calculated (additional EFP components, i.e. private SSCs and non-tax revenues from natural resources, are excluded from the analysis), which presents the percentage ratio between tax revenue figures by type of tax for the LAC average and those of OECD member countries.

This proves the point made in the case of general taxes on goods and services, whose convergence indicator (for LAC and in relation to the OECD) rose from 54.7% in 1990 to 100.2% in 2021 (Figure 13). Two other components of indirect taxation have not only reached the OECD average collection values in 2021, but have far exceeded them: average revenues from excise taxes in LAC are 15% higher today (in 1990 they were equivalent), while those linked to levies on international trade represent more than six times (620%) what was collected in developed countries (in 1990 they already represented more than 342% of the average value for OECD countries). In the latter case, the difference is explained not by an increase in these resources (in fact, their amount has been reduced over the past decades), but by the virtual disappearance of these instruments in the tax structures of developed countries, even though they continue to be an important source of revenue in several LAC countries.

Figure 13. Convergence of the relative structure of the Equivalent Fiscal Pressure of Latin America and the Caribbean and tax revenues of the Organization for Economic Cooperation and Development, 1990-2021

(simple averages, as a percentage of the average tax revenue (TR) of OECD countries)



Source: Prepared by the authors with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023) and OECD.Stats (preliminary data for year 2021, as of May 31, 2023).

In contrast, the rest of the tax instruments in LAC still show a collection performance far from the average figures of the OECD. One of the main gaps is observed in social security contributions: in fact, when considering only those linked to public schemes, it can be seen that in 2021 the LAC average represented only 40.2% of the OECD average value (it was 37.0% in 1990)[21]. The reasons for this are multiple and beyond the scope of this analysis. In general, they are related to the unequal scope and financial organization of the various social security schemes. Although very significant progress has been made in the region over the last

21 Although the situation would marginally improve by adding private SSCs in LAC, the convergence indicator would only reach 49.1% of the average total tax burden of the OECD.

decade, the expansion of coverage in economies with high informality has required ensuring its financing from a mass of general tax revenues and not strictly through the application of mandatory[22] contributions.

A second persistent gap between the tax structures of LAC and the OECD, although of lesser absolute magnitude, is linked to the relative weight of property taxes. The collection associated with these instruments in the countries of the region also shows a certain stagnation, which could already be considered structural in nature, with average values that are equivalent, at least until 2021, to just over a third (34.9%) of what was collected in the OECD (Figure 13). Beyond the particularities and the varied range of taxes present at the country level, the weakness of property or real estate tax stands out, which, nevertheless, constitutes the main source of subnational governments' own resources in most countries of the LAC region.

Finally, the other element of disparity between LAC and the OECD is related to income tax and its complements. The average convergence with respect to this instrument went from 30.2% in 1990 to 49.2% in 2021 (i.e., on average, LAC collects less than half that of the OECD), which has been the result of the reforms introduced in most countries during the last two decades. However, it is clear that these reforms, focused on broadening the tax base, eliminating exemptions and increasing legal rates to achieve greater progressivity, have not been sufficient and there is still considerable room for progress in strengthening the tax as a primary source of fiscal resources.

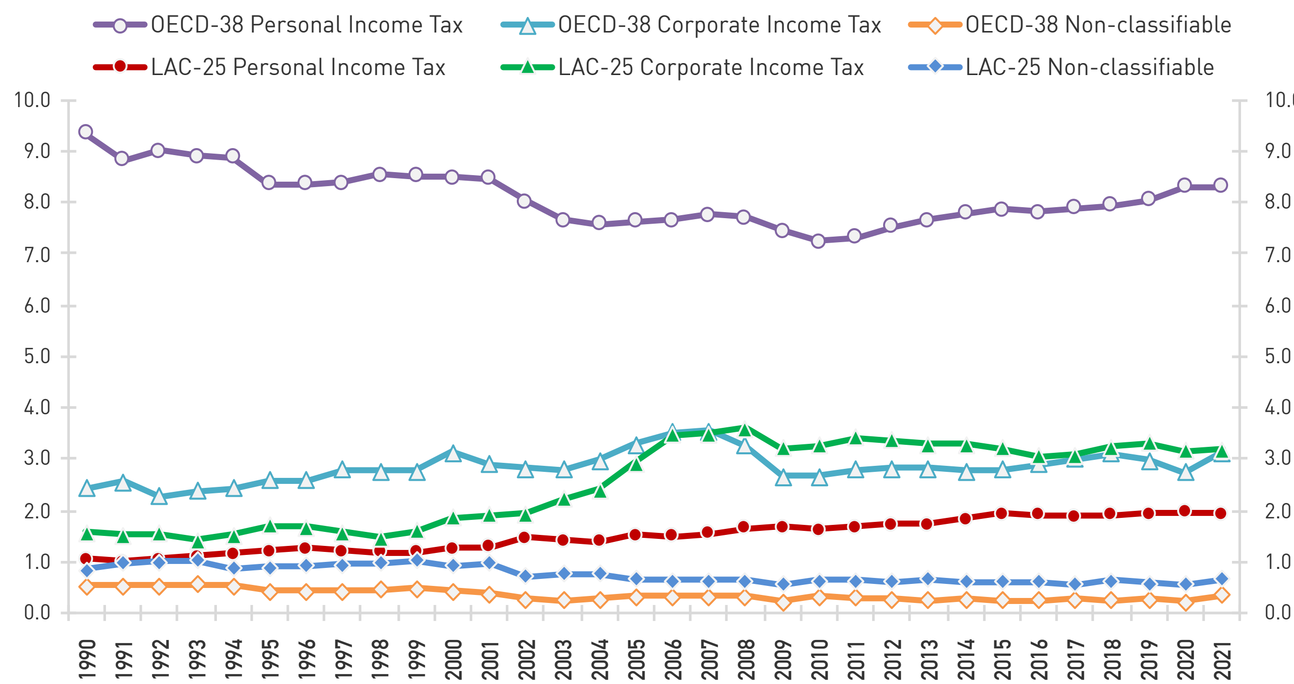
A more in-depth analysis shows that, in reality, the slow convergence towards OECD average values is mainly explained by the low relative revenue performance of personal income tax, which is not the case with the corporate income tax (Figure 14). In LAC countries, the magnitude of the revenues contributed by the latter in relation to this tax is, on average, greater than in developed countries at present.

Although there was a significant gap in the 1990s, throughout the period the contribution of corporate entities (companies or corporations) in LAC grew rapidly between 2002 and 2007, converging towards the OECD average level and surpassing it as of 2008 (which was particularly affected by the international

22 For a comprehensive analysis, see: Arenas de Mesa, A. (2019), "Los sistemas de pensiones en la encrucijada: desafíos para la sostenibilidad en América Latina". ECLAC Books No. 159. Santiago, Chile, Economic Commission for Latin America and the Caribbean. Available at: http://repositorio.cepal.org/bitstream/handle/11362/44851/1/S1900521_es.pdf

financial crisis of that year). During the past decade, the average for LAC remained above that of the OECD countries, with the last year surveyed bringing it closer: in 2021, the OECD collected 3.1% of GDP and LAC, 3.2%, while in 1990 the collection of this tax was equivalent to 2.4% and 1.6% of GDP, respectively, which implies an improvement of 28% (0.7 percentage points) in the first case, and 103% (1.6 percentage points) in the second. Convergence between LAC and the OECD, in this case, rose from 63.9% in 1990 to 101.6% in 2021, and reached a maximum value of 122.2% in 2010-2011. However, the current difference can be seen in the proportion that these levels of resources represent in the total income tax collection; in the OECD it is 26.5% and in LAC it reaches 55.1% of the total.

