

Revenue Report COVID-19 (RRC) Year 2021



JUNE 2022

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EXECUTIVE SUMMARY

- The **total tax collection** of the 23 **CIAT** member countries analyzed in the Report has shown, on average and in constant values, **a recovery during the year 2021 in the order of 17.2% compared to the year 2020**. This trend was also verified for all major tax categories (Income Taxes - IT, +16.9%; Value Added Taxes - VAT, +19.6%; Excise taxes, +9.4%). **When comparing with 2019 figures, the annual improvement is steady, although limited in its magnitudes**, for Total tax revenue (+6.7%), and for Income taxes (+7.0%) and VAT (+10.3%) but no longer recorded for Excise taxes (-4.5%). **By region, the results are similar although with some differences**. Latin America and the Caribbean recorded a real improvement of 18.3% compared to 2020 and only 6.0% compared to 2019, with similar gaps for the main taxes. The Andean and Central American countries were, on average, those with the greatest recovery (+24.2% and +23.6%) in comparison with 2020, not so with 2019 where all year-on-year increases are moderated even with a relative drop in Caribbean cases (-4.6%). **By country, heterogeneity remains very high**. Compared to 2020, the recovery in real terms is unanimous and unambiguous although in a wide range of increases from 35% in Peru to the more discreet 1.1% in Mexico. Weighing the figures for 2019, the range of values for year-on-year improvements is narrower (maximum of 21.3% for Chile), including some cases with percentage drops in real terms (Ecuador, Jamaica and Panama).
- The **Revenue Report COVID-19 (RRC)** compiles the available information on the evolution of global collection of tax administrations and their main components (Income taxes, VAT, Excise taxes and other tax revenues) with their monthly changes regarding the same month of the previous year as a reference and cumulatively throughout the year in constant values. This sixth edition of this publication analyzes the available data for the **period January-December 2021** and incorporates information corresponding to a large group of 23 CIAT member countries, which has been compiled and processed within a database built specifically for this purpose, thus providing a complete perspective on the evolution of tax revenue at the international level and, in turn, making it possible to observe and analyze a larger number of particular cases.
- **Total tax collection**, as anticipated, showed a remarkable recovery in 2021, especially during the second quarter, which coincided, in the year-on-year comparison, with the period of greatest negative impact of the COVID-19 pandemic during 2020. In real terms, average year-on-year increases of close to 40% were achieved in the months of April, May and June, while the average year-on-year increase in total cumulative collections reached 21.5% at the end of the first half of the year. During the second half of the year, this trend stabilized and slightly declined until closing with an average improvement of +17.2% at the end of December.

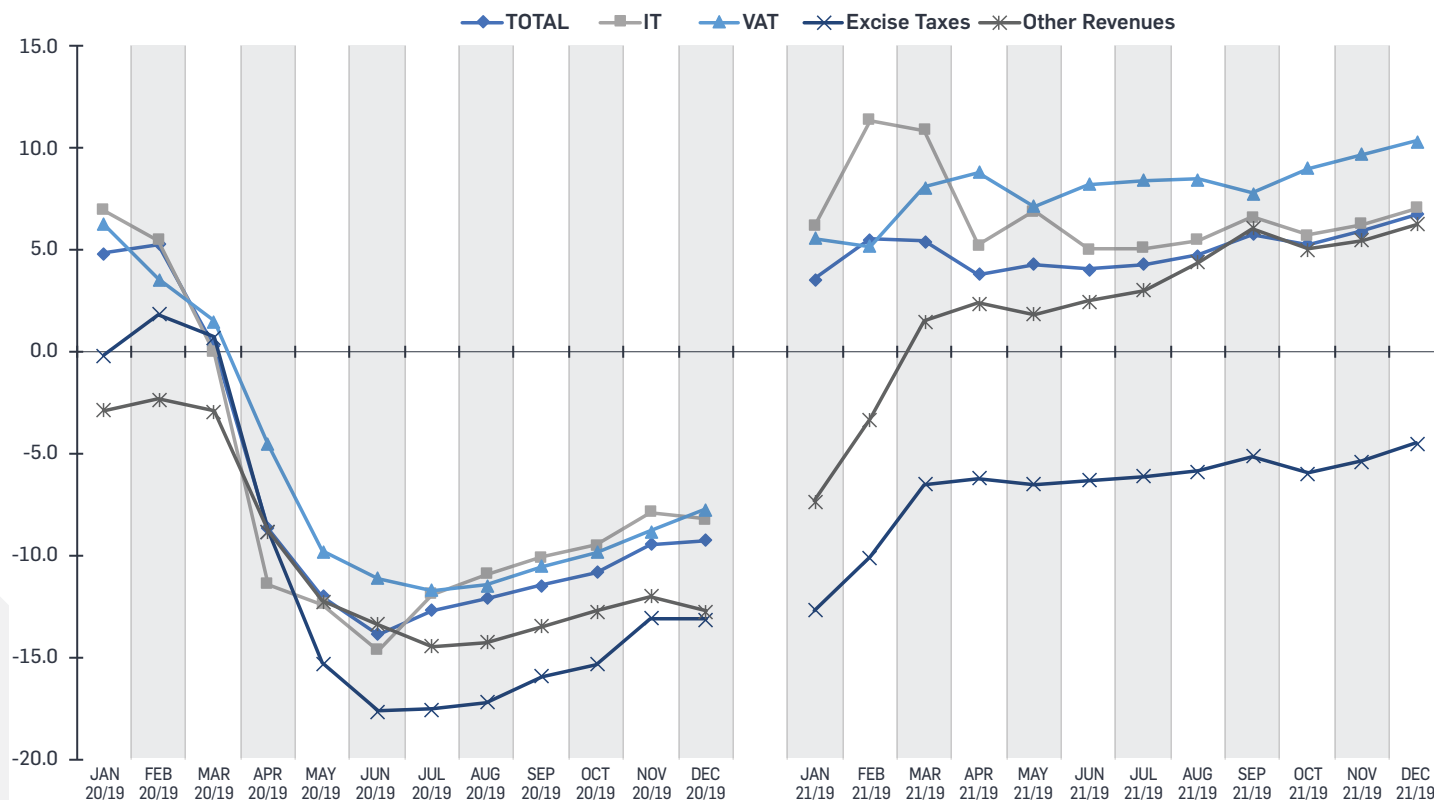
- Since year 2020 can be considered as atypical to be taken as a benchmark in a temporal comparison, **similar analyses were included throughout this document in relation to calendar year 2019**, which can be considered more "normal" in statistical terms and allows comparing the evolution of years 2020 and 2021 against the same benchmark and better assessing the relative "strength" of the recovery pointed out in the last annual period. Thus, it was found that the year-on-year growth of total tax collection was repeated in all months of 2021, although the magnitude of these changes turned out to be much more limited than when compared to the 2020 figures. In cumulative terms and on average, increases with respect to 2019 remained throughout 2021 in a range between 3.5% in January and 6.7% in December, which implies a concrete improvement when considering that the same variables had ended in negative territory (-9.3%) at the end of 2020 (Figure 0).
- **Income Taxes (IT)** recorded, on average, monthly increases in revenues throughout the year when compared to 2020 figures. In cumulative terms, an annual maximum was reached in June (+21.9%), ending 2021 with an average relative improvement of 16.9%. Something different, although not as much, was observed when comparing with the IT figures in 2019 relativizing, somehow, the magnitude of the recovery around the average of 7.0% it reached in December. However, it is clear the contrast and relative improvement compared to what was observed at the end of 2020 where the tax accumulated a loss of 8.2% (Figure 0). At the country level, if 2020 is taken as a reference, most countries show a clear recovery in tax collection levels since the beginning of the year, losing some strength in the second part of the year. With respect to 2019, the initial rebound in accumulated IT revenue also gradually fades away, with a significant number of cases with tax losses by the end of 2021.
- **At the individual level**, all the countries surveyed achieved, in constant values, positive year-on-year changes in total accumulated tax collection at the end of 2021 and in comparison with 2020, with a maximum peak around the month of June within a very wide range of relative increases. When weighted by 2019 figures, a greater diversity of realities is noticed. While some countries confirm the general trend -even with lower magnitudes than those calculated for 2020-, many others show some weakness in the recovery observed in the last months of 2021, including cases where the total accumulated collection was not able to reach, in constant values, the figures recorded in 2019 and, therefore, ended in negative ground.
- **The Value Added Tax (VAT)** has been, together with the IT, one of the tax instruments that, albeit partially, cushioned the deep fall in global tax revenue during the first part of 2020 and pushed the recovery during the second half of 2020. During 2021, the collection of this tax showed, on average, a strong recovery with respect to the previous year, especially from the second quarter onwards. The accumulated figures reached a maximum real growth of 22.7% in July, stabilizing around 19-20% by the end of the year. With respect to 2019 (Figure 0), having ended with a negative balance in 2020 (-7.8%), the VAT rebound during 2021 - although relativized - remained in positive territory and with an increasing trend towards the end of the year (+10.3%). At the country level, there is a diversity of cases, especially when comparing with 2019 figures, where cases can be found with both very significant increases and relative decreases in specific tax levels.

- **Excise taxes** had been during 2020 the most affected instruments by the impacts of the COVID-19 pandemic, a situation that continued during the first months of 2021. From April onwards, in comparison with 2020, the collection of Excise taxes in cumulative terms showed successive year-on-year increases -more limited than those of the IT or VAT-, with a pattern of strong recovery until the middle of the year and a gradual moderation of that trend towards December (+9.4%). However, with respect to 2019, the relative weakness of monthly increases meant that cumulative excise taxes revenues remained in loss territory throughout the period analyzed, ending with an average drop of 4.5% in December, which is not as deep as that calculated for 2020 (13.1%) with respect to the same reference year (Figure 0). At the country level, comparing with figures for 2020 where the impact of the pandemic has been felt more strongly, some of them failed to consolidate the overall recovery process and showed significant drops in cumulative Excise taxes collection at the end of 2021 (a situation that is aggravated and accentuated when taking into consideration the figures for 2019).
- The aggregated chapter of **Other Revenues** has less analytical importance due to its high heterogeneity among the considered countries with available information. However, in some cases its weight is much more relevant than the average (for example, in Argentina, Brazil and the United States). The average evolution of "Other Revenues" is in line with the other taxes previously analyzed. In 2020, the average accumulated drop up to December (-12.7%) turned out to be one of the highest. For year 2021, compared to 2020 figures, an accelerated recovery of collection was observed, in constant values,

which resulted in an average accumulated increase of 21.2% in the month of December. With respect to 2019, isolating the greater negative effects of the pandemic, the aforementioned recovery is tempered and relativized, reaching a maximum of 6.2% in December 2021 (Figure 0). By country, the vast majority of countries show positive changes in the accumulated collection of "Other Revenues" throughout the year and in comparison with the figures corresponding to the year 2020. The general trends and behaviors are accentuated in several cases when compared to 2019, further moderating the recovery of the cumulative collection of this set of taxes.

- Additional detailed information on the monthly and cumulative evolution -in constant and current values- of all CIAT member countries surveyed is available on the CIAT web page ([Collection | Inter-American Center of Tax Administrations \(ciat.org\)](https://ciat.org), "Monthly Collection Database (Annex)").

Figure 0. Evolution of total tax cumulative collection of tax administrations by type of tax (in percentage change compared to the same month of 2019; simple averages; constant prices; January 2020 to December 2021)



Source: Elaborated by the authors based on official information from CIAT Tax Administrations.

- The RRC have been using the **data on people's mobility** collected and disseminated by Google to contrast and anticipate, to some extent, the effects of such measures on public revenues. After the deep drop in these indicators during the months of March and April 2020 (as a consequence of the various restrictions imposed by governments around the world), an upward trend in mobility and a gradual rebound in economic activity were observed in all cases under analysis, although the recovery had not been complete by the end of the year and the circulation of people still continued to be limited compared to pre-pandemic mobility.
- Throughout 2021, in view of the progress made in terms of vaccination of the population and reduction of

reported infections, the trend of gradual improvement of mobility indicators in all its dimensions began to consolidate. Trips to **grocery and pharmacies** led this recovery since March of that year, reaching an increase of nearly 40% in December with respect to the values of January 2020. **Commuting to work**, which had improved in the first months of the year, slowed down its pace, probably due to the new remote working modalities that have become widespread in most countries, still remaining at the end of 2021 below pre-pandemic levels. Movements in **retail and recreation and transit stations** showed an encouraging upturn during the second half of the year, which allowed a return to these baseline levels in November.

- For their part, the **average monthly tax collection** data by type of tax until December 2021 and with respect to the 2019 figures show a behavior correlated with mobility indicators, with a slow recovery of the levels observed from June 2020 onwards, after the deep drops observed in April and May of that year, with a somewhat less and more diffuse rhythm during 2021.
- Previous editions of the RRC have already analyzed this **correlation between the evolution of tax collection and indicators of people's mobility**, both considering average values and through a panel data analysis. For year 2020, a linear regression model between both variables achieved a high level of fit ($R^2=0.87$), with a parameter estimate for Retail and Recreation which suggested that 60% of changes in mobility would have impacted on changes in total monthly tax collection. When incorporating monthly data for calendar year 2021, we found a loss of explanatory power ($R^2=0.79$) with an estimated parameter of 0.54 for the mobility indicator. This relationship, although it adequately summarizes what happened in a two-year period (2020-21), has not remained stable throughout the period, where three different sub-periods can be distinguished: i) February to August 2020 ($R^2=0.92$); ii) September 2020 and May 2021 ($R^2=0.08$); iii) June and December 2021 ($R^2=0.91$). Therefore, the mobility constraints resulting from the measures to curb the pandemic's progress have allowed explaining the main changes in public revenues, especially in the most restrictive periods of 2020. For the last six months analyzed, the linear relationship between changes in mobility and revenue seems to have been reconstituted, which could provide, going forward, a useful element to improve tax projections in the future.
- Beyond the analysis of general trends, as in the case of revenue from the main taxes, a more detailed analysis of the data by country reveals the **different trends adopted in terms of mobility**, which mainly respond

to the different strategies of national and subnational governments to cope with the COVID-19 pandemic. From the selection of a group of CIAT member countries, differences can be identified in terms of magnitude and pace of post-pandemic recovery. While there are countries where mobility in Retail and Recreation rebounded strongly since the third quarter of 2021, in other cases this indicator recovered only in the last months of that year with moderate figures, while in a limited number of countries, at the end of December, the movement of people had not yet fully recovered. Similar heterogeneity can be observed in mobility linked to workplaces, with countries that have managed to recover and even surpass pre-pandemic levels, many others that have not yet reached that goal despite significant upturns, and the rest of them that remain with mobility indicators well below those recorded at the beginning of 2020.

- In order to take advantage of the possibilities offered by the large amount of statistical information gathered, this Report also provides an **overview by groups of selected countries**, according to generally accepted geographic-economic criteria. In order to visualize and identify similarities and/or differences at the regional level in the recent evolution of variables related to tax collection and population mobility, five groups of countries were formed: "Mercosur + Mexico", "Andeans + Chile", "The Caribbean", "Central America + Dominican Republic", and "Others" (which includes CIAT member countries from the northern hemisphere included in the RRC Database that do not belong to the Latin American and Caribbean region). In addition, the grouping "Latin America and the Caribbean (LAC)" was considered to provide a more conventional regional perspective.
- In terms of **global tax revenues by country groups**, the Andean (+24.2%) and Central American countries (+23.6%), which were - together with the Caribbean

countries - the regions whose tax revenues had deteriorated the most as a result of the pandemic, showed a weak start for year 2021, compared to 2020, although they ended up accumulating, on average, the largest relative increases at the end of December. On the other hand, Mercosur countries (including Mexico) and Others (all of them in the Northern Hemisphere), whose cumulative total collections had been more resilient to the impacts of the pandemic during 2020, maintained year-on-year increases throughout 2021, which gradually declined towards the end of the year. The heterogeneous conglomerate of LAC countries accumulated an average increase of 18.3%. The figures are very different when comparing with 2019 where, for all the groups of countries, the average percentage increases are limited and close and even in the Caribbean there is a year-on-year drop which, having been maintained in the twelve months analyzed, ends up being -4.6% in December. For LAC region, the average growth in total accumulated tax collection is moderate (6.0%), although it consolidated in the second half of last year.

- It is also feasible to identify similarities and differences in the temporal evolution of **people's mobility indicators by country groups**. Regarding trips to Retail and Recreation Places, all country groups show the sharp drop experienced in April 2020, followed by a recovery of varying speed. However, the continuation of this trend in 2021 shows some differences since, at the end of December, the groups most affected in their collections since the beginning of the pandemic (the Andeans, Central America and the Caribbean) are precisely those showing the most significant increases in these indicators. The only exception is the "Others" group, which, on average and despite gradual progress, had not managed to recover pre-crisis mobility levels by the end of 2021. Something similar can be noted in terms of mobility to Workplaces where all country groups experienced the sharp drop in the month of

April 2020, followed by a generalized rebound in relative mobility levels during the rest of 2020 and also 2021. However, in this dimension the recovery has been slower in some groups (the Caribbean and Others) and is still far from complete compared to pre-pandemic values.

- This type of analysis can also be extended to the **different categories of main taxes by groups of countries**, also taking 2020 and 2019 as a reference for year-on-year comparison. In the case of **IT**, the average percentage changes of the accumulated collection of the tax are in line with the results commented for the total collection of the countries, with encouraging improvements with respect to 2020, which are limited when compared to 2019. In relation to **VAT**, a tax whose collection was more resilient during 2020, there is a continuity in the recovery during 2021, with respect to 2020 and 2019 (where relative year-on-year increases are attenuated but sustained for all groups of countries). For their part, the average year-on-year changes in cumulative **Excise taxes** collections by country group reflect the unequal intensity and depth of the negative impacts of the crisis and the different paces of the subsequent recovery underway. In 2021, with respect to 2020, all groups exhibit relative declines during the first quarter that then fade during the year; with respect to 2019, all groups record negative figures throughout and at the end of last year (except for Central America, with a meager positive balance in December). Finally, as for **Other Revenues**, all groups ended 2021 with positive year-on-year increases of varying magnitude when compared to 2020 figures. On the other hand, with respect to 2019, the final year-on-year increases are confirmed, although reduced in magnitude, except for the Caribbean group where the situation is reversed in successive falls for the entire annual period under analysis.

- To conclude and as a final comment, the identification of some signs of weakness in the recovery observed in tax collection (especially when weighing the figures for 2021 against those recorded in 2019) **highlights the usefulness of this RRC Report -and the Database that supports it statistically-** as a unique tool to carry out the monthly monitoring of tax revenues and to have new inputs to improve resource projections and comparisons between very different countries. The processing of the data collected has also made it possible to account for the effects of various

inflationary processes that affect the real amount of total tax collection and by main taxes, with significant differences among the surveyed countries. The analysis by groups, in turn, has shown that both the crisis of 2020 and the subsequent prolonged recovery during 2021 have been very diverse even in aggregate terms and at constant values, which requires adopting different approaches depending on each particular case.

METHODOLOGICAL INTRODUCTION

The crisis resulting from the COVID-19 pandemic has created an unprecedented situation in history that made the collection of quantitative information more necessary than ever to gain knowledge of the relative states of affairs and facilitate the design of policy responses to contain and mitigate the most negative effects of this crisis.

The Revenue Report COVID-19 (RRC) prepared by CIAT aims to collaborate in this task through the simultaneous preparation of a statistical database of international scope, which allows monitoring the monthly evolution of tax collection and its corresponding analysis for a given period, in this case covering the twelve months of the 2021 calendar year.

The information collected comes from the tax administrations of CIAT member countries, most of the time published in the form of monthly or quarterly bulletins¹, and should be interpreted for its advantages in terms of temporal proximity but also with its particularities given its origin and the context in which it is framed (the different responsibilities among institutions - internal taxes, customs, social² security-;

the different monthly collection and accounting schedules; the effects of deferrals granted to taxpayers³; the publication times and formats; etc.). In turn, in some cases where information is available, the figures are supplemented with information from other public institutions to incorporate, for example, the performance of subnational tax resources given their crucial relevance in certain countries.

The RRC summarizes the main information available until its publication, which generally follows monthly⁴ periodicity, including summary tables of the evolution of the administrations' global collection and its main components (income taxes, VAT, Excise taxes and Other revenue) with their monthly changes regarding the same month of the previous year and cumulatively throughout the year. In general, except when the necessary official information is not available, the figures are presented in constant values to avoid distortions derived from the evolution of prices. Given the dynamic nature of the process of obtaining and processing statistical information from different sources, various CIAT member countries have been incorporated throughout the successive editions of this Report (reaching a total of

1 In any case, the information contained in these reports should not be considered official and should be referred to the corresponding sources. Any error contained in the processing of this data is the sole responsibility of the authors of the Report.

2 For further information, see: [Díaz de Sarralde, S. \(2019\) "Overview of Tax Administrations: structure, income, resources and personnel; operation and digitalization ISORA \(International Survey on Revenue Administration\). ISORA \(International Survey on Revenue Administration\)", CIAT.](#)

3 In this regard, see: [CIAT, OCDE, IOTA \(2020\) "Tax Administration Responses to COVID-19: Measures Taken to Support Taxpayers".](#)

4 Updates to the RRC are published in the CIAT Book and Working Paper series. See: [The Revenue Report COVID-19 | Inter-American Center of Tax Administrations \(ciat.org\).](#)

23 cases), which has provided considerable robustness to the general trends identified on the basis of the averages calculated.

The following is a summary of the most important developments by country, including information on the structure of tax collection, its monthly distribution and the evolution of activity in the different territories, based on the mobility reports provided by the major mobile telephony technology companies. An analysis by regions or groups of countries will also be presented in order to delve into both the aspects in common and the most notable differences between the different countries for which statistical information is available.

In addition to the information presented here, the complete information data in Excel format (RRC Database) will be made available to the interested public, with a wide detail by tax figures, in constant and current values, detailing the structure of the monthly⁵ collection.

5 See link: [Collection | Inter-American Center of Tax Administrations \(ciat.org\)](#), "Revenue Report COVID-19 CIAT (Annex)".

1. MONTHLY EVOLUTION OF TAX COLLECTION DURING YEAR 2021

This first section of the Report analyzes the evolution of global tax collection, in general, in constant terms (deflated by the evolution of consumer price indexes in each country) and its breakdown into income taxes (IT), value added taxes (VAT), Excise taxes and a group that includes other revenues.

This new edition of the RRC contains information available for calendar year 2021, which allows us to identify general trends for an annual period and, at the same time, to verify a slow and prolonged recovery of tax collection levels with respect to those recorded at the beginning of the COVID-19 pandemic.

During year 2020, when the most powerful and harmful effects of the economic and health crisis became evident, total collection in constant values of the countries analyzed in the Report fell, on average, by -9.3% (Excise taxes, -12.1%; Income Taxes, IT, -8.2%; VAT, -7.8%), although with very significant heterogeneity by country (from -26.9% in Panama or -22.5% in Honduras, to +8.2% in Morocco, together with Mexico, +0.8%, the only two that ended the year in positive territory). With respect to these figures, the year-on-year changes of monthly collections in 2021 show spectacular growths, especially in relation to the months of harsher confinement and, logically, in the taxes hardest hit by the social isolation measures. More relevantly, with respect to 2019, the base scenario for assessing recovery, an improvement in collection is also observed, although it turned out to be more modest and no longer verifiable for all countries and tax categories.

From the beginning, it should be borne in mind that these data are surrounded by much uncertainty due to the different rates of evolution of the pandemic by country and the complexity of the analysis itself. The basis of comparison with 2020, a totally irregular year, makes it difficult to interpret the data, but even with respect to the base scenario prior to the pandemic (2019), the continuity of the current transition period must be taken into account, conditioned by the timing of policy and tax administration measures and by the temporal shifts in consumption decisions.

1.1. Evolution of global tax collection (Total)

The overall year-on-year collection for the twenty-three countries for which data⁶ are available showed a remarkable recovery in 2021, especially during the second quarter of the year which coincided, in the year-on-year comparison, with the period of greatest negative impact of the COVID-19 pandemic during 2020, both on the economy and, in particular, on the tax revenues of CIAT member countries. It should be recalled that, in the first months following the declarations of health emergency by the respective governments, a battery of measures were adopted which, on the one hand, restricted the mobility and movement of people on public roads as much as possible, which had a very negative impact on economic activity and, predictably, on tax revenues. At the same time, as is well known, other additional measures were implemented to protect and guarantee certain liquidity to families in times of maximum social isolation

6 Data collection for this report closed on March 31, 2021.

and restricted economic activity, including tax relief and deferrals in the maturity of various tax obligations, which significantly affected the flow of tax collection in the different countries, either temporarily or definitively.

Predictably, total tax collection reached average year-on-year increases of close to 40% in the months of April, May and June (Figure 1, left panel). This led, in cumulative terms, to an average year-on-year increase of 21.5% at the end of the first half of the year compared to the same period of 2020. From then on, as a reflection of what happened in the previous year with a slow but gradual recovery of collection levels in general, there was a continuation of monthly increases during the second half of the year, although with a decreasing trend in their relative magnitude and with a slight rebound in the last month of the year (+20.9%). This evolution was correlated with the fact that the total accumulated collection at the end of each month⁷ remained, on average for the countries considered, in clear positive territory in the year-on-year comparison throughout the second half of the year, although with increases that went from 19.9% at the end of July to 17.2% at the end of the last month of the year.

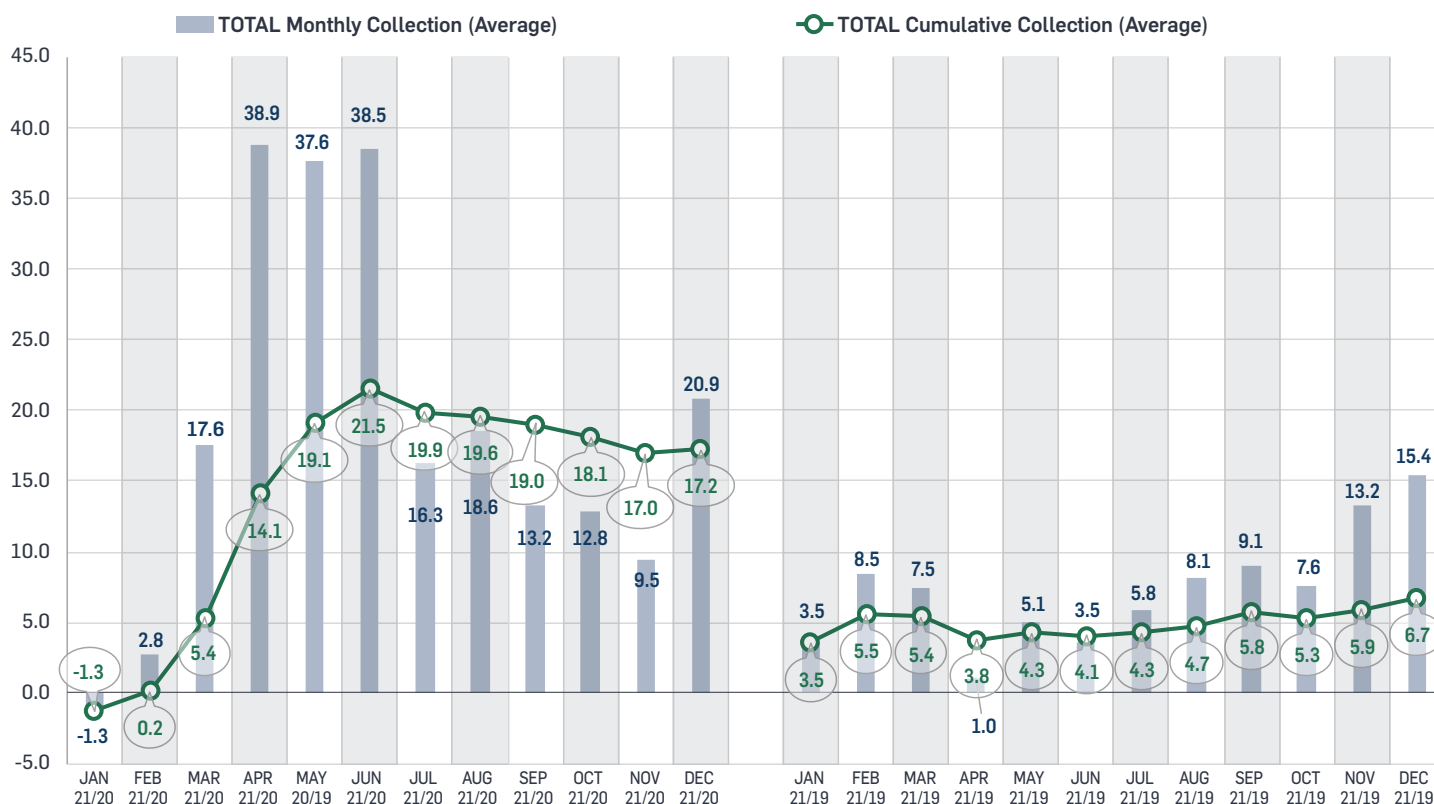
Given that, as noted above, the year 2020 may be considered an outlier to be taken as a point of reference in a temporal comparison, similar analyses will be included throughout this document for the monthly periods corresponding to the calendar year 2019, which may be considered more “normal” in statistical terms than the one during which the COVID-19 pandemic was unleashed and had its most profound impacts.

Therefore, when analyzing the evolution of the monthly total collection, on average for the selected countries, it was possible to verify a year-on-year growth of the variable in all the months of the year with respect to those corresponding to 2019, although the magnitude of these changes turned out to be much more limited than when compared to the figures for 2020. In fact, during the second quarter, monthly increases averaged only 1.0% in April, 5.1% in May and 3.5% in June, which is far from the values indicated above. On the other hand, from July onwards, a gradual acceleration of the year-on-year increases could be observed with respect to 2019, which would strengthen the image of a concrete recovery of the average total collection, in constant values, throughout the second half of 2021 (Figure 1, right panel).

In cumulative terms and on average, the year-on-year changes of total revenues, taking 2019 as a reference, were again much more limited and with less variability than those observed when comparing with the same months of 2020, although confirming the maintenance of this variable in positive territory throughout 2021 in a range of changes between 3.5% in January and 6.7% in December.