Figure 14. Collection of income tax (and complementary taxes) in Latin America and the Caribbean and the Organization for Economic Cooperation and Development, 1990-2021
(simple averages, as a percentage of GDP)



Source: Prepared by the authors with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023) and OECD.Stats (preliminary data for year 2021, as of May 31, 2023).

On the other hand, the average collection of taxes levied on individual income is less than a quarter of the average calculated for the OECD in the latest year available (1.9% and 8.3% of GDP, respectively, with a low convergence of 23.3%). Since in 1990 these figures amounted to 1.1% of GDP for LAC and

9.3% of output for the OECD (the convergence indicator stood at 11.3%), this would imply an increase of 84% (+0.9 percentage points) in LAC and a decrease of 11% (-1.0 percentage points) in the OECD over the 1990-2021 period (Figure 14). Presumably, the percentage share of these taxpayers in the total resources collected through this tax is different between the two groups of countries in 2021: it is 33.5% of the total in LAC and 70.5% in the OECD[23].

This notable difference has implications not only in terms of tax collection, but also in terms of the distributional impacts of the region's tax systems. In most cases, the tax ends up falling exclusively on a limited group of high-income individuals working in the formal sector of the economy, and a large part of the population remains outside its scope[24]. In general, its collection is affected by a series of structural factors, such as the low level of GDP per capita and the high level of informality, as well as by others related to the technical design of the tax, such as the existence of high tax exemptions and concessions, the differential treatment of capital income and the low level of maximum[25] legal rates. All these factors mean that the income tax structure is biased towards corporations (or business) in the vast majority of LAC countries (Figure 15).

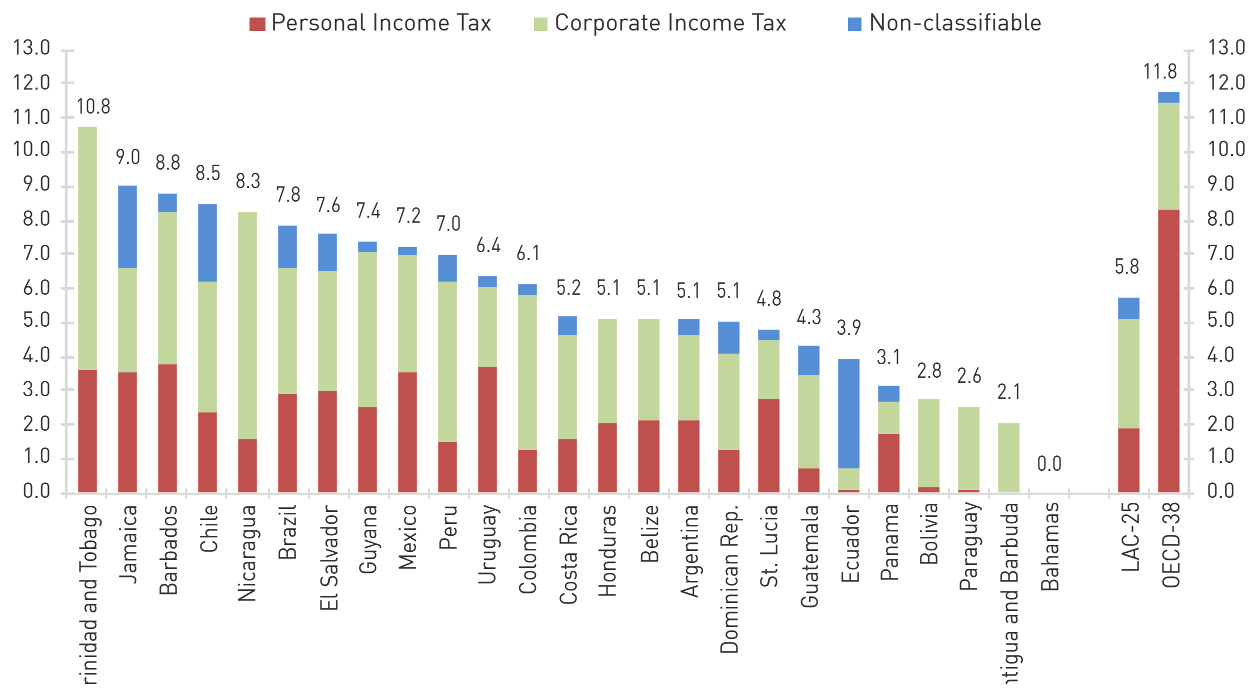
23 The Economic Commission for Latin America and the Caribbean (ECLAC) suggests that informality in LAC would reach 53.1% of workers in the region. Collection for LAC and OECD countries is complemented by an unclassifiable component, which has been decreasing in both groups to 0.7% and 0.4% of GDP in 2021, respectively.

24 Espejo, A. (2022), "Informalidad laboral en América Latina: propuesta metodológica para su identificación a nivel subnacional". Project Documents (LC/TS.2022/6). Santiago, Chile, Economic Commission for Latin America and the Caribbean. Available at: http://repositorio.cepal.org/handle/11362/47726

25 For an updated analysis of this tax in the countries of the region, see: ECLAC (2023), "Panorama Fiscal de América Latina y el Caribe 2023: Política fiscal para el crecimiento, la redistribución y la transformación productiva". Santiago, Chile, Economic Commission for Latin America and the Caribbean. Available at: https://repositorio.cepal.org/bitstream/handle/11362/48899/5/S2300202_es.pdf

Figure 15. Income tax revenue structure in LAC countries

Individual data, 2021, as a percentages of GDP



Source: Prepared by the authors with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023).

Note: The Bahamas does not apply this tax; Antigua and Barbuda only applies it on companies. In the case of Ecuador, but also in Chile and Jamaica, the information available does not allow a significant part of the tax collection in 2021 to be disaggregated, so the figures presented should be analized with some caution. However, their inclusion in the averages does not change the regional trends identified. This figure does not present the cases of Cuba (due to drastic changes in tax revenues in 2021 associated with a monetary reform; in that last year Income Tax (IT) collected 8.2% of GDP, of which 1.4 percentage points (17%) corresponded to individuals and the rest to the contribution of companies) or Venezuela (due to lack of official information since 2016), although the corresponding figures can be consulted in the updated EFP database.

In several cases, revenue from corporate income tax far exceeds, in percentages of GDP, the average calculated for OECD countries. For example, for Trinidad and Tobago and Nicaragua (7.1% and 6.7% of GDP, respectively), the convergence indicator is over 200% (double) of the regional benchmark, while for Barbados, Colombia, Guyana and Peru it is around 150% (10 LAC countries have corporate income tax revenues above the OECD average). On the other hand, with respect to personal income tax, convergence is less than 50% in 2021 for all countries in the region. The cases with the highest tax collection in this area are Barbados (3.8% of GDP), Uruguay (3.7%), Trinidad and Tobago (3.6%), Mexico (3.6%) and Jamaica (3.5%). In stark contrast, in countries such as Guatemala, Bolivia and

Paraguay[26] (excluding Antigua and Barbuda and the Bahamas, where the tax is not currently in force), the contribution of these individual taxpayers is very insignificant (Figure 15). In conclusion, the gaps with the simple (unweighted) average of OECD member countries, both in absolute and relative terms, are quite evident.

26 El caso de Ecuador también muestra una muy baja recaudación asignable a las personas físicas, pero ello se debe a limitaciones estadísticas que impiden clasificar, por tipo de contribuyente, gran parte de la recaudación del impuesto, la cual es captada a través de retenciones en la fuente.