⁷ When moving from the analysis of monthly variations to that of cumulative changes, it should be taken into account that the weight of the collection is not evenly distributed among the different months (nor with homogeneous patterns in the different countries). The RRC Database, used as the basis for the analysis, includes as a reference the temporal distribution patterns of the collection for each of the countries throughout 2019.

Figure 1. Evolution of total tax collection of tax administrations in 2021 (in percentage changes with respect to the same month of 2020 -left- and 2019 -right-; simple averages; constant prices; January to December)



Source: Elaborated by the authors based on official information from the tax administrations.

Nota: Due to the fact that it presents changes outside the general range of the rest of the countries surveyed (which could bias the resulting figures and general conclusions), in this figure and in the following ones, the case of Bolivia is not considered for the calculation of the (simple) average values of the interannual changes of the monthly and accumulated collection. Neither are included for the calculation of the averages those figures corresponding to other countries that represent inter-annual variations (monthly or accumulated) greater than +/- 100% of the values of the same period of the previous year (which can be verified in the different tables presented throughout this section). However, the averages calculated in the Annex to the Report (<https://www.ciat.org/recaudacion/>) include all available data.

The information updated at the individual level for the 2021 calendar year shows the different rates of recovery of total collection in the countries surveyed. Given the exceptional nature of the year 2020 in terms of tax collection, the year-on-year changes per month show extraordinary figures -over 100%- and great volatility -both due to the decrease in revenues and to the deferrals in the maturities of the different tax obligations- in a

significant number of cases⁸. For this reason, the focus here will be on the evolution of the average accumulated collection, which usually shows smoother movements throughout the year under analysis.

In comparison with what was observed during 2020, although some countries exhibited negative results in the first three or four months (for example: Bolivia, Chile,

⁸ The results can be found in the Statistical Annex ([Collection | Inter-American Center of Tax Administrations \(ciat.org\)](https://www.ciat.org/recaudacion/)) accompanying this document.

Colombia, Ecuador, Spain, Jamaica, Mexico, Panama and Uruguay), it can be observed that all the countries surveyed achieved positive year-on-year changes in total collection in cumulative terms, with a maximum peak around the month of June and a moderation of the increases in the following months although, in all cases,

ending the year 2021 in clear positive territory (Table 1). Chile (+33.9%), Costa Rica (+26.0%), Honduras (+31.2%), Peru (+35.0%) and the Dominican Republic (+30.3%) stand out above the global average, leading the general recovery of total tax collection among CIAT members.

Table 1. Evolution of total tax cumulative collection of tax administrations in 2021 (percentage change compared to the *same month of year 2020*; constant prices; January to December)

Countries	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	May 21/20	Jun 21/20	Jul 21/20	Ago 21/20	Sep 21/20	Oct 21/20	Nov 21/20	Dec 21/20
Argentina	4.9	5.7	9.5	15.3	15.2	14.6	13.7	12.9	12.1	11.2	10.6	10.9
Bolivia	-22.5	-18.3	-11.5	26.3	28.9	25.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Brazil	1.6	3.4	6.9	13.3	19.9	22.7	23.4	21.5	20.4	18.7	16.9	15.9
Chile	-4.7	-1.3	1.4	16.6	28.4	32.4	30.0	33.6	35.5	35.6	35.0	33.9
Colombia	-6.9	-7.6	-3.6	3.0	6.9	6.8	9.7	11.3	12.8	13.3	13.7	15.0
Costa Rica	1.5	-0.2	12.5	18.2	24.7	31.5	31.8	31.0	29.5	28.7	28.2	26.0
Dominican Republic	-6.6	0.4	6.6	28.9	36.7	37.8	37.3	35.9	34.5	31.7	31.8	30.3
Ecuador	-7.2	-2.4	-0.1	2.0	7.9	11.6	13.2	13.7	11.3	12.1	12.6	12.9
El Salvador	1.5	3.3	7.2	23.7	28.2	27.7	27.5	25.7	23.7	23.0	22.6	21.9
Guatemala	-0.6	1.5	16.7	13.3	17.5	20.2	23.5	24.2	23.8	22.8	22.3	24.1
Honduras	25.0	12.5	12.5	23.3	29.3	37.4	38.5	37.4	35.6	34.2	28.8	31.2
Italy	1.8	-2.8	0.6	6.7	12.0	13.7	12.6	10.2	10.9	10.2	9.0	8.0
Jamaica	-9.6	-11.9	-7.7	-2.6	0.1	1.9	3.9	4.4	4.7	4.5	5.7	6.2
Mexico	-5.8	-4.7	-2.0	-2.8	0.4	1.2	2.3	2.8	2.5	1.7	0.7	1.1
Morocco	15.3	12.7	3.0	10.4	14.7	14.1	13.7	13.8	12.9	12.7	4.6	10.0
Nicaragua	17.0	14.4	15.8	18.5	21.0	23.5	24.4	24.2	23.3	22.0	21.4	20.6
Panama	-60.5	-47.6	-8.5	2.1	14.6	23.0	13.0	16.5	14.7	15.2	15.2	10.9
Paraguay	10.0	6.4	8.0	32.3	41.9	33.4	28.0	22.7	15.8	13.0	10.0	6.0
Peru	-4.0	1.1	11.9	25.0	26.1	32.5	34.2	38.1	37.7	36.0	35.6	35.0
Spain	-1.6	-3.2	-3.6	17.6	12.3	14.7	15.2	12.3	11.6	13.1	11.5	11.4
Trinidad & Tobago	4.9	19.2	21.0	16.0	11.7	17.5	14.4	12.0	n.a.	12.5	12.4	20.2
United States	1.9	11.3	10.9	25.8	44.3	49.7	20.3	19.7	19.3	18.7	18.8	20.1
Uruguay	-5.8	-6.4	-1.1	3.6	5.6	6.2	6.1	6.2	6.1	6.3	6.8	7.0
Average ^{/1}	-1.3	0.2	5.4	14.1	19.1	21.5	19.9	19.6	19.0	18.1	17.0	17.2

Source: Elaborated by the authors based on official information from the tax administrations. "n.a." = not available.

^{/1} In order to calculate the average values (simple) of the year-on-year changes of monthly and cumulative collections, and to avoid possible biases in the resulting figures and in the general conclusions due to the presence of changes outside the general range of the rest of the countries surveyed, Bolivia is not considered in this table and in the following tables due to lack of sufficient information. Neither are included for the calculation of averages those figures corresponding to other countries that represent inter-annual changes (monthly or accumulated) greater than +/- 100% of the values of the same period of the previous year. Nevertheless, the averages calculated in the Annex to the Report ([Collection | Inter-American Center of Tax Administrations \(ciat.org\)](#)) do consider all available data.

As in monthly analysis, the identification of certain general trends in terms of cumulative collection in year 2021 (in constant values) is not enough to hide the high diversity of realities among the countries analyzed. This becomes even more evident when analyzing the year-on-year changes of total collection but taking as a reference for comparison the monthly periods corresponding to the calendar year 2019 (Table 2).

On the one hand, it was found that most countries showed some ups and downs during the first part of the year, followed by a gradual but clear recovery during the second half, although, predictably, the magnitudes are lower than those calculated for 2020 in light of the impacts of the crisis associated with the pandemic. For the year-end cumulative figures, some cases with notable relative increases are Chile (+21.3%), United States (+15.8%), Guatemala (+15.8%), Morocco (+19.0%) and Nicaragua (+18.1%), all well above the global average year-on-year percentage change (+6.7%).

However, some cases were also identified that deviate from the general trend indicated above and show some weakness in the recovery observed in the last months of 2021. In some countries this is reflected in very slight increases in accumulated collection as of December, as was observed in Argentina (2.8%), Spain (2.0%), Honduras (1.7%), Italy (2.2%) and Mexico (2.0%).

In other cases, the total accumulated collection at the end of 2021 did not match, in relative terms and at constant values, the equivalent figures recorded in 2019 and ended in negative territory, as was seen in Trinidad and Tobago (-0.0%), Ecuador (-1.7%), Jamaica (-9.2%) and Panama (-18.9%).

In general, for the countries surveyed with available information, the relative improvements calculated with respect to 2019 are lower than those weighted according to the collection figures for 2020, including cases where the increases are reversed in year-on-year decreases of varying magnitude. This stylized fact was predictable given the profound negative impacts of the COVID-19 pandemic and the economic crisis on 2020 collection levels, which deteriorated that basis for comparison. However, Morocco and Mexico were two exceptions in this regard, as they were precisely the only countries that ended that year with a positive collection balance.

Table 2. Evolution of total tax cumulative collection of tax administrations in 2021 (percentage change compared to the *same month of year 2019*; constant prices; January to December)

Countries	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19	May 21/19	Jun 21/19	Jul 21/19	Aug 21/19	Sep 21/19	Oct 21/19	Nov 21/19	Dec 21/19
Argentina	-0.9	0.1	2.8	3.3	0.8	-0.4	-1.0	-0.6	0.5	1.2	1.6	2.8
Bolivia	-43.8	-34.2	-27.0	-27.9	-22.8	-20.6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Brazil	6.1	4.7	7.2	6.3	7.3	7.2	8.0	8.4	9.1	9.6	9.5	9.5
Chile	8.2	4.5	5.2	0.6	9.8	9.7	9.7	11.4	14.3	17.3	19.7	21.3
Colombia	1.9	0.4	2.4	0.7	0.3	-1.4	-1.1	-0.2	0.1	0.9	2.6	4.2
Costa Rica	-2.8	2.9	15.8	14.7	15.4	14.7	15.4	14.8	13.7	12.3	12.4	11.0
Dominican Republic	-2.9	4.0	3.8	7.7	8.3	8.9	11.1	11.8	12.1	12.2	13.7	13.3
Ecuador	-2.3	-2.6	1.7	-10.5	-9.6	-8.0	-7.5	-7.3	-5.5	-4.5	-3.5	-1.7
El Salvador	5.7	8.2	10.9	10.9	11.2	12.6	13.1	13.1	13.4	13.6	14.5	15.2
Guatemala	7.4	9.4	11.0	12.6	11.6	11.8	13.1	12.8	12.8	13.6	13.6	15.8
Honduras	30.5	14.5	8.5	3.4	2.7	1.4	1.5	2.4	0.8	1.7	2.4	1.7
Italy	5.5	3.0	3.4	3.5	2.7	2.0	2.2	2.9	4.9	3.0	2.7	2.2
Jamaica	-9.4	-11.2	-6.3	-7.0	-8.8	-9.6	-8.9	-9.4	-10.3	-10.2	-9.6	-9.2
Mexico	4.4	0.2	11.0	2.7	2.4	1.3	1.5	2.2	1.7	1.1	0.8	2.0
Morocco	23.4	23.2	13.8	14.6	15.6	17.6	17.1	18.3	19.0	18.7	19.6	19.0
Nicaragua	38.6	66.5	21.6	22.2	20.4	16.5	16.6	17.1	17.6	17.5	18.2	18.1
Panama	-58.9	-43.9	-21.9	-21.6	-17.5	-22.1	-20.7	-19.0	-19.7	-19.2	-18.6	-18.9
Paraguay	11.4	9.4	6.1	7.3	9.7	7.8	7.0	6.6	6.1	4.4	4.2	4.6
Peru	-0.1	3.1	7.5	7.5	6.9	7.7	8.9	12.6	12.7	12.6	13.4	14.7
Spain	6.2	1.8	3.7	11.7	2.2	2.0	1.5	0.9	1.2	2.0	1.8	2.0
Trinidad & Tobago	1.2	10.4	-5.9	-9.9	-11.7	-8.1	-9.3	-10.5	n.a.	-8.5	-6.9	-0.0
United States	8.9	20.0	17.6	1.2	14.8	17.0	14.7	14.3	14.4	13.8	14.0	15.8
Uruguay	-4.6	-7.2	-0.8	1.4	-0.7	0.3	1.0	1.4	2.0	2.3	3.4	4.2
Average	3.5	5.5	5.4	3.8	4.3	4.1	4.3	4.7	5.8	5.3	5.9	6.7

Source: Elaborated by the authors based on official information from the tax administrations. "n.a." = not available.

As will be seen below, the year-on-year changes in 2021 collection, whether measured against 2020 or 2019, also evolved unevenly across taxes which, given the different tax structures and the unique temporal distribution of their revenues over the year⁹, provides more detailed

information not only on the impacts of the COVID-19 pandemic crisis on countries' tax collections but also on the different rates of recovery from pre-pandemic levels.

⁹ The "RRC Database" includes the detail of the monthly composition of the total collection by tax figures in 2020 and 2019 and the temporal distribution patterns of the collection for each of the countries in 2019. ([Collection | Inter-American Center of Tax Administrations \(ciat.org\)](#)).

1.2. Evolution of Income Tax collection (IT)

Income taxation, considering jointly the contribution of individuals and corporates¹⁰, recorded, on average, increases in collection throughout the year when compared to 2020 figures. Although it was insignificant in January, the monthly upturn in IT tax collection consolidated from February onwards, with maximum monthly peaks in April (+23.9%) and June (+21.9%) of 2021. Then, during the second part of the year, the monthly IT collection maintained the increases with respect to the previous year, although with more limited magnitudes between July and November, beyond the particular jump that was glimpsed in December (+19.6%).

Especially in the case of this tax, it must be considered that the collection calendar is very different according to the month considered and, in many countries, April is usually one of the strongest collection time periods (among them Bolivia; Dominican Republic, Peru, Mexico, United States, El Salvador, Ecuador, Colombia, Chile, Paraguay)¹¹. However, it should be deemed that one of the fiscal relief measures (and liquidity protection for families) most used in most of the countries analyzed as a response to the crisis caused by the COVID-19 pandemic has been the granting of deferrals in the payment of IT. This produced a significant alteration in the tax revenue schedule usually observed for this particular tax.

Therefore, as observed at the global level, from July to November there is a change in trend that, to a large extent, has a certain analogy with the strong recovery

of resources generated by the IT in most countries during the second half of 2020, possibly reinforced by the lagged entry of collection whose obligation had been intentionally deferred in previous months. This singular behavior is reflected in the accumulated IT collection which, having reached an annual peak in June (+21.9%), reached an average relative increase of 16.9% in the last month of 2021 (Figure 2, left panel).

Something different, although not as much, can be observed when comparing the IT collection figures in 2021 versus what was recorded in 2019, in order to avoid biased perspectives due to the extraordinary effects of the pandemic on the economic variables. In terms of monthly IT collection (always at constant values), very slight average year-on-year setbacks were observed in the months of April (-0.4%) and June (-0.3%) which, coincidentally, were those with the largest increases when taking the data for 2020 as a baseline. This, in a way, relativizes the magnitude of the recovery, at least during the first half of the year. In fact, the year-on-year changes for the subsequent months, which were significant in relation to the previous year, become more relevant when compared to 2019 as they suggest a gradual average growth until the end of 2021 (+14.2% in December).