4 Final Comments

With more than a decade of validity, the Equivalent Fiscal Pressure (EFP) database has established itself as a statistical reference in terms of tax revenues for LAC countries. Over the years, its broad definition, which aims to improve and strengthen comparisons between countries in the region and with respect to other regions of the world, has been nurtured by a process of gradual and cumulative improvement in terms of the criteria and sources used for the collection and systematization of a large amount of relevant quantitative information for 27 countries in the region for the period 1990-2021.

Therefore, the present document is the natural outcome of the continuation of this joint statistical project (IDB-CIAT) and, within this framework, provides a new update of its main results. The particularity of the period under analysis lies in the fact that it includes the outbreak of the COVID-19 pandemic, which has had profound negative impacts in 2020, and the subsequent recovery of economic activity to pre-pandemic levels, which was accompanied by a rebound in tax revenue collection. Therefore, in addition to the updated analysis of the medium-term evolution of the EFP at the regional, subregional and individual levels, special emphasis has been placed here on identifying and pointing out the magnitude of the impacts of the crisis on the flow of fiscal resources available to the different countries in the region, as well as the diversity of realities regarding the subsequent recovery in 2021. The pandemic, in an abrupt manner, has revealed at the regional level -and in each of the countries- the different capacities of reaction and resilience of fiscal instruments in the face of external shocks, and has also revealed a certain volatility in the available sources of public financing.

The analysis of the composition structures of the EFP has made it possible to delve deeper into the factors and elements that have led to a certain tax ratio convergence between LAC and OECD countries. Certain instruments, such as general taxes on goods and services, have achieved a superlative performance, but there is also a persistent gap in some of them, specifically in those that could perhaps have a greater impact on the distributive sphere. In clear contrast with the situation in the main developed countries, this includes both the contributions aimed at financing the expansion of social protection coverage and the variants of direct taxation levied on wealth and personal income. To some extent, the convergence analysis also offers the possibility of identifying the main areas and the most important fiscal spaces where it would be necessary, for the future, to concentrate tax reform efforts to ensure fiscal sustainability on the basis of more equitable and efficient tax systems and fiscal regimes.

Statistical Annex

Table 1: Structure of the Equivalent Fiscal Pressure (by main tax type) in Latin American and Caribbean countries, 2021.
(individual data, in percentages of GDP)

Country	ISO Code	Income Tax				Public SSCs	Property	Goods and services				Other Taxes	Tax Revenue (TR)	Private SSCs	Non tax Natural Resources	Total EFP
		Personal	Corporate	Classifiable	Total IT			General		Excise	International Trade					
								VAT	Other							
Antigua and Barbuda	ATG	0.0	2.1	0.0	2.1	3.3	0.6	6.1	1.9	3.5	2.4	0.1	**20.0**	0.0	0.0	**20.0**
Argentina	ARG	2.2	2.5	0.4	5.1	5.1	1.3	7.0	3.8	3.5	3.1	1.3	**30.2**	1.6	1.0	**32.7**
Bahamas	BHS	0.0	0.0	0.0	0.0	2.2	1.5	7.5	0.0	2.6	2.9	1.9	**18.6**	0.0	0.0	**18.6**
Barbados	BRB	3.8	4.4	0.6	8.8	5.8	2.0	8.7	0.0	4.2	2.2	0.1	**31.9**	0.0	0.0	**31.9**
Belize	BLZ	2.2	2.9	0.0	5.1	2.4	0.2	6.6	0.0	5.1	4.1	0.1	**23.5**	0.0	0.1	**23.6**
Bolivia	BOL	0.2	2.6	0.0	2.8	6.0	0.1	6.9	1.8	1.9	1.1	2.4	**23.0**	0.0	3.7	**26.7**
Brazil	BRA	2.9	3.6	1.3	7.8	7.7	1.6	7.4	4.9	1.5	0.7	1.6	**33.2**	0.0	1.3	**34.6**
Chile	CHL	2.4	3.8	2.3	8.5	1.2	0.8	9.5	0.0	1.5	0.2	0.5	**22.2**	4.6	1.3	**28.1**
Colombia	COL	1.3	4.5	0.3	6.1	4.6	1.0	5.9	0.9	1.7	0.4	1.1	**21.8**	2.0	0.8	**24.6**
Costa Rica	CRI	1.6	3.1	0.5	5.2	9.9	1.1	5.1	0.4	2.2	0.5	0.0	**24.3**	1.2	0.0	**25.6**
Dominican Rep.	DOM	1.3	2.8	1.0	5.1	0.1	0.6	4.8	0.0	3.2	0.8	0.1	**14.6**	2.6	0.1	**17.2**
Ecuador	ECU	0.1	0.6	3.2	3.9	5.0	0.6	6.2	0.0	2.1	1.1	1.0	**20.0**	0.0	0.9	**20.9**
El Salvador	SLV	3.0	3.5	1.1	7.6	2.8	0.1	9.7	0.0	1.7	1.0	0.3	**23.3**	3.6	0.2	**27.1**
Guatemala	GTM	0.7	2.8	0.8	4.3	2.2	0.3	5.6	0.0	1.1	0.5	0.3	**14.2**	0.0	0.0	**14.2**
Guyana	GUY	2.6	4.5	0.3	7.4	1.6	0.3	2.9	0.0	2.8	1.5	0.4	**16.8**	0.0	0.0	**16.8**
Honduras	HND	2.1	3.1	0.0	5.1	3.5	0.2	7.2	0.0	4.0	0.8	0.9	**21.7**	0.0	0.0	**21.7**
Jamaica	JAM	3.5	3.1	2.4	9.0	1.4	0.4	8.8	0.0	3.8	2.9	1.5	**27.9**	0.0	0.1	**28.0**
Mexico	MEX	3.6	3.4	0.2	7.2	1.8	0.0	4.3	0.0	1.6	0.3	1.2	**16.3**	1.1	4.4	**21.8**
Nicaragua	NIC	1.6	6.7	0.0	8.3	6.5	0.3	6.7	0.9	3.5	0.7	0.4	**27.3**	0.0	0.4	**27.7**
Panama	PAN	1.7	0.9	0.5	3.1	5.6	0.5	1.8	0.0	0.8	0.4	0.8	**13.1**	0.0	3.3	**16.4**
Paraguay	PRY	0.1	2.4	0.0	2.6	3.8	0.2	5.1	0.1	1.1	0.9	0.2	**13.9**	0.0	1.1	**15.1**
Peru	PER	1.5	4.7	0.8	7.0	1.9	0.4	7.2	0.0	1.1	0.0	0.8	**18.3**	1.9	0.9	**21.1**
St. Lucia	LCA	2.7	1.8	0.3	4.8	2.4	0.2	6.4	0.0	3.5	4.3	0.1	**21.8**	0.0	0.0	**21.8**
Trinidad and Tobago	TTO	3.6	7.1	0.0	10.8	2.8	0.0	5.2	0.5	0.8	1.4	0.2	**21.8**	0.0	1.4	**23.2**
Uruguay	URY	3.7	2.4	0.3	6.4	8.9	1.9	7.9	0.0	2.5	1.1	-0.3	**28.3**	3.2	0.0	**31.5**
Mercosur + Chile + Mexico		2.5	3.0	0.8	6.3	4.7	1.0	6.8	1.5	1.9	1.1	0.7	**24.0**	1.7	1.5	**27.3**
Andean Community		0.8	3.1	1.1	5.0	4.4	0.5	6.5	0.7	1.7	0.7	1.3	**20.8**	1.0	1.6	**23.3**
Central America and Dominican Rep.		1.7	3.3	0.6	5.5	4.4	0.4	5.8	0.2	2.4	0.7	0.4	**19.8**	1.1	0.6	**21.4**
Caribbean		2.3	3.3	0.5	6.0	2.7	0.6	6.5	0.3	3.3	2.7	0.6	**22.8**	0.0	0.2	**23.0**
Average LAC-25		**1.9**	**3.2**	**0.7**	**5.8**	**3.9**	**0.6**	**6.4**	**0.6**	**2.5**	**1.4**	**0.7**	**21.9**	**0.9**	**0.8**	**23.6**
Cuba	CUB	1.4	6.8	0.0	8.2	4.4	0.0	0.0	1.2	0.8	0.0	3.2	**17.7**	0.0	0.0	**17.7**

Source: Prepared by the authors with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023).

Note: "Other taxes" includes payroll taxes, taxes on financial transactions, taxes and simplified non-classifiable regimes, among others.

Table 2: **Structure of the Equivalent Fiscal Pressure (by main tax type) in Latin American and Caribbean countries, 2021**

(individual data, in percentages of total EFP)

Country	ISO Code	Income Tax				Public SSCs	Property	Goods and services				Other Taxes	Tax Revenue (TR)	Private SSCs	Non tax Natural Resources	Total EFP
		Personal	Corporate	Classifiable	Total IT			General		Excise	International Trade					
								VAT	Other							
Antigua and Barbuda	ATG	0.0	10.4	0.0	10.4	16.5	3.0	30.4	9.3	17.7	12.2	0.5	**100.0**	0.0	0.0	**100.0**
Argentina	ARG	6.6	7.6	1.3	15.5	15.7	3.9	21.4	11.8	10.6	9.6	3.9	**92.3**	4.8	3.0	**100.0**
Bahamas	BHS	0.0	0.0	0.0	0.0	12.0	7.8	40.4	0.0	14.0	15.7	10.0	**100.0**	0.0	0.0	**100.0**
Barbados	BRB	11.9	13.9	1.9	27.7	18.4	6.3	27.3	0.0	13.1	6.8	0.4	**100.0**	0.0	0.0	**100.0**
Belize	BLZ	9.2	12.5	0.0	21.6	10.0	0.7	27.8	0.0	21.7	17.3	0.6	**99.8**	0.0	0.2	**100.0**
Bolivia	BOL	0.6	9.7	0.0	10.3	22.6	0.3	25.8	6.8	7.2	4.0	9.1	**86.2**	0.0	13.8	**100.0**
Brazil	BRA	8.5	10.5	3.7	22.7	22.3	4.7	21.4	14.1	4.3	2.0	4.7	**96.1**	0.0	3.9	**100.0**
Chile	CHL	8.6	13.5	8.2	30.3	4.2	2.9	33.8	0.0	5.4	0.7	1.8	**79.1**	16.4	4.5	**100.0**
Colombia	COL	5.3	18.5	1.2	25.0	18.9	4.1	23.8	3.6	7.1	1.4	4.7	**88.6**	8.2	3.2	**100.0**
Costa Rica	CRI	6.2	12.0	1.9	20.1	38.7	4.4	19.9	1.4	8.7	1.9	0.1	**95.2**	4.8	0.0	**100.0**
Dominican Rep.	DOM	7.4	16.2	5.7	29.4	0.4	3.2	28.1	0.0	18.5	4.6	0.3	**84.4**	14.9	0.6	**100.0**
Ecuador	ECU	0.6	2.9	15.3	18.8	23.9	3.1	29.6	0.0	10.2	5.4	4.7	**95.7**	0.0	4.3	**100.0**
El Salvador	SLV	11.1	12.9	4.0	28.1	10.5	0.5	35.7	0.0	6.3	3.7	1.1	**86.0**	13.5	0.6	**100.0**
Guatemala	GTM	5.1	19.6	5.7	30.4	15.2	2.0	39.2	0.0	7.5	3.7	1.8	**99.8**	0.0	0.2	**100.0**
Guyana	GUY	15.2	26.9	1.9	43.9	9.5	1.8	17.1	0.0	16.4	9.1	2.2	**100.0**	0.0	0.0	**100.0**
Honduras	HND	9.6	14.1	0.0	23.7	16.2	0.7	33.2	0.0	18.5	3.6	4.2	**100.0**	0.0	0.0	**100.0**
Jamaica	JAM	12.6	11.1	8.5	32.2	5.1	1.5	31.4	0.0	13.7	10.2	5.4	**99.6**	0.0	0.4	**100.0**
Mexico	MEX	16.4	15.8	1.0	33.2	8.2	0.0	19.6	0.0	7.2	1.3	5.4	**74.9**	4.9	20.2	**100.0**
Nicaragua	NIC	5.7	24.2	0.0	29.9	23.5	1.3	24.2	3.2	12.8	2.4	1.3	**98.6**	0.0	1.4	**100.0**
Panama	PAN	10.6	5.6	3.0	19.2	34.2	3.1	10.8	0.0	4.9	2.7	4.6	**79.6**	0.0	20.4	**100.0**
Paraguay	PRY	0.9	16.1	0.0	17.0	25.2	1.6	33.6	0.6	7.4	5.9	1.1	**92.5**	0.0	7.5	**100.0**
Peru	PER	7.0	22.5	3.7	33.2	8.9	1.8	34.0	0.0	5.1	0.2	3.7	**86.7**	9.0	4.3	**100.0**
St. Lucia	LCA	12.5	8.1	1.5	22.1	10.9	0.8	29.6	0.0	16.3	19.6	0.7	**100.0**	0.0	0.0	**100.0**
Trinidad and Tobago	TTO	15.6	30.7	0.0	46.4	12.2	0.0	22.4	2.4	3.5	6.2	0.8	**93.8**	0.0	6.2	**100.0**
Uruguay	URY	11.7	7.5	1.0	20.3	28.1	5.9	25.0	0.0	7.8	3.6	-1.0	**89.8**	10.2	0.0	**100.0**
Mercosur + Chile + Mexico		9.1	11.1	2.8	23.0	17.4	3.5	25.1	5.4	7.1	3.9	2.7	**88.1**	6.4	5.6	**100.0**
Andean Community		3.3	13.4	4.6	21.3	18.8	2.3	28.0	2.9	7.4	2.8	5.7	**89.1**	4.2	6.7	**100.0**
Centroamérica y Rep. Dom.		8.0	15.2	2.6	25.8	20.4	2.1	27.2	0.8	11.0	3.1	1.8	**92.3**	5.0	2.7	**100.0**
Caribe		10.0	14.1	2.0	26.1	11.9	2.8	28.4	1.3	14.4	11.8	2.4	**99.1**	0.0	0.9	**100.0**
Average LAC-25		**8.2**	**13.5**	**2.8**	**24.4**	**16.7**	**2.7**	**27.1**	**2.6**	**10.4**	**6.0**	**2.9**	**92.8**	**3.7**	**3.6**	**100.0**
Cuba	CUB	7.6	38.5	0.0	46.2	25.0	0.0	0.0	6.7	4.2	0.0	17.9	**100.0**	0.0	0.0	**100.0**

Source: Prepared by the authors with data from the Equivalent Fiscal Pressure for Latin America and the Caribbean 1990-2021 (IDB-CIAT, 2023).

Note: "Other taxes" includes payroll taxes, taxes on financial transactions, taxes and simplified non-classifiable regimes, among others.