In turn, the cumulative collection of IT maintained, on average, moderate relative increases throughout 2021 and in relation to 2019 -around the average of 7.0% reached in December-, which reflects the relatively greater stability of IT as a source of tax resources

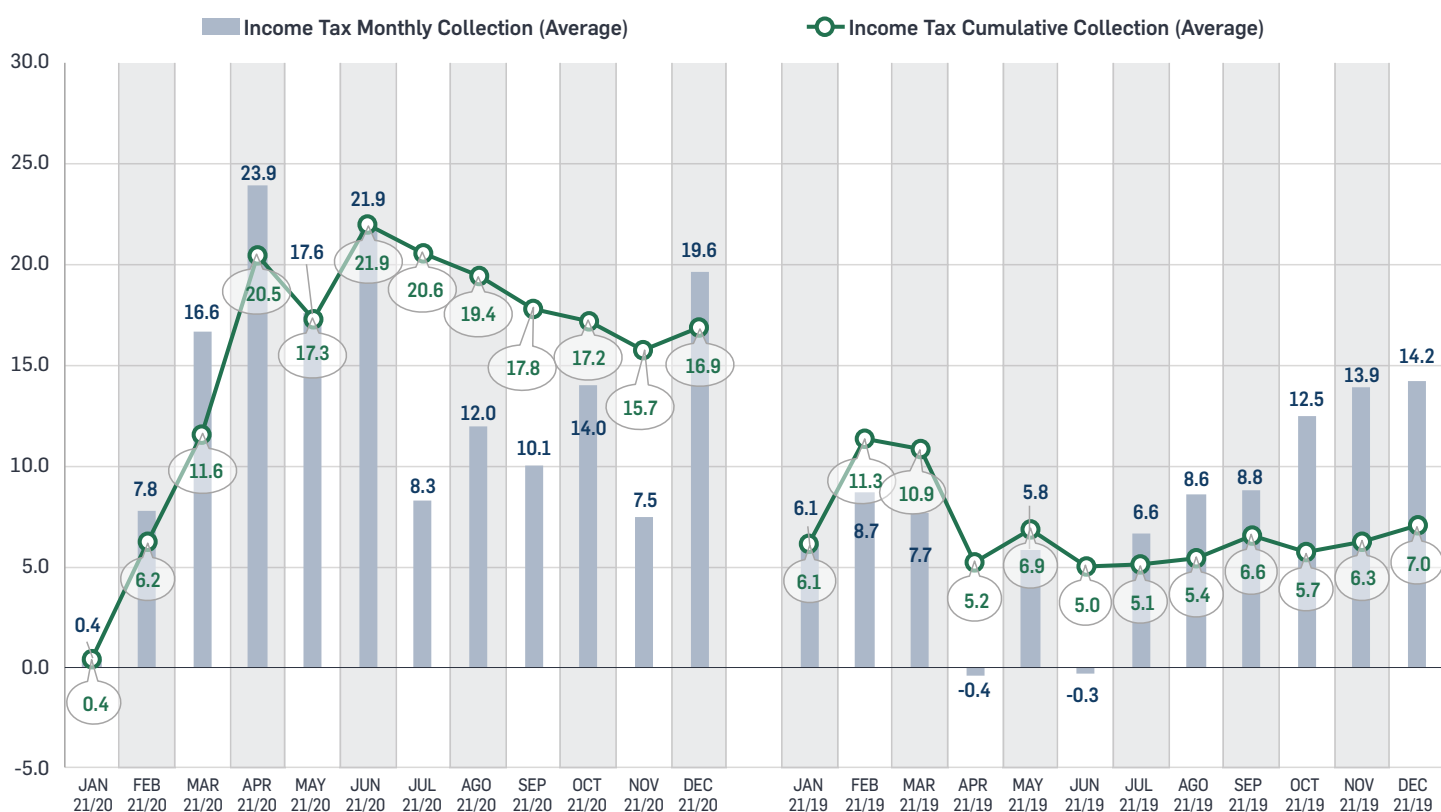
10 In these Reports we have preferred to aggregate personal and corporate income taxes due to the difficulty of separating sources in many cases. The information by country will allow for a more detailed analysis when information is available. In the work of [Morán, D. y Rojas A. \(2019\) "Equivalent Fiscal Pressure in Latin America and the Caribbean : An analysis of the stylized facts in the past decade", Working Paper CIAT 5-2019](#) the possibility of disaggregation between personal and corporate income in different countries can be consulted.

11 There are clear exceptions such as Spain (July, October), Italy (December) or Brazil (between August and December). The rest usually have a peak in March (Panama, Costa Rica, Morocco) or May (Argentina).

compared to other main taxes applied in CIAT member countries (Figure 2, right panel). This contrasts sharply with the evolution of the tax during 2020, which had

concluded with an average cumulative collection loss of 8.2% with respect to the same base year of comparison (2019).

Figure 2. Evolution of Income Tax (IT) collection in 2021 (in percentage changes with respect to the same month of 2020 -left- and 2019 -right-; simple averages; constant prices; January to December



Source: Elaborated by the authors based on official information from the tax administrations. "n.a." = not available.

Note: The same considerations of Figure 1 apply to the calculation of the averages of year-on-year changes in monthly and cumulative collections, so incomplete data or data with extreme changes are not excluded.

As observed for global tax collection and other main taxes, the general trends are the result of very different year-on-year changes among the countries analyzed. In the case of IT, taking 2020 as a reference year, most of the countries show a clear recovery in tax collection levels since the beginning of the year, which lost some strength in the second part of the year. However, it is also possible to identify very different behaviors throughout the year 2021 depending on the country considered.

On the one hand, some countries clearly confirm the general trends already noted in terms of accumulated IT collection: the United States (with a maximum interannual growth peak of 121.8% in June, which then moderated its pace to end at around +41.0% in December), Paraguay (which, having reached a change of +105.5% in May, placed its accumulated annual growth at only 10.6% at the end of the year) and the Dominican Republic (which reached a relative growth of 45.7% to end the year with a positive balance of 30.1%) stand out in this regard (Table 3).

Honduras also shows a remarkable performance in relation to this tax, although the year-on-year increase, which in January stood at 135.0%, ends up being limited to 31.7% in December 2021. Then, there are countries where the improvement in terms of average accumulated IT collection -in constant values- was consolidated towards the end of the year, such as Chile (+43.7%), Guatemala (+33.2%), Nicaragua (+19.7%), Peru (+37.9%) or Trinidad and Tobago (+28.3%). Nevertheless, and as an example of the high heterogeneity of realities that the calculated averages usually hide, there were also cases where the accumulated IT collection ended up showing very slight growth compared to 2020 (especially in Italy, Jamaica, Morocco or Mexico) or even relative decreases, as in the case of Ecuador (-1.6%).

Table 3. Evolution of Income Tax cumulative collection in 2021 (in percentage changes with respect to the *same month of year 2020*; constant prices; January to December).

Countries	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	May 21/20	Jun 21/20	Jul 21/20	Aug 21/20	Sep 21/20	Oct 21/20	Nov 21/20	Dec 21/20
Argentina	12.3	12.2	15.7	19.9	14.8	11.0	11.0	10.6	10.7	9.9	8.5	8.0
Bolivia	-44.2	-34.9	-25.6	148.5	45.2	13.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Brazil	3.2	6.4	9.5	13.3	21.3	20.1	21.6	21.7	20.9	20.0	18.9	18.4
Chile	-17.0	-11.3	-9.2	24.3	47.2	48.3	37.1	39.3	44.4	46.7	46.9	43.7
Colombia	-4.4	-6.8	-4.3	5.3	4.1	2.0	3.7	4.9	5.9	6.1	6.3	7.7
Costa Rica	-2.7	4.1	29.7	23.9	22.5	29.6	29.6	29.2	26.8	25.0	24.1	23.0
Dominican Republic	-1.8	10.7	8.5	37.2	44.2	45.7	44.0	42.1	38.0	31.1	32.6	30.1
Ecuador	6.7	12.1	10.5	-2.4	0.2	3.0	3.6	3.5	-4.1	-3.3	-2.5	-1.6
El Salvador	-0.0	-0.3	1.9	30.2	30.6	24.8	21.6	17.2	13.5	13.1	12.8	13.0
Guatemala	2.0	0.8	23.9	12.6	15.6	16.4	22.7	23.6	23.8	24.9	24.3	33.2
Honduras	135.0	78.0	59.4	44.0	40.4	53.6	51.0	43.9	38.9	38.3	21.5	31.7
Italy	-2.0	-2.9	-1.2	1.9	5.1	5.7	3.8	0.5	2.5	2.3	2.2	0.4
Jamaica	-2.3	-3.7	5.2	6.9	6.4	3.8	4.4	3.9	2.0	1.7	1.9	1.6
Mexico	-2.6	-2.8	2.2	-1.9	0.2	-0.9	-0.6	-0.2	0.3	0.2	-0.1	1.9
Morocco	26.6	23.8	2.4	7.7	8.1	2.9	3.3	3.5	2.6	2.2	-6.8	0.1
Nicaragua	11.2	11.5	13.4	14.9	16.3	19.3	19.5	19.8	19.8	19.1	19.8	19.7
Panama	-50.7	-46.8	14.7	15.0	21.5	28.6	11.3	13.0	8.1	9.1	8.9	5.0
Paraguay	26.3	19.1	22.2	69.5	105.5	77.1	59.2	47.7	29.1	23.8	19.1	10.6
Peru	-0.7	2.1	16.2	31.8	20.6	27.9	31.8	33.2	34.9	35.1	35.5	37.9
Spain	-4.2	-0.4	0.2	32.7	22.5	24.2	17.5	13.2	12.2	15.3	12.9	12.7
Trinidad & Tobago	5.5	13.4	11.6	3.5	1.1	14.7	11.7	11.0	n.a.	14.4	14.8	28.3
United States	7.7	26.2	24.9	57.8	102.0	121.8	42.2	41.3	40.4	39.4	39.6	41.0
Uruguay	-3.7	-8.6	-2.4	2.3	2.8	2.6	2.5	3.1	3.3	3.4	4.3	4.4
Average	0.4	6.2	11.6	20.5	17.3	21.9	20.6	19.4	17.8	17.2	15.9	16.9

Source: Elaborated by the authors based on official information from the tax administrations. "n.a." = not available.

Note: The same considerations as in Figure 1 apply to the calculation of the averages of the year-on-year changes in monthly and accumulated collections, so that incomplete data or data with extreme changes are not taken into account.

Once again, if we take the figures corresponding to 2019 as a reference for comparison, the analysis at the country level in terms of accumulated IT collection provides a somewhat different picture in terms of the aforementioned general recovery (Table 4). Although it is more complex to identify general patterns, it can be seen that the rebound in IT tax collections is relativized

in the vast majority of cases, which means that a greater number of them will reflect tax collection losses by the end of 2021. Among others, the examples of Honduras (which went from an increase of 192.0% in January to an accumulated drop of 5.5% in December), Ecuador (whose accumulated increase in January of 12.5% evolved into a relative loss of 8.9% in December), Panama (going from

-44.5% to -18.1% between January and December) and Trinidad and Tobago (starting with a slight decrease of 0.3% at the beginning of the year, which was accentuated

in the middle of the year, closing in a more limited drop of 7.1% in December)¹² stand out.

Table 4. Evolution of Income Tax cumulative collection in 2021 (in percentage changes with respect to the same month of year 2019; constant prices; January to December)

Countries	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19	May 21/19	Jun 21/19	Jul 21/19	Aug 21/19	Sep 21/19	Oct 21/19	Nov 21/19	Dec 21/19
Argentina	-0.9	-0.4	2.5	0.4	-6.4	-10.7	-11.4	-9.2	-6.8	-3.8	-1.7	0.2
Bolivia	-87.3	-81.1	-71.2	-51.3	-40.6	-39.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Brazil	14.5	10.3	13.6	10.3	15.9	15.4	15.3	14.8	15.6	16.8	15.8	15.8
Chile	-1.1	-0.5	-0.2	-5.5	11.9	7.4	5.0	7.0	13.3	17.3	20.3	22.4
Colombia	13.2	4.8	5.6	0.2	-0.0	-3.9	-3.1	-2.3	-1.6	-0.5	1.3	3.0
Costa Rica	-28.6	-10.8	17.3	16.4	18.3	14.7	15.5	16.5	14.5	13.0	12.7	8.6
Dominican Republic	14.1	24.6	15.3	19.7	22.5	20.7	24.4	25.6	24.0	22.3	24.0	21.5
Ecuador	12.5	15.6	10.0	-21.3	-17.7	-13.9	-13.0	-12.8	-12.0	-11.2	-10.8	-8.9
El Salvador	5.0	6.9	5.9	7.5	7.9	8.6	9.7	9.5	9.6	9.9	10.7	12.0
Guatemala	18.8	13.0	11.2	15.7	15.9	14.2	19.4	18.5	17.4	20.4	19.7	26.0
Honduras	192.0	97.1	51.0	10.2	6.8	-1.2	-1.6	-0.8	-5.1	-3.3	-2.8	-5.5
Italy	0.6	0.1	0.9	1.7	2.4	2.5	1.4	2.4	5.4	1.2	0.6	-1.0
Jamaica	0.9	4.9	9.5	11.2	11.1	5.2	4.9	3.6	-0.5	-0.1	-0.5	-2.8
Mexico	-1.9	-3.6	15.4	-0.9	1.4	0.4	0.6	0.9	0.5	0.6	0.7	2.9
Morocco	30.7	30.6	12.6	11.3	12.3	13.0	14.0	13.9	15.2	14.9	15.4	13.0
Nicaragua	53.3	125.8	14.8	15.4	13.6	7.0	7.7	9.2	10.1	10.5	12.3	13.4
Panama	-44.5	-33.1	0.8	-3.3	0.0	-15.9	-15.1	-13.9	-17.5	-16.8	-16.5	-18.1
Paraguay	14.5	26.2	20.2	15.1	20.2	15.6	12.5	12.9	10.8	7.3	7.8	8.3
Peru	3.5	7.5	8.3	10.1	7.7	9.2	12.1	13.3	14.0	14.4	14.3	17.3
Spain	10.1	11.2	15.1	24.8	12.4	12.0	8.1	6.7	7.0	6.8	6.4	6.1
Trinidad & Tobago	-0.3	4.9	-23.1	-26.2	-26.9	-20.2	-21.3	-21.7	n.a.	-18.1	-16.8	-7.1
United States	17.1	39.7	34.8	1.0	24.4	32.0	27.5	26.4	24.7	23.7	23.5	26.0
Uruguay	-2.8	-11.0	-2.4	1.1	-2.5	-1.7	-0.8	-0.7	-0.3	0.3	1.2	1.7
Average	6.1	11.3	10.9	5.2	6.9	5.0	5.1	5.4	6.6	5.3	6.7	7.0

Source: Elaborated by the authors based on official information from the tax administrations. "n.a." = not available.

12 In the particular case of Trinidad and Tobago, all figures for the month of December should be considered preliminary as they are affected by the lack of information corresponding to the month of September 2021 (which is, precisely, the closing month of the fiscal period). In order to achieve adequate comparisons, the cumulative values for the last three months exclude the monthly figures corresponding to that month in both reference years (2019 and 2020).

1.3. Evolution of Value Added Taxes collection (VAT)

As described in the RRC for 2020, VAT, being the main instrument of tax collection in most of the countries analyzed, has been one of the main tax instruments that partially cushioned the deep fall in overall collection during the second quarter of that year, with a subsequent progressive improvement in its collection performance throughout the second half, although it ended up accumulating a collection loss of 7.8% at the end of the year with respect to 2019¹³.