Methodological annex and country clarification notes

The main clarifications, criteria and changes adopted in this update of the database of the Equivalent Fiscal Pressure (2023) for each of the countries surveyed are detailed below. Given the cumulative nature of this statistical compilation process, in all cases it has been adopted as a basis what had been done up to the last edition of this project and sought to respect generally accepted methodological consensuses in order to improve the accuracy and detail of the figures presented as much as possible.

Antigua and Barbuda

The main sources of information consulted in this update were: the *Ministry of Finance* for central and subnational tax collection, and the *Social Security Board* for social security contributions (SSCs). It is one of the two countries incorporated into the database in this edition.

This update was made with annual data from official budget estimates. Regarding changes in the data table, in the category of non-tax revenues, some concepts were reclassified to be compatible with the rest of the countries, separating taxes on goods into general and specific, in line with the methodology of the Organization for Economic Co-operation and Development (OECD).

For SSCs, in the absence of updated data, it was taken a series of projections included to complete the period 2019-2021. For the gross domestic product (GDP) series, data expressed in fiscal years were considered (compatible with the fiscal data presented); the series was updated with data from the *World Economic Outlook* (WEO) of the International Monetary Fund (IMF).

Argentina

The main sources of information consulted were: the Federal Administration of Public Revenues (AFIP) and the Secretariat of Public Revenues of the Ministry of Finance for tax and SSCs revenues, respectively, and the National Directorate of Fiscal Coordination with the Provinces to complete the tax and non-tax revenues (hydrocarbon and mineral royalties) of the subnational governments.

In this update, annual data on tax collection (national and provincial) and SSCs (national) up to 2021 were completed. Municipal revenue figures were also collected, which include some taxes and mostly fees and contributions of a mandatory nature.

By the cut-off date (03/31/2023), there was no complete information on the accumulated collection for the different concepts of municipal taxes and non-tax resources for the period under analysis. Therefore, the municipal resources for 2018-2021 period were estimated, respecting the same proportions of growth of the provincial collection of the immediately preceding year. The series of non-tax resources for royalties was also updated, incorporating a disaggregation between provinces and municipalities and with the estimation of the annual data for 2019-2021 period maintaining the same proportion of GDP of the previous year. The GDP series was updated thanks to the availability of official data (Ministry of Finance) for the entire period covered by the database (1990-2021).

Adjustments were made to the collection of excise taxes from 2018 to the present, in order to correct differences observed with the previous estimate (payment facilities). Additionally, the Tax for an Inclusive and Solidarity-based Argentina (PAIS), in force since December 2019, and the Solidarity and Extraordinary Contribution (although the latter as non-tax revenue, only in the EFP) were incorporated to the database.

Bahamas

The main sources of information consulted in this update were: the Central Bank of the Bahamas (Quarterly Statistical Digest, 2022) to complete the tax collection, and the National Insurance Board for the SSCs.

Regarding the changes in the data table, the Business and Professional License item, which had been classified as Income Tax, is recategorized as "*Other Taxes*", since this country does not have an income tax system. Additionally, this same item of Business and Professional License was completed, including the category *Other business and professional license*, and a more precise reclassification and reallocation of consumption taxes between *General Consumption Taxes*, *Taxes on Specific Goods and Services and Other Taxes* was made.

By the cut-off date of this update (31/03/2023), the information on SSCs for 2020 and 2021 was not available, so it was estimated taking as a reference the percentage of GDP of the immediately preceding year, in line with the OECD methodology. As for non-tax revenues, since this category did not contain revenues from natural resources, and in order to methodologically adjust the update according to EFP guidelines, it was decided to exclude this item from the data table and classify it below the line as a memo item.

For the GDP series, data expressed in fiscal years (compatible with the fiscal data presented) are taken from the IMF WEO database, except for the most recent years (2020 and 2021), for which the figures agreed with the OECD were used to adjust for the mismatch between revenue (fiscal year) and GDP (calendar year).

Barbados

The main sources of information consulted were: *Central Bank of Barbados*, for tax revenue data, and *National Insurance Board* (*NIS*) for SSCs. The most recent figures come from the Budget Resource Estimations published by the Barbados Parliament.

Tax data was completed through 2021. Based on quarterly data, annual tax collection data were recalculated to coincide with the fiscal years (which begin in April of each year). In addition, some concepts were reclassified to make them compatible with the rest of the countries, separating taxes on goods into general and specific taxes, in line with the OECD methodology. For SSCs, in the absence of updated data for 2021, it was decided to take the projection included in the *17th Actuarial Report NIS* (2017) to complete the most recent period. On the other hand, since these contributions are not directly linked to the exploitation of natural resources (renewable or non-renewable), it was decided to eliminate the non-tax revenue concepts included in previous versions and present them as a memo item (without inclusion in the calculation of total EFP).

For the GDP series, data expressed in fiscal years are taken (compatible with the fiscal data presented); this series was updated with data from the *Central Bank of Barbados* and the IMF WEO.

Belize

The main sources of information consulted in this update were: the *Ministry of Finance* for completing the central and subnational tax collection, and the Social Security Board for social contributions.

This update was made using annual data. The tax collection information for 2021 corresponds to the official revised estimates for fiscal year 2021/22, while the SSCs data are preliminary for the last year surveyed. On this occasion, several of the licenses that had been kept as “memo items” in previous versions were reclassified. These items were included under the heading “*Other Taxes*”. The stamp duties-land-transactions tax was also added. As non-tax revenues, licenses, rents and royalties derived exclusively from petroleum operations were maintained within the EFP; in this way, the data table of Belize was methodologically aligned with the EFP. In turn, revenues from ministerial agencies, licenses and royalties are included below the line as a memo item.

The taxes contained in the *Taxes on Goods*, *Transactions and Services* category were reclassified and reassigned to *General Consumption Taxes*, *Taxes on Specific Goods and Services and Taxes on Financial Transactions* (stamp duties) for greater precision in their categorization.

Regarding GDP, the complete series was checked and updated for the period 1990-2021, according to the fiscal years that are compatible with the fiscal information from the IMF’s National Accounts and WEO.

Bolivia

The main sources of information consulted were: the Ministry of Economy and Public Finance (MEFP) for tax (including subnational), public and private SSCs, and non-tax revenues. Data from the Central Bank of Bolivia (BCB) were also used for mining royalties.

Most of this update was carried out with annual data. The main change was introduced in the income from (public) SSCs, in which case the previous information was checked and the “Rentas Pensionarias Públicas“ items were eliminated from the EFP calculation; at the same time, the series of resources from mandatory contributions to the Health Insurance (Caja Nacional de Salud) was added. Additionally, the Tax on High Net Worth Individuals (Impuesto a las Grandes Fortunas IGF) was incorporated to the database within the Property Tax line. This tax has been in force since 2021 (Law 1,357).

At the cut-off date of this update (03/31/2023), there was no data available on refunds corresponding to Tax Refund Certificates (CEDEIM) for the 2019-2021 period. CEDEIM are usually published in the MEFP's Tax Revenues and Expenditures Bulletin, but, since the latter is outdated, it was decided to estimate the 2019-2021 period maintaining the same proportion with respect to the GDP of each year. The GDP series was checked and updated thanks to the availability of an official series for the entire period covered by the database (1990-2021).

Brazil

The three main sources used were: the annual Tax Burden report of Receita Federal do Brasil (RFB) and the National Treasury database. Data from the Brazilian Institute of Geography and Statistics (IBGE) were also used for GDP.

In the case of Brazil, it was decided to make a methodological change to bring figures and criteria closer to the main official sources and also to the OECD. Until now, it had been used the raw data from annual reports of the RFB, which showed some limitations in terms of updating them in a comparable way with the rest of the countries. On this occasion, it was decided to use net collection data on an annual basis, to eliminate the concept of refunds and to reclassify the Personal Income Tax. The following components were disaggregated in the Income Tax: Income Tax Withheld at Source (Impuesto sobre la Renta Retenido en la Fuente IRRF) and Personal Income Tax (PIT), in line with OECD methodology.

Annual data was reviewed and completed for the series of tax revenues of states and municipalities according to main taxes, as well as for fiscal instruments linked to non-renewable natural resource sectors. The GDP series was updated up to 2021, and the figures were also reviewed backwards and up to 1993 with the annual data base shared with the OECD. Since there is no complete series for the entire period, the resulting values in percentages of GDP show strong variations in some years, which calls for caution when analyzing the complete series. For the period under analysis, information from the IBGE was available, compatible with the figures in the CBT report for 2021, expressed in current values (millions of reais).

Chile

The main sources of information consulted were: the Budget Directorate (Dirección de Presupuestos DIPRES), the Internal Revenue Service (Servicio de Impuestos Internos SII), the Superintendence of Health (for data referring to ISAPRES) and the Superintendence of Pensions (for resources of mandatory contributions to the Pension Fund Administrators, AFP), in addition to the Central Bank of Chile for the GDP series.

Annual figures were completed for all series up to 2021. With annual data from the SII, it was possible to complete information on the different concepts involving tax refunds. In addition, the Income Tax was reclassified in line with the OECD methodology. In addition, the new Value Added Tax (VAT) on Digital Services, effective as of 2020, was incorporated into the database. The amount of VAT Remaining balances and others (SII) was also reclassified and adjusted to eliminate the existing differences between DIPRES data (net VAT and refunds, quarterly) and SII (gross VAT, annual). As for the structure of the excise tax revenue series, mining patents, gambling tax, environmental taxes (mobile sources and fixed sources) were added. Under the heading “Others”, miscellaneous items were added, including, among others, the fluctuation of debtors. For the series of municipal revenues and social security (public and private), the annual amounts were updated with the official sources (DIPRES and ISAPRES). Regarding mandatory contributions to the AFP, the collection figures for all items were estimated based on the respective percentage ratio to the previous year’s GDP.

Since that at the cut-off date of this update (31/03/2023) the detail of the amounts collected from DIPRECA-CAPREDENA-IPS and the Institute of Labor Security (ISL) for 2021 was not available, both concepts were estimated by applying the same percentage distribution of the previous year to the total value effectively collected, in line with the OECD methodology. Finally, GDP figures were revised and updated based on the spliced series base 2018 for the period 1990-2021 from the Central Bank of Chile.

Colombia

The main sources of information consulted for this update were: the National Tax and Customs Directorate (Dirección de Impuestos y Aduanas Nacionales DIAN) for gross tax collection; the Ministry of Finance and Public Credit for tax collection net of refunds, public social contributions and Ecopetrol dividends; the National Planning Department (Departamento Nacional de Planeación DNP) for subnational collection; the Financial Superintendency of Colombia for private social contributions; and the Ministry of Mines and Energy and the DNP's General Royalties System for mining and hydrocarbon royalties. For the GDP series, information from the National Administrative Department of Statistics (Departamento Administrativo Nacional de Estadísticas DANE) was used.

On this occasion, adjustments were made to the central tax collection, which were completed with annual net collection data, in line with the methodology used by the Ministry of Finance and Public Credit. In addition, the data for municipalities between 2011 and 2021 published in the DNP's Effective Cash Operations (OEC) report was updated. New taxes were also incorporated to the database: the SIMPLE regime (Simple Tax System for Small Taxpayers), and the standardization and withholding tax, effective as of 2019. Meanwhile, the collection of the COVID Solidarity Tax that was in force between May 1 and July 31 of that year is included in the income tax on individuals and corporates in 2020. Refunds continued to be calculated as the difference between the collection reported by DIAN (gross collection) and the one reported by the Ministry of Finance and Public Credit (net).

At the cut-off date (03/31/2023) the opening of public social security contributions for the period 2019-2021 was not available. The usual source of this data has been the Ministry of Finance and Public Credit, an entity that has published the total public contributions, but not the disaggregated data for Health and Pensions and Severance Pay. For the period between 2019 and 2021, the annual Health data was estimated from the percentage of GDP of the immediately preceding year and the annual Pensions and Severance pay data as the difference of total public contributions and Health. These figures were verified with DNP officials. Finally, the current GDP series was updated with data from DANE.

Costa Rica

The main sources of information were: the Ministry of Finance for central and subnational tax collection and non-tax revenues, and the Costa Rican Social Security Fund (Caja Costarricense del Seguro Social CCSS) for public and private social contributions, in addition to other regimes.

In this update, annual tax collection data was completed. In addition, very detailed information was obtained from the Ministry of Finance that allowed disaggregating excise taxes according to whether they are collected internally or by imports. Regarding the inclusion/updating of taxes and as a result of the approval of Law 9635, Law for the Strengthening of Public Finances, as of 2018 the “General Sales Tax” item is renamed “Value Added Tax”. Additionally, this Law did not mean the creation of new taxes, but the transformation of some or the unification of some tax rates. In mid 2019, a series of modifications to the “Personal” item of the Income Tax were presented. These modifications allowed generating a series of additional openings for this item, namely: “Taxes on salaries, pensions and retirements”, “Taxes on Individuals with Lucrative Activity”. In the case of taxes on “Dividends and Interest on Securities”, these were broken down into three components: “Taxes on Real Estate Capital”, “Taxes on Movable Capital” and “Taxes on Capital Gains and Losses”.

As for non-tax revenues, and in order to adjust this update to the EFP methodology (which, by definition, includes in this category non-tax revenues from the exploitation of natural resources), it was decided to eliminate this item from the data table (which includes Hunting and Fishing Licenses -continental and from the Ministry of Environment and Energy-, Consular Fees and Migration and Foreigners Law) and classify it below the line as a memo item.

The GDP series was revised and updated due to the availability of an official series from the Central Bank of Costa Rica for the entire period covered by the database (1990-2021).

Cuba

The main sources of information consulted were: the National Statistics and Information Office (Oficina Nacional de Estadísticas e Información ONEI), the Ministry of Finance and Prices, the National Tax Administration Office (Oficina Nacional de Administración Tributaria ONAT) and the Central Bank of Cuba (Banco Central de Cuba BCC).

The corresponding table was updated with annual data for the period 1990-2021 based on consolidated information from the State budget settlement reports. Regrettably, it has not been possible to disaggregate local government revenues and non-tax revenues linked to natural resources. The data are in line with those published by the OECD, both in magnitude and in their classification.

A recent monetary order reform, together with the inflation that soared due to the COVID-19 pandemic, led to a sharp increase in GDP between 2020 and 2021 (more than five times in nominal terms) and caused an extraordinary alteration in the country's tax level and structure, which led to an unprecedented drop in EFP from 37.5% of GDP in 2020 to 17.7% of GDP in 2021, a phenomenon that can be explained mainly by the reduction in the sales tax rate and a reclassification of extraordinary revenues as non-tax revenues. In a medium-term perspective, this would undoubtedly introduce an artificial bias in any comparative analysis. For this reason, the figures for this country were not considered in the regional averages nor in the comparisons between countries in the region.

Dominican Republic

The main sources of information consulted in this update were: the General Directorate of Internal Taxes (Dirección General de Impuestos Internos DGII) and the Ministry of Finance (Ministerio de Hacienda MH) for central level collections and non-tax revenues, the General Directorate of Budget (Dirección General de Presupuesto DIGEPRES) for local level collections, and the Social Security Treasury for SSCs (public regimes).