The evolution of the monthly collection of this tax throughout the year 2021 shows, on average, a trend of strong recovery, especially from the second quarter of the year with very significant monthly increases (47.4% in April; 42.8% in May; 41.7% in June). In the second half of the year, the average growth of VAT revenue per month slows down towards the end of the year, although it maintains considerable values in every month, going from 29.8% in July to 11.1% in December.

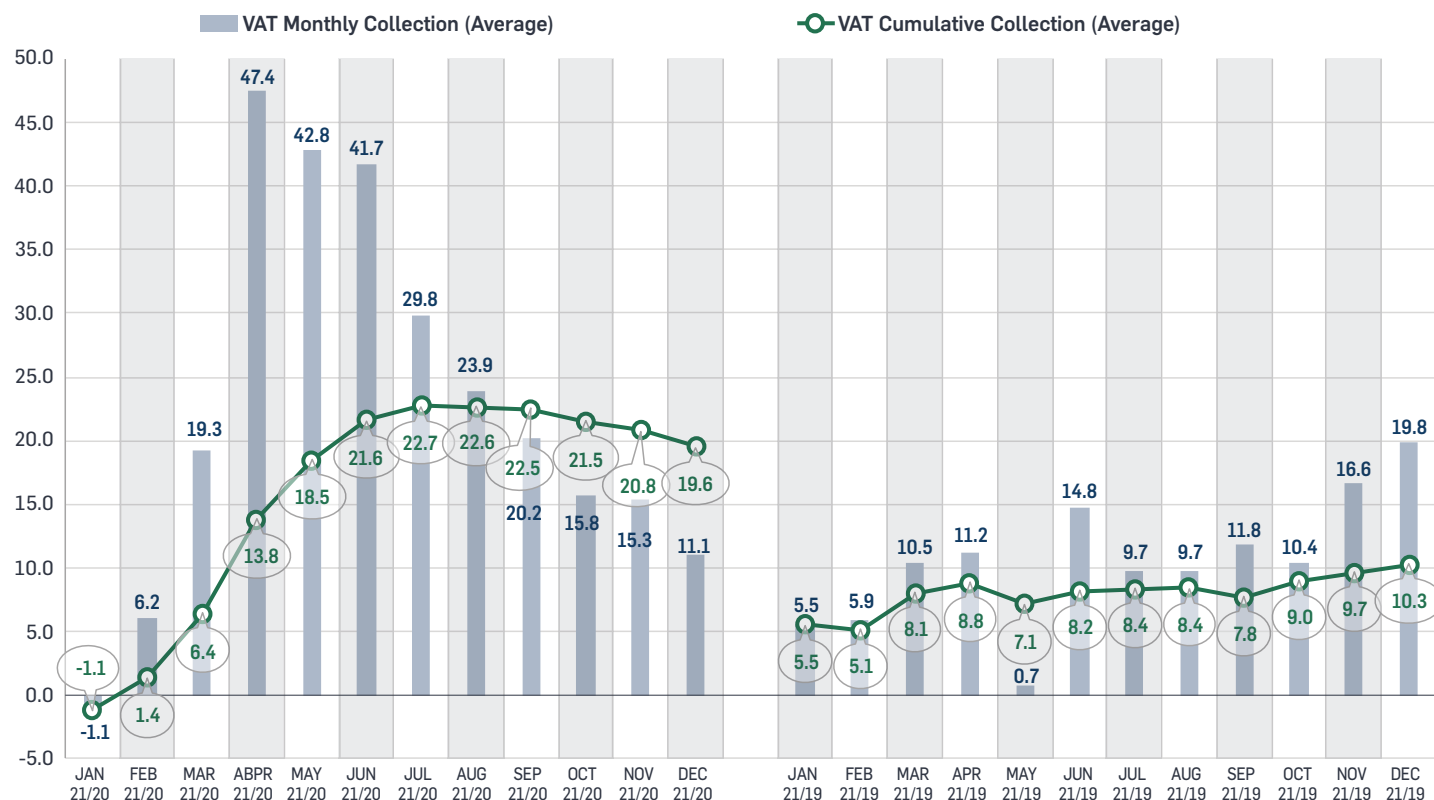
In line with this, the accumulated tax collection also showed, on average, a rapid recovery during the first half of the year, reaching a maximum year-on-year increase of 22.7% in July and stabilizing -with a slight downward trend- at around 19-21% during the second half of the year (Figure 3, left panel).

Similarly to what was observed with respect to IT, when comparing the updated figures for year 2021 with those corresponding to 2019, results are different and, to a certain extent, the aforementioned VAT recovery in terms of collection is relativized. Monthly collection exhibits moderate year-on-year increases (except for the exception of May where it was barely 0.7% on average) with a moderate but clear increasing trend towards the end of the year, where an average improvement of almost 20% was observed for December.

Cumulative VAT collection had a stable evolution during 2021, when compared to 2019 figures, remaining in positive territory throughout the period, with a slight rise in the last quarter and ending with an average percentage change of +10.3% in the last month of the year (Figure 3, right panel).

13 See: Díaz de Sarraide, S., Morán, D., López, J., Maldonado, G. (2021); "Revenue Report COVID-19 (RRC) Year 2020", CIAT, April, Panamá.

Figure 3. Evolution of Value Added Tax (VAT) collection in 2021 (percentage changes with respect to the same month of 2020 -left- and 2019 -right-; simple averages; constant prices; January to December)



Source: Elaborated by the authors based on official information from the tax administrations.

Note: The same considerations as in Figure 1 apply to the calculation of the averages of the year-on-year changes in monthly and cumulative collections, so that incomplete data or data with extreme changes are not excluded.

Although the general trends in the case of VAT also suggest a process of recovery in tax collection, the high degree of heterogeneity that characterizes the set of countries included in the database that provides information for this Report leads to some differences among the different cases in terms of the magnitude of the year-on-year changes in tax revenues. On the one hand, some countries can be distinguished in which the percentage changes of the accumulated VAT collection, with respect to 2020, remained with negative sign -implying year-on-year collection losses- during the first months of 2021 as, for example, in the cases of Bolivia (-6.2% up to February), Colombia (-3.0% up to March),

Ecuador (-6.0% up to March), Spain (-5.2% up to March), Jamaica (-3.7% up to May), Mexico (-0.1% up to April) and Panama (-5.5% up to May).

Nevertheless, all countries with available data showed an improvement in accumulated VAT collection at the end of the year, although with some differences among them in terms of the evolution of this variable throughout the year (Table 5). Among those with the greatest relative improvement as of December are Chile (+36.5%), El Salvador (+30.1%), Honduras (+31.7%) and Peru (+35.1%).

Table 5. Evolution of VAT cumulative collection in 2021 (in percentage changes with respect to the *same month of year 2020*; constant prices; January to December)

Countries	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	May 21/20	Jun 21/20	Jul 21/20	Aug 21/20	Sep 21/20	Oct 21/20	Nov 21/20	Dec 21/20
Argentina	-1.5	1.9	9.4	14.9	16.4	17.4	18.2	18.0	17.8	15.8	15.0	14.8
Bolivia	-14.3	-6.2	1.3	25.8	40.5	46.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Brazil	7.6	7.0	8.1	12.5	17.9	20.0	20.7	20.4	19.5	20.1	18.4	16.9
Chile	6.7	12.7	19.0	23.9	31.7	38.4	39.7	42.3	41.8	40.2	38.5	36.5
Colombia	-7.7	-7.8	-3.0	0.0	8.5	10.6	14.8	16.8	19.7	21.1	20.6	22.2
Costa Rica	-1.1	-1.4	2.0	17.6	28.2	34.7	33.7	32.9	31.6	30.0	28.7	23.5
Dominican Republic	-11.2	-7.4	3.4	17.8	25.0	25.8	26.4	25.3	25.4	25.3	24.9	24.3
Ecuador	-13.5	-8.2	-6.0	2.5	11.2	16.4	19.2	20.3	21.0	21.9	22.2	22.0
El Salvador	5.8	8.8	13.4	21.3	29.1	34.4	35.8	35.7	34.3	32.8	31.9	30.1
Guatemala	2.1	4.7	18.8	15.7	20.0	23.1	24.8	25.5	24.9	24.4	24.0	23.0
Honduras	-4.9	-2.7	2.3	14.6	25.6	32.2	35.2	36.4	35.6	33.7	33.5	31.7
Italy	25.5	7.4	14.1	23.3	27.7	29.3	27.7	24.0	21.8	20.3	18.8	17.4
Jamaica	-19.7	-18.2	-16.3	-10.2	-3.7	0.7	2.1	2.9	3.8	3.5	5.3	5.8
Mexico	-1.4	-0.8	-3.2	-0.1	5.2	8.9	12.6	14.2	13.6	11.6	9.7	7.8
Morocco	7.5	10.5	12.5	17.9	24.1	26.7	25.0	24.2	23.0	22.1	21.9	19.1
Nicaragua	28.4	25.3	22.0	24.7	28.9	30.9	31.9	31.0	29.7	28.1	26.8	25.9
Panama	-70.2	-52.2	-39.0	-21.6	-5.5	6.5	9.7	15.4	18.8	20.5	21.0	14.7
Paraguay	5.3	4.4	5.2	17.9	14.0	13.3	11.2	9.3	8.0	6.8	4.8	4.0
Peru	-3.6	3.3	13.5	23.6	32.1	38.2	39.6	40.8	40.0	37.5	36.7	35.1
Spain	10.1	-2.9	-5.2	9.3	4.8	6.6	14.3	12.8	12.0	11.3	11.2	11.3
Trinidad & Tobago	20.2	48.8	62.7	59.3	40.1	32.0	26.5	19.5	n.a.	15.8	14.9	15.2
United States	--	--	--	--	--	--	--	--	--	--	--	--
Uruguay	-7.4	-4.9	0.9	5.5	7.0	7.4	7.7	7.7	8.1	8.7	8.7	9.6
Average	-1.1	1.4	6.4	13.8	18.5	21.6	22.7	22.6	22.5	21.5	20.8	19.6

Source: Elaborated by the authors based on official information from the tax administrations. "n.a." = not available.

Note: The United States and Brazil are two unique cases in this regard. In the first case, there is no VAT at the federal level, but various retail sales taxes applied at the level of each sub-national State (the collection of which is not considered here). In the second case, although there is a multiplicity of general consumption taxes -simultaneously for the three levels of government-, for the purposes of this Report the figures presented correspond to the ICMS (State tax).

Taking as a reference the figures corresponding to the calendar year 2019, strong changes can be observed in the resulting inter-annual changes for 2021, in some cases with increases higher than those that arise from comparing with the figures for 2020 (for example, Morocco and Trinidad and Tobago), in other countries with a slowdown in the recovery of accumulated VAT

revenues and in other countries, directly, showing a relative decrease compared to the values recorded two years earlier when the possibility of a pandemic such as COVID-19 was still unsuspected (Table 6). Among the latter are Argentina (which ended 2021 with a slight real drop of 0.1% with respect to 2019), Bolivia (which as of June, according to available data, showed a relative

loss of 12.3%), Ecuador (which ended the year with a rebound of 0, 9% but being in negative values for much of it), Spain (also coming in with a cumulative decline of 1.2% in December), along with more striking cases such

as Jamaica (-12.4% as of December) and Panama (which ended the year with -25.4% but recovering from -72.3% in the first month of the year)¹⁴.

Table 6. Evolution of VAT cumulative collection in 2021 (in percentage changes with respect to the *same month of year 2019*; constant prices; January to December)

Countries	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19	May 21/19	Jun 21/19	Jul 21/19	Aug 21/19	Sep 21/19	Oct 21/19	Nov 21/19	Dec 21/19
Argentina	-4.2	-3.8	-0.1	0.1	-2.2	-2.6	-2.9	-3.5	-2.6	-3.0	-2.2	-0.1
Bolivia	-23.2	-20.0	-14.5	-15.7	-13.7	-12.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Brazil	12.7	11.1	11.9	11.2	11.1	12.1	13.4	14.5	15.2	15.4	15.3	13.7
Chile	26.1	21.9	23.3	21.0	18.6	20.8	22.6	23.7	24.3	26.5	29.1	29.2
Colombia	-1.5	-1.2	1.1	2.3	1.4	1.7	1.6	2.6	3.9	5.1	5.9	7.7
Costa Rica	15.0	18.9	21.7	25.4	24.6	26.9	26.3	24.9	23.0	21.2	21.0	21.7
Dominican Republic	-7.2	-2.7	-1.3	0.1	1.1	3.1	3.6	4.0	4.9	6.0	7.7	8.3
Ecuador	-7.8	-9.0	-8.4	-9.0	-9.4	-8.7	-8.3	-7.8	-4.9	-3.4	-1.3	0.9
El Salvador	15.0	15.5	19.7	20.1	19.4	21.1	20.4	20.6	20.8	20.9	21.8	22.0
Guatemala	9.7	11.2	13.0	13.6	12.5	13.7	13.8	13.7	13.9	13.6	14.0	14.4
Honduras	-4.7	-2.8	-1.6	-0.4	1.6	3.8	3.7	4.7	4.7	4.9	5.7	6.0
Italy	32.9	9.2	8.7	8.2	6.0	5.6	6.2	5.2	5.9	6.3	6.0	5.3
Jamaica	-17.3	-19.3	-16.1	-17.1	-18.2	-16.0	-15.7	-15.0	-14.0	-14.1	-13.0	-12.4
Mexico	19.2	14.5	14.6	16.1	9.9	8.2	8.5	12.1	11.3	10.3	9.8	10.3
Morocco	31.8	28.6	30.1	29.1	27.6	28.7	26.9	27.6	27.2	26.4	26.7	27.4
Nicaragua	32.9	30.3	29.3	30.3	28.8	28.0	28.0	27.9	28.3	27.9	27.6	25.9
Panama	-72.3	-56.7	-46.7	-41.1	-36.9	-34.0	-31.0	-28.9	-27.4	-25.6	-24.3	-25.4
Paraguay	15.3	8.0	5.4	8.1	7.3	7.4	7.2	6.4	6.8	6.6	6.0	6.5
Peru	-2.8	2.2	8.9	9.2	9.3	10.2	10.8	12.4	13.0	13.1	14.3	15.5
Spain	3.6	-2.4	-2.2	3.9	-4.8	-5.3	-3.8	-4.0	-4.1	-2.4	-2.0	-1.2
Trinidad & Tobago	21.6	37.7	55.9	49.7	39.8	44.8	40.6	32.2	n.a.	28.2	28.6	33.4
United States	--	--	--	--	--	--	--	--	--	--	--	--
Uruguay	-1.6	-3.3	1.9	4.1	2.1	3.1	4.3	4.2	4.8	5.4	6.4	7.6
Average	5.5	5.1	8.1	8.8	7.1	8.2	8.4	8.4	7.8	9.0	9.7	10.3

Source: Elaborated by the authors based on official information from the tax administrations. "n.a." = not available.

14 Both in this and in most of the cases surveyed, VAT revenues in the domestic market and those derived from actual imports of goods and services are considered together, which, however, could have been affected in different ways by the consequences of the pandemic.