The update was carried out on an annual basis, based on information from the MH and the DGII, which made it possible to disaggregate most of the taxes by collecting agency (DGII, General Directorate of Customs and Treasury). In addition, a line was opened with the RD$2.0 additional tax on diesel and premium-regular gasoline consumption, in order to differentiate the collecting entity. Until 2017, this tax was added within the Excise Tax on Hydrocarbons and was collected by the DGII. As of 2018 it began to be collected by the DGA.

As for consular duties, included in non-tax revenues, and in order to methodologically adjust the data table according to EFP guidelines, it was decided to delete this item from the data table and classify it below the line as a memo item. The internal component of " Excise Taxes on Alcoholic Beverages" corresponds to the sum of "Excise Taxes on Alcohol Derived Products" and "Excise Taxes on Beers". Regarding the "Other Property Taxes", the DGII made a slight upward update, with respect to the version of the EFP 2018, for the period 2015-2021. In the case of the "Other Taxes on Services", as of 2017, these were changed to include the "Tax for the 911 emergency system".

Regarding GDP, the complete series for the period 2015-2021 was revised and updated with information from the IMF WEO as of October 2022.

Ecuador

The main sources of information consulted were: the Internal Revenue Service (Servicio de Rentas Internas SRI) for tax revenue series, the Central Bank of Ecuador (Banco Central del Ecuador BCE) for GDP and SSCs figures, the Ecuadorian Customs Corporation (Corporación Aduanera Ecuatoriana CAE) for tax resources linked to international trade, and the Development Bank of Ecuador (Banco de Desarrollo del Ecuador BDE) for the resources of provinces and municipalities.

In this update, annual data on tax collection (central government, provinces and municipalities) and SSCs (nation) was completed until 2021. Thanks to the availability of new information from the SRI and BCE, the information for the period 2015-2021 was updated for the following concepts: “NCN and compensations”, “Personal and Corporate Income Tax “, “ICE internal operations”, “Tax on Foreign Exchange Outflows” and “Security Contributions”. Likewise, the GDP series for the 2013-2021 period was updated.

At the cut-off date (03/31/2023), complete information on subnational collection (BDE) for the year 2021 (which is published in October of each subsequent year) was not available, so the collection figures for each of the concepts were estimated based on the respective percentage ratio to the previous year’s GDP (2020) in line with the OECD methodology.

El Salvador

The main sources of information consulted for this update were: the Ministry of Finance, the Fiscal Transparency Portal, and the Superintendency of the Financial System for social contributions to the private pension system.

In this update, annual tax collection data for the central government were completed. For their part, the special contributions to citizen security were broken down into their component taxes: Citizen Security and Coexistence (CESC) and Large Taxpayers for the Citizen Security Plan (CEGC). Both taxes have been in force since 2015

It is worth mentioning that in 2018 the Constitutional Chamber of El Salvador declared the Tax on Financial Operations unconstitutional, considering that the approval of this tax did not follow due process. However, with the purpose of avoiding possible problems of budgetary insolvency, a term of validity was set for such tax until December 31, 2018.

Regarding GDP, the complete series for the period 1990-2021 was checked and updated with information from the IMF's WEO as of October 2022..

Guatemala

The main sources of information consulted for this update were: the Ministry of Finance, the Superintendency of Tax Administration (Superintendencia de Administración Tributaria SAT) and the Guatemalan Social Security Institute (Instituto Guatemalteco de Seguridad Social IGSS).

In this update, annual data on tax collection at the central government, municipal and SSCs levels were completed. In addition, two concepts were added as payroll taxes: INTECAP (Employer's Tax, including payment agreements) and IRTRA (Tax Decree 1528). The information referring to SSCs was complemented with the incorporation of revenue from Social Security and Social Welfare Contributions (public employees). Both changes were made in line with OECD methodology.

Regarding GDP, the complete series for the period 1990-2021 was revised and updated with information from the IMF's WEO as of October 2022.

Guyana

The main sources of information consulted were: the *Ministry of Finance*, the *Central Bank of Guyana*, the *National Insurance Scheme* (NIS) and complementary information from the OECD. GDP data (calendar year series) were sourced from the *Bureau of Statistics of Guyana* and supplemented with IMF estimates.

In this update, annual data on tax collection at the central government, municipal and SSCs levels were completed. In addition, the internal structure of property taxes by type of taxpayer (*Public Sector companies, Private Sector companies, Individuals*) and excise taxes on imports (Motor vehicles, Oil products, Tobacco and Alcoholic beverages) were specified.

Regarding GDP, the series for the period 2015-2021 was checked and updated with information from the IMF's WEO as of October 2022. A significant increase in this indicator has been observed for 2021, which is due to the discovery of important hydrocarbon deposits that have not yet been matched by an increase in fiscal revenues (which explains, to a large extent, the notable drop in EFP in that year).

Honduras

The main source of information in this case has been the Ministry of Finance of the Government of Honduras (SEFIN), although data shared by the OECD (municipalities) and internal VAT figures provided by the Revenue Administration Service (Servicio de Administración de Rentas SAR) were also obtained.

All central government tax information was updated through 2021. However, the VAT series (internal and customs) for the period 2019-2021 was estimated by applying the same percentage distribution of the last year actually collected. In addition, detailed information was added on the Population Security Rate by component, which was assigned to different groups of taxes according to their legal nature and in line with the OECD methodology. The entire series (1990-2021) of total municipal tax revenues was also updated with data revised by the SEFIN.

For GDP data, although the complete series contains official data from the Central Bank of Honduras, IMF WEO figures as of October 2022 were used for the most recent period.

Jamaica

The main sources of information used were: the *Ministry of Finance* (MOF), which includes agencies such as the *Tax Administration Jamaica* (TAJ), the *Fiscal Policy Management Unit* (FPMU), the *National Insurance Scheme* (NIS), the *Department of Local Government* (DLG) and the *Bank of Jamaica* (BOJ).

The annual information was completed until 2021, ensuring consistency with OECD data. In addition, the disaggregation with recent taxes (*Quarry Tax*) was improved and non-tax revenues associated with bauxite mining activity (*Levy & Royalties*) were added. To be in line with OECD methodology, *General Consumption Tax* (*domestic & imports*) and *Specific Consumption Tax* (*domestic & imports*) were reclassified separately. Municipal and SSCs revenue data for the most recent years are from the *Tax Administration of Jamaica and MOF* (*Public Bodies*), on a calendar year basis.

For the GDP series, a series compatible with the fiscal data collected and in line with that used by the OECD was used, i.e.: expressed in fiscal years (April 1 to March 31) for the period 1990-2003, and then in calendar years (January 1 to December 31) for the period 2004-2021 (until 2019 in coincidence with the IMF WEO).

Mexico

The main sources of information consulted in this update were: the Ministry of Finance and Public Credit (Secretaría de Hacienda y Crédito Público SHCP) for tax collection corresponding to the federal government and public SSCs, the National Institute of Statistics and Geography (Instituto Nacional de Estadística y Geografía INEGI) for state and municipal collection, the National Commission of the Retirement Savings System (Comisión Nacional del Sistema de Ahorro para el Retiro CONSAR) for contributions to the private pension system, and the Bank of Mexico for Petróleos Mexicanos' non-tax revenues.