1.4. Evolution of Excise Taxes collection

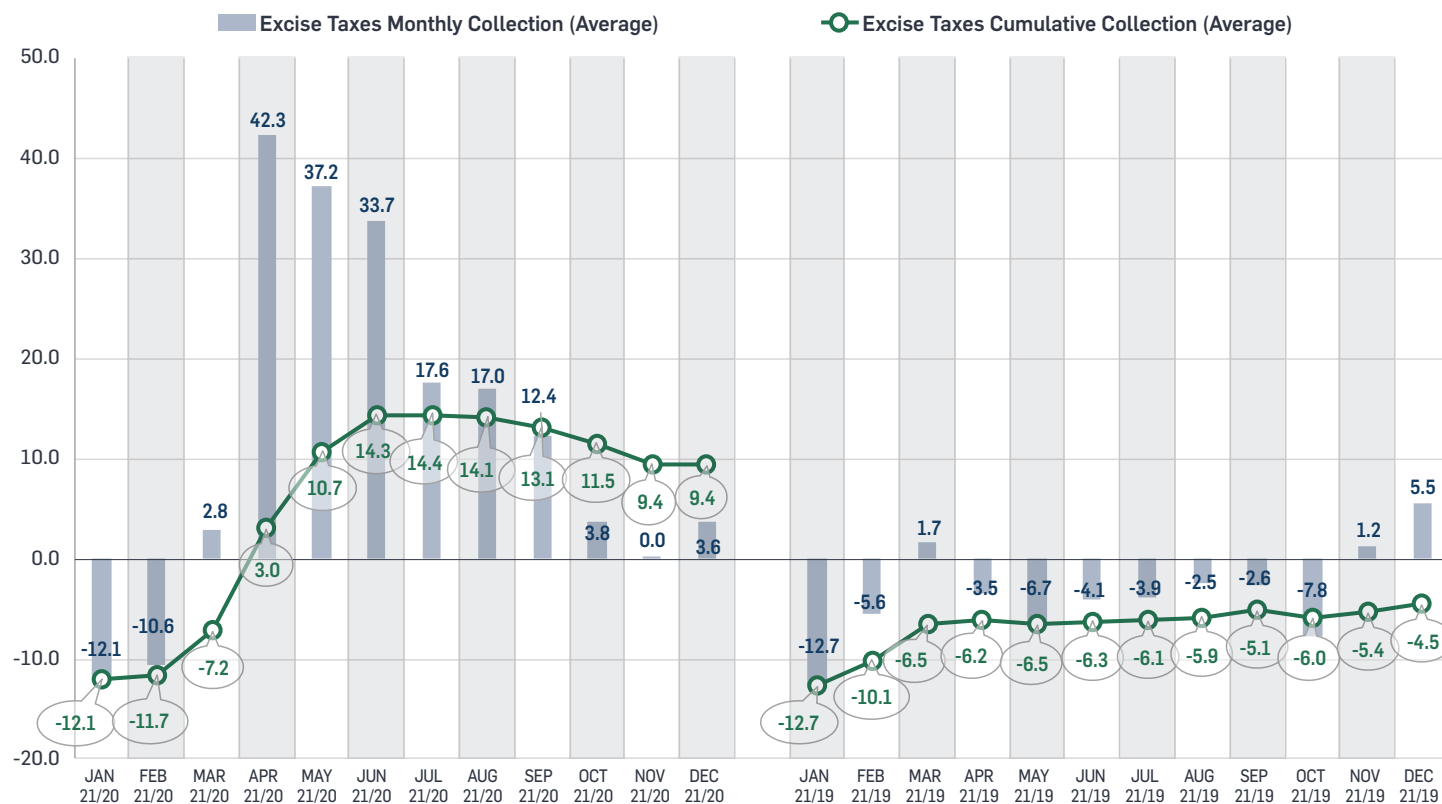
In previous editions of this Report it was noted that, based on available information, the initial restrictions on mobility and the paralysis of commercial and industrial activities adopted to prevent the spread of the COVID-19 pandemic in the context of the different countries have been determining factors to become the Excise taxes the fiscal instruments most affected in their collection during 2020, both in monthly and cumulative terms, even though the year-on-year decreases turn into more moderate towards the end of that year.

In the first months of 2021, Excise taxes continued to be the hardest hit by the crisis. In fact, in the comparison with 2020 data, the average series of interannual changes of monthly collection showed negative values in January (-12.1%) and February (-10.6%) and a very small increase in March (+2.8%). However, in the second quarter there were very notable jumps in the collection of this tax which, on average and without considering some cases with out-of-range changes (+/-100%), reached 42.3% in April, 37.2% in May and 33.7% in June (Figure 4, left panel). Then, in the second part of the year, the rate of growth of Excise taxes collection slowed down to show only positive average changes during the last quarter (+3.6% in December).

These movements influenced Excise taxes collections in cumulative terms to show more limited changes than other main taxes such as IT or VAT, although with a similar pattern of strong recovery up to the middle of the year (from -12.1% to 14.3%) and a slight and gradual moderation of average year-on-year increases towards December (+9.4%).

With respect to 2019 (Figure 4, right panel), the monthly collection of Excise taxes shows mostly negative average changes (from -12.7% in January) although with a very slight rebound towards the end of 2021 (+1.2% in November and +5.5% in December). The accumulated collection, logically and in clear contrast with IT, VAT and overall collection, also remains in the area of collection loss or insufficient recovery during the entire period analyzed, ending with an average drop of 4.5% in December -which is not as deep as the one calculated for 2020 (13.1%) with respect to the same reference year- and diluting, somehow, the idea of apparent recovery for this group of taxes during the period analyzed.

Figure 4. Evolution of Excise taxes collection in 2021 (in percentage changes with respect to the *same month of 2020 -left- and 2019 -right-;* simple averages; constant prices; January to December)



Source: Elaborated by the authors based on official information from the tax administrations.

Nota: The same considerations as in Figure 1 apply to the calculation of the averages of the year-on-year changes in monthly and cumulative collections, so that incomplete data or data with extreme changes are not excluded.

At the country level, despite observing large gaps that partly respond to different tax structures on specific consumption (fuels, tobacco, beverages, various services, among others), it was found that a large number of the countries surveyed maintained negative figures of year-on-year change of cumulative Excise taxes collection in the first three months of the year, reversing this trend in most of them as of April or May, as the case may be,

due to superlative increases in monthly¹⁵ collection. However, even when compared to the figures for 2020 where the impact of the pandemic has been felt more strongly (Table 7), some countries have not been able to consolidate this recovery and showed significant drops in cumulative Excise taxes collection at the end of 2021, as could be observed in Chile (8.9%), The United States (6.6%), Mexico (17.8%) and Paraguay (33.9%).

¹⁵ In this case also, the monthly variations in current and constant values for all the countries surveyed can be consulted in the Statistical Annex (online) that accompanies this document.

Table 7. Evolution of Excise taxes cumulative collection in 2021 (in percentage changes with respect to the *same month of year 2020*; constant prices; January to December)

Countries	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	May 21/20	Jun 21/20	Jul 21/20	Aug 21/20	Sep 21/20	Oct 21/20	Nov 21/20	Dec 21/20
Argentina	26.6	18.7	28.5	40.5	39.3	33.7	20.8	19.9	17.5	17.8	16.5	15.1
Bolivia	-19.2	-19.3	-18.4	6.6	29.9	49.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Brazil	14.4	18.3	24.5	30.3	35.4	37.3	35.3	31.3	27.8	23.8	20.3	18.8
Chile	-31.9	-27.7	-26.3	-23.9	-18.0	-15.3	-15.3	-8.2	-6.3	-10.2	-9.9	-8.9
Colombia	-31.3	-29.1	-25.9	-17.9	-2.4	-1.0	5.8	6.9	12.6	13.5	15.0	14.9
Costa Rica	-1.0	-12.0	-5.5	1.2	15.0	21.6	23.8	21.6	21.6	24.0	24.4	23.2
Dominican Republic	-3.3	-5.3	2.7	19.1	26.1	26.0	24.9	24.4	26.6	24.6	24.0	23.8
Ecuador	-14.5	-11.1	-12.2	-0.2	8.9	11.7	16.5	15.6	16.1	15.8	13.8	12.0
El Salvador	10.5	6.4	8.4	17.2	21.1	25.8	25.7	22.7	21.8	20.2	19.2	17.1
Guatemala	-10.4	-5.9	4.7	13.1	18.6	23.7	25.7	24.7	22.6	20.6	19.0	16.6
Honduras	-1.0	-2.2	-2.3	7.7	16.5	21.6	24.1	26.1	25.8	24.5	22.9	23.1
Italy	-28.1	-29.4	-23.5	-10.5	3.1	11.3	14.3	16.6	16.6	11.6	2.3	8.2
Jamaica	27.4	9.7	2.6	14.1	5.7	7.2	8.8	8.9	11.5	10.4	12.0	14.3
Mexico	-21.2	-18.0	-16.9	-13.1	-8.7	-6.7	-8.2	-10.2	-12.1	-14.3	-16.2	-17.8
Morocco	-11.5	-4.4	4.5	16.5	24.1	28.8	24.8	21.8	22.9	23.4	1.7	16.1
Nicaragua	14.6	7.7	12.6	16.9	18.1	19.5	21.3	20.8	18.1	15.9	13.3	11.4
Panama	-72.8	-54.2	-35.8	-16.4	7.3	23.5	25.4	31.3	31.9	27.0	26.0	20.2
Paraguay	-32.7	-40.1	-41.7	-34.3	-32.6	-34.8	-35.7	-34.1	-33.4	-33.6	-34.3	-33.9
Peru	-8.3	-4.4	-3.7	10.0	22.9	30.8	33.2	34.2	34.4	33.7	30.3	26.5
Spain	-9.3	-17.2	-15.5	-9.5	-2.5	2.4	3.2	2.3	3.9	3.6	2.0	1.8
Trinidad & Tobago	-24.1	-11.1	-3.8	7.5	9.6	4.6	5.1	5.0	n.a.	4.6	5.4	4.4
United States	-45.6	-36.5	-25.2	2.3	19.4	28.3	23.7	17.7	-13.5	-11.9	-8.8	-6.6
Uruguay	-12.9	-9.0	-8.6	-3.6	9.0	15.6	14.0	11.6	9.1	7.7	8.8	6.5
Average	-12.1	-11.7	-7.2	3.0	10.7	14.3	14.4	14.1	13.1	11.5	9.4	9.4

Source: Elaborated by the authors based on official information from the tax administrations. "n.a." = not available.

As expected, the lower intensity of the general recovery of cumulative Excise taxes collection (in relation to that experienced with other taxes) underlies the presence of a considerable number of countries with significant decreases with respect to the 2019 figures, which were maintained for several months or, directly, throughout the year (Table 8). Of course, the sharpest drops are verified in the first part of the year, although in some cases they are accentuated towards the end of the year, for example, in Mexico (20.5%) or Paraguay (47.3%).

However, there is a clear contrast with a few countries where the year-on-year changes of the accumulated Excise taxes collection with respect to 2019 end up in positive territory, meaning a significant improvement during 2021, as observed in cases such as Argentina (+13.3%), Brazil (+15.3%), El Salvador (+13.6%), Morocco (+21.2%) and Nicaragua (+11.9%), among others.

Table 8. Evolution of Excise taxes cumulative collection in 2021 (in percentage changes with respect to the *same month of year 2019*; constant prices; January to December)

Countries	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19	May 21/19	Jun 21/19	Jul 21/19	Aug 21/19	Sep 21/19	Oct 21/19	Nov 21/19	Dec 21/19
Argentina	0.3	7.2	11.8	12.0	14.1	14.7	15.5	16.1	15.1	15.6	14.4	13.3
Bolivia	-10.4	-10.4	-12.9	-13.3	-11.4	-10.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Brazil	5.5	11.2	15.1	13.9	12.6	11.9	11.6	12.1	13.2	13.0	14.0	15.3
Chile	-42.4	-32.9	-23.9	-18.4	-14.3	-12.5	-14.4	-13.5	-13.4	-14.1	-13.4	-10.0
Colombia	-33.3	-29.0	-29.5	-26.9	-27.9	-27.0	-28.6	-26.9	-26.4	-25.2	-24.1	-22.9
Costa Rica	10.7	-4.9	3.0	-6.0	-3.6	-4.0	-0.9	-4.0	-3.9	-5.4	-4.2	-2.6
Dominican Republic	-12.6	-10.5	-2.6	-0.3	-2.3	-1.4	0.2	0.2	2.8	2.3	3.6	4.0
Ecuador	-11.1	-10.9	-10.6	-10.5	-13.2	-13.8	-11.3	-11.5	-10.8	-9.6	-9.4	-8.5
El Salvador	5.3	10.9	13.3	16.9	16.7	17.0	17.9	16.4	14.6	14.9	15.0	13.6
Guatemala	-4.8	6.4	8.0	7.6	3.2	4.3	6.7	4.6	4.8	4.1	4.0	4.7
Honduras	0.2	-2.1	-1.6	0.1	-1.1	-0.1	0.5	0.8	0.5	0.8	1.1	1.5
Italy	-26.7	-27.8	-21.6	-23.1	-23.1	-22.3	-21.6	-19.9	-18.4	-19.5	-16.6	-10.9
Jamaica	24.3	14.9	6.5	5.9	-2.8	-8.9	-5.7	-8.7	-10.4	-10.4	-9.3	-5.8
Mexico	4.9	-11.4	-13.0	-10.0	-10.4	-10.4	-11.4	-14.9	-15.4	-17.8	-19.3	-20.5
Morocco	-24.5	-0.3	5.6	8.4	14.5	21.3	16.2	20.2	20.3	21.7	23.0	21.2
Nicaragua	20.7	22.2	26.7	23.6	20.1	18.3	16.2	14.5	14.6	13.1	12.6	11.9
Panama	-72.1	-53.4	-40.8	-38.3	-32.1	-28.8	-28.0	-26.2	-25.0	-26.7	-25.3	-21.9
Paraguay	-26.4	-40.0	-45.1	-44.8	-43.9	-46.0	-46.4	-45.5	-46.0	-46.6	-47.2	-47.3
Peru	10.7	5.7	7.8	5.7	4.8	1.5	3.1	4.0	3.2	2.9	3.7	4.5
Spain	-5.5	-14.1	-12.1	-8.6	-10.8	-10.7	-9.9	-10.5	-9.5	-8.9	-10.1	-10.2
Trinidad & Tobago	-27.7	-18.8	-5.6	-8.9	-16.8	-18.4	-18.3	-15.6	n.a.	-15.1	-14.6	-13.4
United States	-50.6	-33.6	-28.8	-26.6	-23.8	-20.8	-20.4	-19.2	-18.8	-18.4	-17.1	-16.3
Uruguay	-23.6	-11.5	-6.0	-7.9	-3.6	-2.7	-5.5	-2.1	0.9	-2.0	1.1	1.4
Average	-12.7	-10.1	-6.5	-6.2	-6.5	-6.3	-6.1	-5.9	-5.1	-6.0	-5.4	-4.5

Source: Elaborated by the authors based on official information from the tax administrations. "n.a." = not available.