In this update, annual data on national and subnational tax collection have been completed, which is in line with those compiled by the OECD. Within the Corporate Income Tax, the collection of IT from hydrocarbon contractors and assignees was detailed. Likewise, the Tax on Hydrocarbon Exploration and Extraction Activities was added to the general Income Tax item. As of 2015, hydrocarbon duties began to include transfers from the Mexican Petroleum Fund for Stabilization and Development.

The current GDP series was revised and updated with INEGI data through 2021.

Nicaragua

The main source of information has been the Ministry of Finance and Public Credit (Ministerio de Hacienda y Crédito Público MHCP).

All annual tax collection data from the central government and municipalities were updated, as well as data from the SSCs and the Road Maintenance Fund (Fondo de Mantenimiento Vial FOMAV) (non-tax). In the case of foreign trade taxes, as of 2015 these received an update from the MHCP.

Furthermore, the lines "Special tax on gaming machines" and "Fixed fee tax" were incorporated; meanwhile, under "Others", the line item corresponding to "Fines and late payment surcharges-other taxes" was included. The 2018 data for "Municipal Income Tax" was also updated, associated with new items recorded as of that year.

Regarding GDP, the complete series for the period 1990-2021 was reviewed and updated with information from the IMF's WEO as of October 2022.

Panama

The main sources of information consulted in this update were: the General Directorate of Revenues (under the Ministry of Economy and Finance) for central government revenues, including non-tax revenues, the Comptroller General of the Republic for municipal revenues, and the Social Security Fund for public social contributions.

The Ministry of Economy and Finance made a slight upward revision with respect to the version of the EFP 2018 for the period 2015-2018 in the non-tax revenues for "Annuity, Tolls and Canal Services", "Canal Dividends" and "Flat Rate". Social Security Fund revenues include regular and special contributions and professional risk insurance. Revenue data for local governments have been estimated for 2021, maintaining the ratio to average GDP for the period 2018-2020 (OECD).

Regarding GDP, the complete series for the period 2016-2021 was reviewed and updated with information from the IMF WEO as of October 2022.

Paraguay

The main sources of information were the State Secretariat of Taxation (Secretaría de Estado de Tributación SET) for central government tax resource statistics, the Ministry of Finance (Ministerio de Hacienda MH) for complementary fiscal statistics and the Central Bank of Paraguay (BCP) for the most updated GDP data.

On this occasion, it was possible to complete and update the annual tax collection information up to 2021, including the figures corresponding to net VAT and excise taxes, social security, municipalities and non-tax revenues. The IT components were also reclassified to make it compatible with the OECD's general methodology, discriminating between individuals and corporates. Additionally, the "Corporate Income Tax (IRE)" and "Dividends and Profits Tax (IDU)" lines were incorporated, effective as of 2020.

Likewise, the GDP series was updated with data from the Central Bank of Paraguay, using the historical series base 2014 available from 1950 to 2021.

Peru

The main sources of information consulted in this update were: the National Superintendency of Customs and Tax Administration (Superintendencia Nacional de Aduanas y de Administración Tributaria SUNAT) for central level collection and non-tax revenues, the Integrated Financial Administration System of the Ministry of Economy and Finance (friendly query) for municipal collection information, and the Central Reserve Bank of Peru for the most updated GDP data and oil royalties.

This update was carried out with annual data. Thanks to the information available, it was possible to update and complete the annual provincial tax collection data up to 2021. The "Tax on imports", "Other tax revenues" and "Compulsory contributions" lines were incorporated. Additionally, the series of non-tax revenues of local governments was updated and cleaned.

In addition, the information corresponding to Refunds was updated and completed, in line with the OECD methodology. As for new taxes, the new excise tax on plastic bags, effective as of 2019 (in force since August 19 by Law No. 30,884), was added to the category of Excise taxes.

The GDP series was updated with the official source of the BCRP due to the availability of an official series for the entire period covered by the database (1990-2021).

St. Lucia

The main sources of information used were: *Ministry of Finance* (*Estimates of Revenue and Expenditure*), *Central Statistical Office of Saint Lucia*, *National Insurance Corporation of Saint Lucia*, while GDP data (series in calendar years) is sourced from OECD 2023, complemented with IMF estimates. This is another of the two countries incorporated in the EFP database (IDB-CIAT) for this update.

The information on tax revenues was completed with annual data up to 2021 (*Revised Estimates of Budget*). To be in line with OECD methodology, *General Consumption Tax*, *VAT and Excise Tax* (*domestic & imports*) were reclassified. Data for municipalities were not available at the cut-off date of this update. SSCs data for the period 2018-2021 correspond to the *National Insurance Corporation of Saint Lucia* and are similar to those published by OECD 2023. In this case, the figures follow the financial year: for 2021 the data was estimated and covers from July 1, 2020 to June 30, 2021.

The current GDP series, expressed in fiscal years, comes from the IMF WEO, in line with the OECD.

Trinidad and Tobago

The main sources of information consulted in this update were: the *Ministry of Finance* to complete central and subnational tax collection, and the *National Insurance Board* for SSCs.

This update was made using annual data. The taxes contained in the *Taxes on Goods and Services* category were reclassified and reallocated for greater accuracy to *General Consumption Taxes and Taxes on Specific Goods and Services*. In addition, within Excise Taxes, the *Tax on Online Purchases*, effective in 2017, was added. The *Oil companies-Petroleum Profits* tax was also reclassified within the tax field (it was previously considered a non-tax resource). Meanwhile, the *Other General Government taxes & fees* category was removed from the data table, as part of the EFP, and classified below the line as a memo item, in order to standardize the criteria with those of the other countries contained in this update.

For the GDP series, figures were revised and updated with data expressed in fiscal years from the IMF WEO.

Uruguay

The sources of information were: the General Tax Directorate (Dirección General Impositiva DGI) for most central government tax collection data; the Ministry of Economy and Finance (Ministerio de Economía y Finanzas MEF) for certain concepts such as customs taxes; the Central Bank of Uruguay (Banco Central del Uruguay BCU) for GDP data; the National Public Education Administration (Administración Nacional de Educación Pública ANEP) for the Primary School Tax up to 2017; the Uruguay Territory Observatory of the Office of Planning and Budget (OPP) for municipal resources; and the National Statistics Institute (Instituto Nacional de Estadísticas INE) for (public and private) social security contributions.

In this update, the annual data up to 2021 was completed based on the data regularly published by the DGI. The occasion was also used to update backward series, such as those corresponding to certificates and refunds of Personal Income Tax (PIT), which was updated with data provided directly by the DGI. At the cut-off date (03/31/2023), data for year 2021 was not available for municipal taxes neither for Property Taxes; in both cases, preliminary figures were estimated maintaining the same proportions in relation to GDP calculated for the 2018-2021 period.

Regarding the GDP series, a review and update was carried out for the entire period under analysis. For this purpose, the most recent BCU figures based on 2016 were used and, for the previous period, a statistical splicing work corresponding to the period 1997-2015 was used; for the previous years since 1990, the series was adjusted according to the average gap with OECD figures.

Venezuela

Until the last update made in 2016, the sources of information were mainly the National Integrated Customs and Tax Administration Service (Servicio Nacional Integrado de Administración Aduanera y Tributaria SENIAT) and the Ministry of the Popular Power of Economy and Finance until 2009. Unfortunately, there is no data available from the aforementioned sources or access to other alternatives. Consequently, it has not been possible to update the data for the period 2016-2021. While the OECD has decided to take as valid data only up to 2012, the IDB-CIAT database maintains figures up to 2015 (some estimated). For these reasons, and to avoid artificial biases, the figures for this country were not considered in the regional or subregional averages or in the comparisons between countries in the region.

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