1.5. Evolution of Other Revenue collection

Finally, the set of Other Revenue is of less analytical importance given its high heterogeneity and residual nature by definition. However, it is recognized that in some countries its weight is much more relevant than in the average, given the extended collection powers of tax administrations -especially those related to social security contributions-, which can significantly affect the aggregate evolution of total tax revenues. Specifically,

in Argentina the weight of Other Revenue has ranged between 49% and 54% of the total during 2021, in Brazil between 47% and 54%, and in the United States between 23% and 50% depending on the calendar month, while in the other countries surveyed the representativeness of this component of the tax structure is generally below 20%¹⁶.

During 2020, the average monthly evolution of Other Revenue collection was in line with the other taxes

¹⁶ The percentage structures of monthly tax collection for each country can be consulted at the following link: [Collection | Inter-American Center of Tax Administrations \(ciat.org\)](#), "Monthly Tax Collection Database (Annex)".

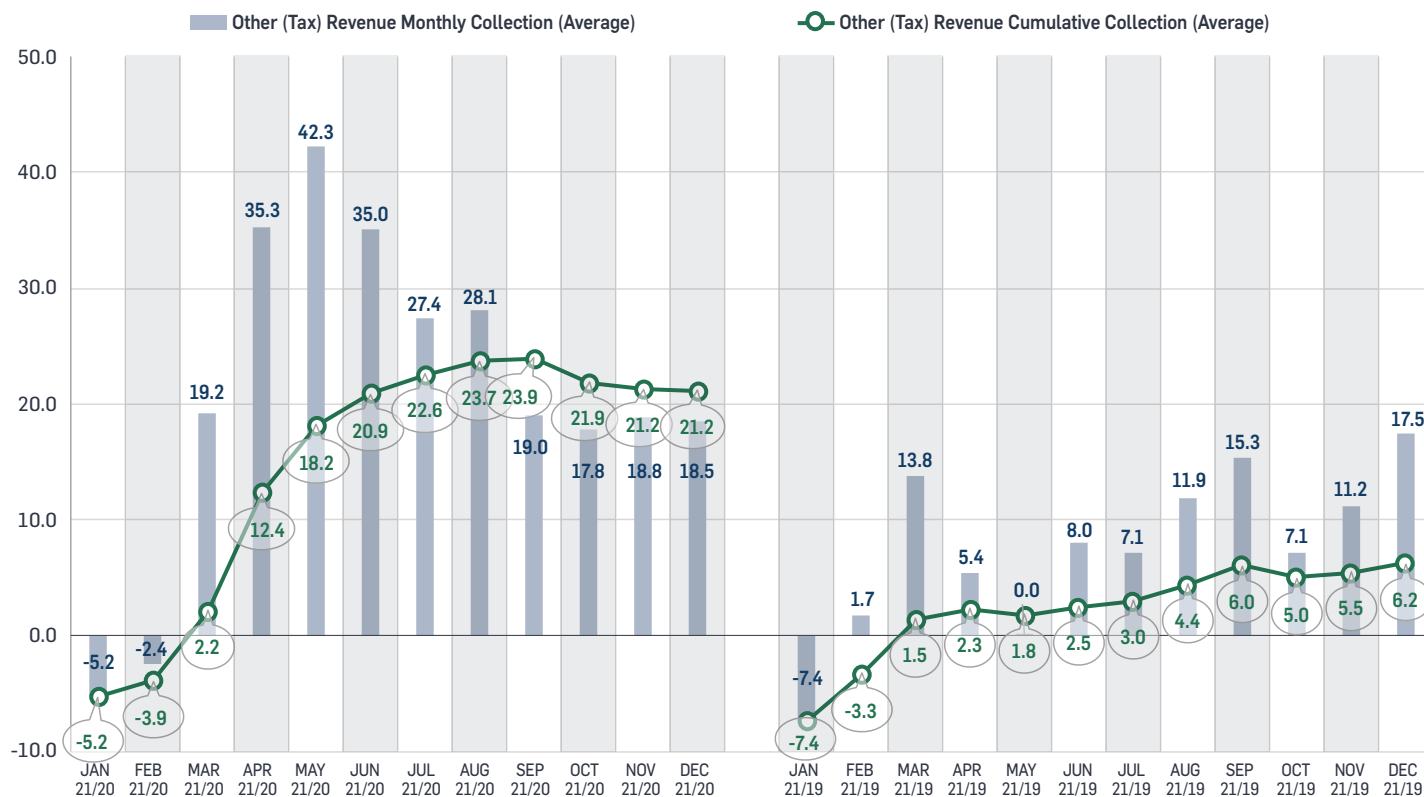
previously analyzed, with a maximum drop in May and more limited year-on-year decreases during the last quarter of that year. However, the average accumulated drop up to December (-12.7%) turned out to be higher than the average for the overall collection (-9.3%) and very close to that of the Excise taxes, showing a slow and scarce improvement in the effective performance of this remaining set of taxes.

For year 2021, compared to 2020 figures, an accelerated recovery of the monthly collection, in constant values, of the Other Revenue component was observed as of March (+19.2%), after a weak start to the year (-5.2% in January and -2.4% in February), with growth peaks during the second quarter (the maximum of 42.3% in May) and a stabilization of the year-on-year variation rates, although all positive and significant, around 18% towards the end of the year (Figure 5, left panel). In terms of the accumulated collection of Other Revenue, a similar figure to that of other main taxes is observed,

starting from a minimum of -5.2% of percentage change in January, passing through a maximum in September (+23.9%) and reaching an average accumulated increase of 21.2% in December.

When comparing the results obtained for 2021 with respect to those recorded in 2019, isolating the greater negative effects of the pandemic, the aforementioned recovery is weakened and relativized. The average inter-annual changes of the monthly collection turn out to be more limited than when weighted by the 2020 figures, although with increasing values towards the last months of the year. This made it possible that, on average, the accumulated collection of Other Revenue managed to increase gradually throughout the year, moving out of negative territory in March (+1.5%) and reaching a maximum of 6.2% in December 2021 (Figure 5, right panel).

Figure 5. Evolution of Other Revenue collection in 2021 (in percentage changes with respect to the *same month of 2020 -left- and 2019 -right-;* simple averages; constant prices; January to December)



Source: Elaborated by the authors based on official information from the tax administrations.

Note: The same considerations as in Figure 1 apply to the calculation of the averages of the year-on-year changes in monthly and cumulative collections, so that incomplete data or data with extreme changes are not excluded.

By country, except for the exceptional case of Chile (where this set of resources suffered a significant decrease in addition to the alteration of their monthly income pattern as a result of the pandemic crisis) and, to a lesser extent, that of the United States, the vast majority of countries show positive variations in the accumulated collection of Other Revenue throughout the year and in comparison with the figures corresponding to 2020 (Table 9). The weak start in the first months of the year is verified for almost all countries, and extends in some cases into the

second quarter (e.g. Jamaica -2.4% in June and Mexico -3.0% in May). With some differences with respect to other taxes, the subsequent recovery of collection seems to be, in several cases, somewhat delayed towards the third quarter and the last months of the year, which may be linked to the postponed entry of pending tax obligations in some countries. Costa Rica (+54.9%), Honduras (+46.9%) and the Dominican Republic (+56.4%) stand out for their relative improvements at the end of the year.

Table 9. Evolution of Other Revenue cumulative collection in 2021 (in percentage changes with respect to the *same month of year 2020*; constant prices; January to December)

Countries	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	May 21/20	Jun 21/20	Jul 21/20	Aug 21/20	Sep 21/20	Oct 21/20	Nov 21/20	Dec 21/20
Argentina	4.5	4.4	5.8	11.8	12.6	12.6	11.7	10.5	9.0	8.5	8.5	9.6
Bolivia	-26.2	-26.1	-18.7	0.1	10.1	9.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Brazil	-2.3	-0.2	4.4	12.7	19.5	24.6	25.1	21.4	20.2	17.0	15.0	14.2
Chile	203.9	36.3	-44.7	-65.7	-52.7	-44.7	-33.5	-25.8	-31.3	-23.0	-22.5	-7.4
Colombia	-1.0	-2.5	4.8	13.5	16.9	21.3	21.7	25.1	18.6	16.8	20.8	20.7
Costa Rica	24.6	13.1	19.5	31.0	41.5	48.2	51.5	53.1	52.5	53.4	55.1	54.9
Dominican Republic	-11.4	3.6	15.9	49.4	65.3	69.5	68.9	66.8	62.9	62.3	61.0	56.4
Ecuador	-9.7	-5.6	3.8	12.6	18.3	19.8	19.1	19.2	21.5	21.3	21.2	20.8
El Salvador	-18.1	-11.3	-3.7	9.9	17.9	15.0	18.9	21.7	23.5	23.5	24.2	23.8
Guatemala	-6.0	-4.3	0.4	6.0	10.4	12.8	19.0	19.6	19.2	12.6	12.7	13.2
Honduras	-6.8	-5.9	7.4	32.1	40.8	42.2	46.8	48.0	47.2	45.8	47.5	46.9
Italy	5.9	-2.6	-1.3	4.2	10.3	12.0	14.9	15.4	17.2	18.4	16.8	16.0
Jamaica	-23.2	-23.2	-22.4	-15.4	-7.1	-2.4	2.8	4.6	5.6	6.3	7.5	8.0
Mexico	-16.3	-8.8	-1.9	-1.0	-3.0	1.4	4.7	4.5	3.7	4.5	5.5	7.7
Morocco	24.5	10.6	-12.0	-1.1	7.0	13.8	14.7	16.5	16.8	16.5	8.1	15.8
Nicaragua	2.9	1.0	13.0	21.1	29.4	32.3	34.8	34.3	33.9	32.6	31.4	30.5
Panama	-55.5	-37.0	1.2	18.7	31.6	31.7	15.9	20.3	19.8	19.0	19.0	17.6
Paraguay	19.6	15.7	1.3	19.3	22.5	25.2	47.3	47.4	44.2	43.1	34.5	32.0
Peru	-10.5	-5.0	5.1	18.7	25.4	29.0	26.9	41.6	38.3	34.9	34.7	32.9
Spain	-1.1	-0.5	13.4	9.6	14.3	28.1	26.5	25.1	22.7	25.1	23.1	23.7
Trinidad & Tobago	-30.3	-18.2	-10.4	-0.1	2.2	2.3	2.1	-0.1	n.a.	-4.2	-3.4	-2.8
United States	-5.4	-3.7	-2.3	-2.2	-1.0	-6.0	-5.2	-4.2	-3.4	-3.4	-2.8	-2.6
Uruguay	5.5	-1.1	3.6	9.5	7.0	6.4	6.0	6.2	4.9	5.2	5.4	5.0
Average	-5.2	-3.9	2.2	12.4	18.2	20.9	22.6	23.7	23.9	21.9	21.2	21.2

Source: Elaborated by the authors based on official information from the tax administrations. "n.a." = not available.

Also at the individual country level, when taking the figures for 2019 as a comparative reference, the trends and behaviors indicated above are verified, but in several cases, the relative drops in the collection of Other Revenues are accentuated, which moderates the recovery highlighted above. In addition to the exceptional case of Chile, Bolivia (up to June), Jamaica, Panama,

Paraguay and Uruguay exhibit values in negative territory throughout the period under analysis and end the year with relative losses (Table 10). However, once again, the contrast is wide as we detect cases such as Nicaragua with an increase of 36.1% in the accumulated collection of these taxes at the end of 2021.

Table 10. Evolution of Other Revenue cumulative collection in 2021 (in percentage changes with respect to the *same month of year 2019*; constant prices; January to December)

Countries	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19	May 21/19	Jun 21/19	Jul 21/19	Ago 21/19	Sep 21/19	Oct 21/19	Nov 21/19	Dec 21/19
Argentina	0.9	2.0	3.7	5.5	4.3	4.3	3.3	3.6	4.3	4.6	4.0	4.4
Bolivia	-27.3	-24.3	-19.7	-20.0	-19.2	-16.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Brazil	-0.6	-0.8	2.2	1.9	1.6	1.4	2.2	2.7	3.4	3.7	4.0	4.6
Chile	120.6	-57.8	-74.2	-74.6	-54.9	-44.0	-38.1	-34.1	-37.8	-29.8	-31.1	-27.5
Colombia	-5.3	-1.7	8.0	5.8	6.7	7.6	6.6	7.1	-0.6	-2.3	2.1	2.8
Costa Rica	20.1	7.2	11.5	11.3	11.0	10.1	8.8	9.6	11.0	12.4	12.7	8.5
Dominican Republic	-17.1	-3.0	1.0	5.7	5.3	8.7	12.3	13.5	14.7	17.1	18.6	19.5
Ecuador	-10.0	-9.1	26.6	21.5	17.4	14.5	12.8	11.4	12.5	11.6	10.7	10.2
El Salvador	-30.3	-19.3	-11.0	-6.1	-5.4	-3.1	-2.4	-2.0	-1.1	-1.2	-0.4	0.2
Guatemala	-4.8	-1.2	3.1	4.9	3.7	2.9	1.1	1.8	3.6	4.9	5.0	6.8
Honduras	-9.0	-6.9	-1.8	2.6	1.3	4.0	5.3	6.4	6.3	6.9	8.2	10.0
Italy	14.2	37.4	27.4	25.3	20.0	13.1	13.8	17.3	19.4	22.1	18.4	18.6
Jamaica	-26.3	-26.8	-24.3	-23.7	-21.9	-19.5	-17.3	-16.4	-16.4	-15.8	-15.0	-14.1
Mexico	-20.6	-10.9	9.6	7.5	7.8	5.4	7.9	8.4	8.2	8.2	9.3	11.3
Morocco	31.9	18.5	-2.3	2.2	2.0	5.8	6.6	9.3	11.5	10.5	12.2	16.4
Nicaragua	28.3	29.6	39.0	43.0	42.6	43.2	41.2	38.4	38.5	37.6	35.8	36.1
Panama	-50.2	-33.3	-25.5	-21.7	-15.9	-16.7	-14.7	-11.7	-10.5	-10.3	-10.6	-7.8
Paraguay	-31.7	-21.6	-27.4	-23.9	-21.7	-17.1	-4.0	-3.4	-3.2	-3.5	-4.1	-2.9
Peru	-3.7	-3.6	1.2	-1.6	0.2	0.7	0.8	14.4	13.0	11.3	12.6	11.9
Spain	-4.3	1.8	2.0	-3.6	-6.6	4.9	-0.2	2.4	5.1	6.2	6.1	6.9
Trinidad & Tobago	-34.1	-22.5	-12.4	-9.5	-14.5	-15.0	-18.9	-20.0	n.a.	-20.2	-17.7	-15.5
United States	-0.9	1.0	2.2	3.1	4.0	-1.6	-0.6	0.5	2.2	2.3	3.2	3.9
Uruguay	-1.4	-6.2	-1.8	-0.9	-3.8	-1.7	-1.2	-1.1	-1.2	-1.0	-0.5	-0.8
Average ¹	-7.4	-3.3	1.5	2.3	1.8	2.5	3.0	4.4	6.0	5.0	5.5	6.2

Source: Elaborated by the authors based on official information from the tax administrations. "n.a." = not available.

2. EVOLUTION OF ACTIVITY (MOBILITY OF PEOPLE) IN DIFFERENT COUNTRIES

At the time of writing, more than two years have passed since the World Health Organization (WHO) began to characterize the COVID-19 situation as a global pandemic. Faced with this extraordinary situation, governments around the world were forced to implement various measures to control and restrict economic activity and the mobility of people in all its forms. CIAT's Revenue Reports COVID-19 have been using mobility data collected and disseminated by Google to contrast and anticipate, to some extent, the effects of such measures on public revenues.

It is interesting to analyze what has happened, on average, to people's commuting from February 2020 to December 2021 in four different categories: retail and recreation; grocery and pharmacy; workplaces; and transit stations¹⁷. After the deep drop in these indicators during the months of March and April 2020, an increasing trend in mobility and a gradual rebound in economic activity has been observed in all countries under analysis, although the recovery had not been complete by the end of the year and the movement of people still continued to be limited compared to pre-pandemic movements (Figure 6).

Throughout 2021, in view of the progress made in terms of vaccination of the population and reduction of reported infections, the trend of gradual improvement

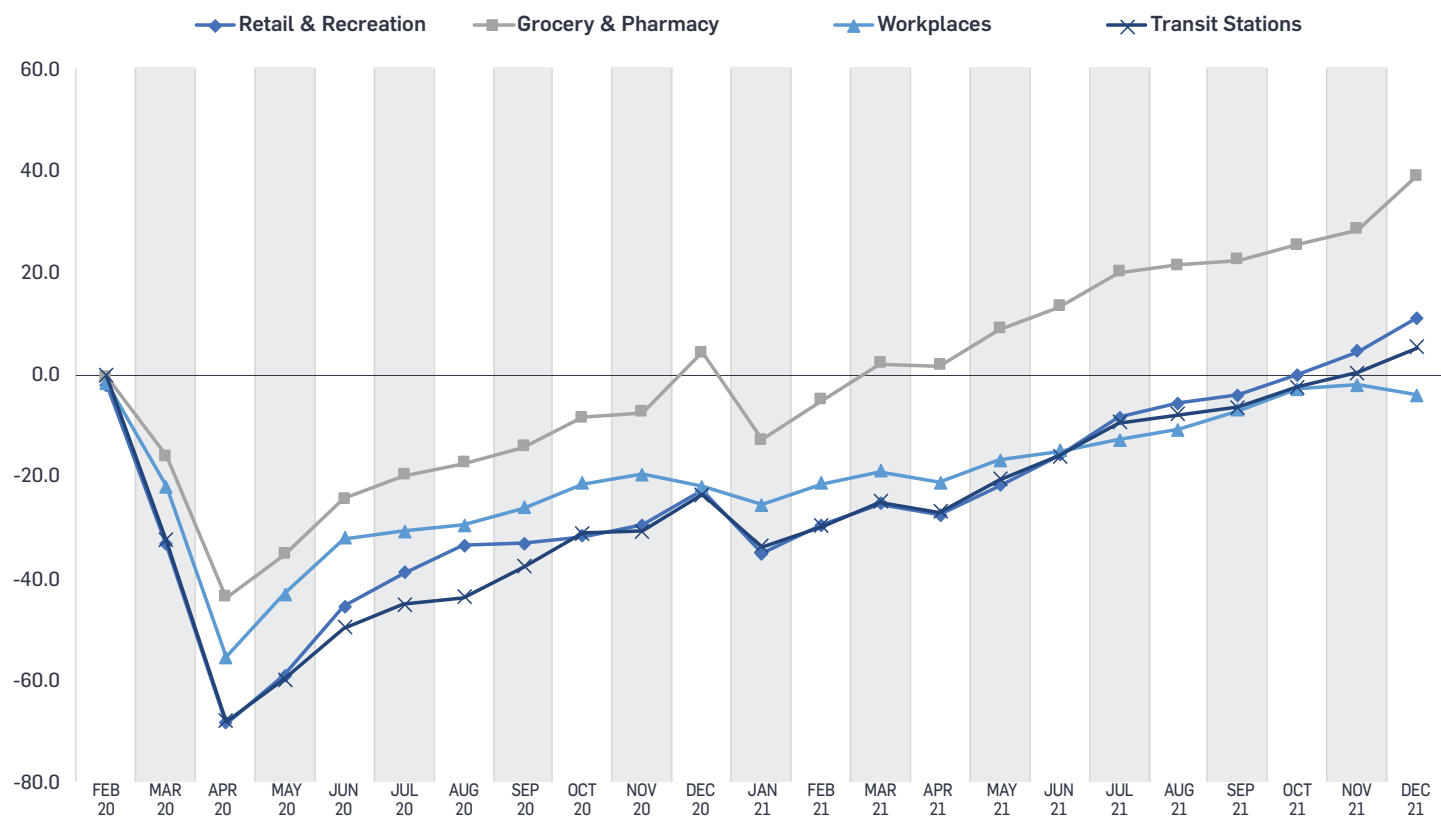
of mobility indicators in all their dimensions began to consolidate. Visits to groceries and pharmacies, linked to basic necessities, led this recovery as early as March of that year, reaching an increase of nearly 40% in the month of December with respect to pre-crisis reference values (January 2020).

Workplace commuting, which had followed a similar gradual improvement in the first months of the year, slowed its pace probably due to changes associated with the new remote or semi-pandemic work arrangements that have become widespread in most countries, still remaining at the end of 2021 below pre-pandemic levels of mobility.

On the other hand, as could be seen in previous RRC, the traffic in retail stores and places of recreation, as well as the transport through transit stations, which had been the most affected by the restrictions imposed in each country from the beginning and until June 2021, showed an encouraging rebound during the second half of the year, which allowed returning, as of November, to the average levels observed in the pre-pandemic period.

17 The data used show the rate of change in the number of visitors to the categorized sites (or the time spent there) compared to a "reference day", which represents a normal value on that day of the week and is calculated as the average value for the five-week period from January 3 to February 6, 2020. This paper considers the monthly average of the daily data for each of the countries analyzed.

Figure 6. Monthly changes in people's mobility (averages by category for all countries analyzed; in percentages; February 2020 to December 2021)

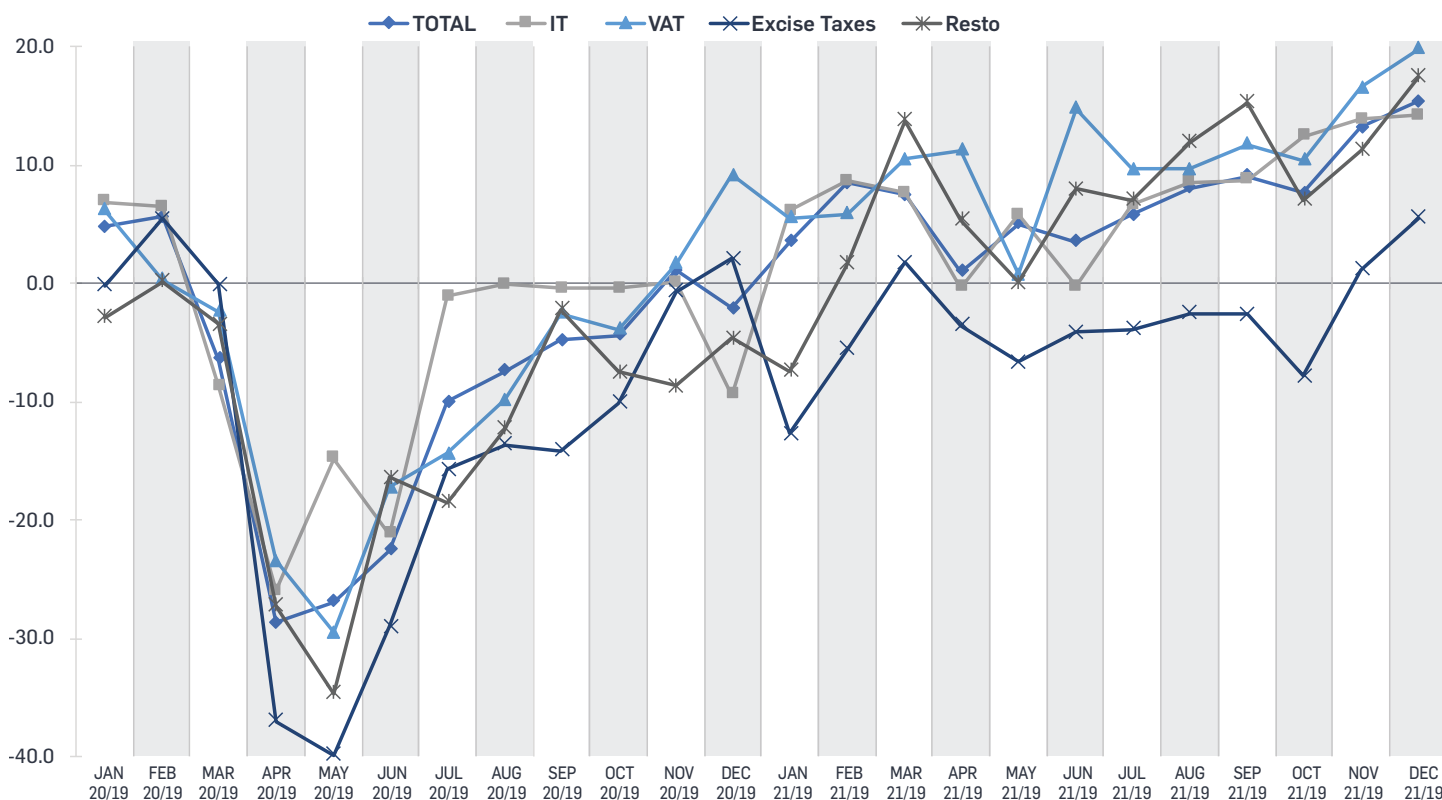


Fuente: Elaborated by the authors based on data from Google LLC "Google COVID-19 Community Mobility Reports". <https://www.google.com/covid19/mobility/> (Accessed: March 1, 2022).

The average monthly collection data by type of tax up to December 2021 and with respect to the figures recorded in the same months of 2019 (Figure 7) show a behavior correlated with the mobility indicators, with a slow recovery of the levels observed from June 2020 onwards, after the deep drops observed in April and May of that year, with a somewhat less and more diffuse pace during 2021. From the outset, the general improvement in tax collection, although seen in all its main components, has been particularly supported by the evolution of income

taxes (IT) which, as a fiscal cushion, contributed to offset much more relevant falls observed in taxes more linked to economic activity such as VAT or, particularly, Excise taxes. Precisely, this unique set of taxes has been the last to recover the levels, in constant values, that existed prior to the pandemic in 2019, verifying an earlier recovery of the collection of the other tax instruments during the past year.

Figure 7. Evolution of total tax monthly collection of tax administrations by type of tax (in percentage change with respect to the *same month of 2019*; simple averages; constant prices; January 2020 to December 2021)



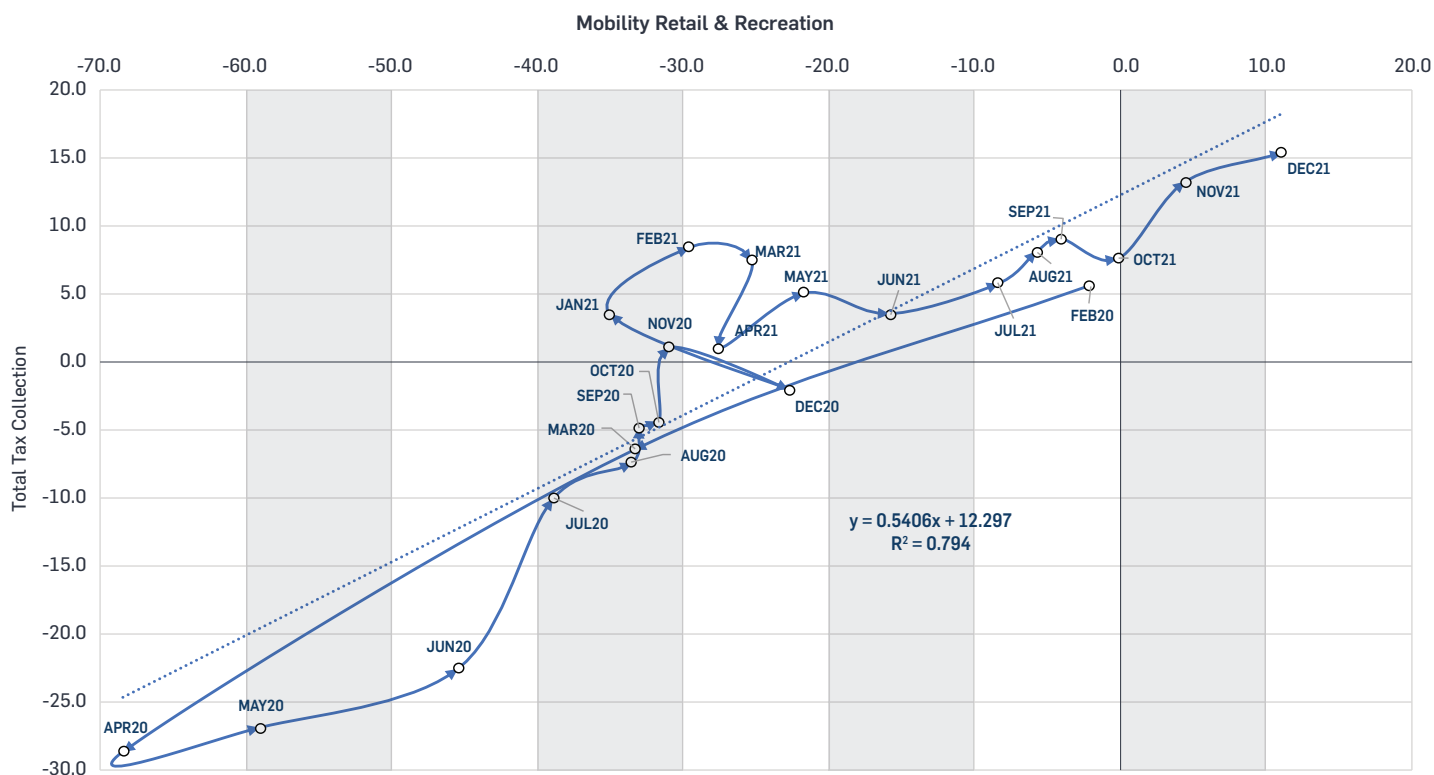
Source: Elaborated by the authors based on official information from the tax administrations (RRC database).

Previous editions of the RRC have already analyzed this correlation between the evolution of tax collection and people's mobility indicators, both in average values and through a panel data analysis. For year 2020, a simple linear regression model between the two variables mentioned reached a high level of fit ($R^2=0.87$), with an estimated parameter for changes in commuting (Retail and Recreation) of 0.60, which allowed us to interpret that 60% of the changes in mobility would have had an impact on changes in total monthly tax collection. However, this

relationship was not stable throughout the year, being much higher until June, while from the middle to the end of the year the relationship between changes in mobility and total revenue became somewhat more diffuse.

Incorporating the monthly data for calendar year 2021 into a single data series shows a loss of explanatory power ($R^2=0.79$) with an estimated parameter for the mobility indicator of 0.54 (Figure 8).

Figure 8. Changes in total tax collection and people's mobility for Retail and Recreation (monthly average; in percentages with respect to the same month of 2019; February 2020 to December 2021)



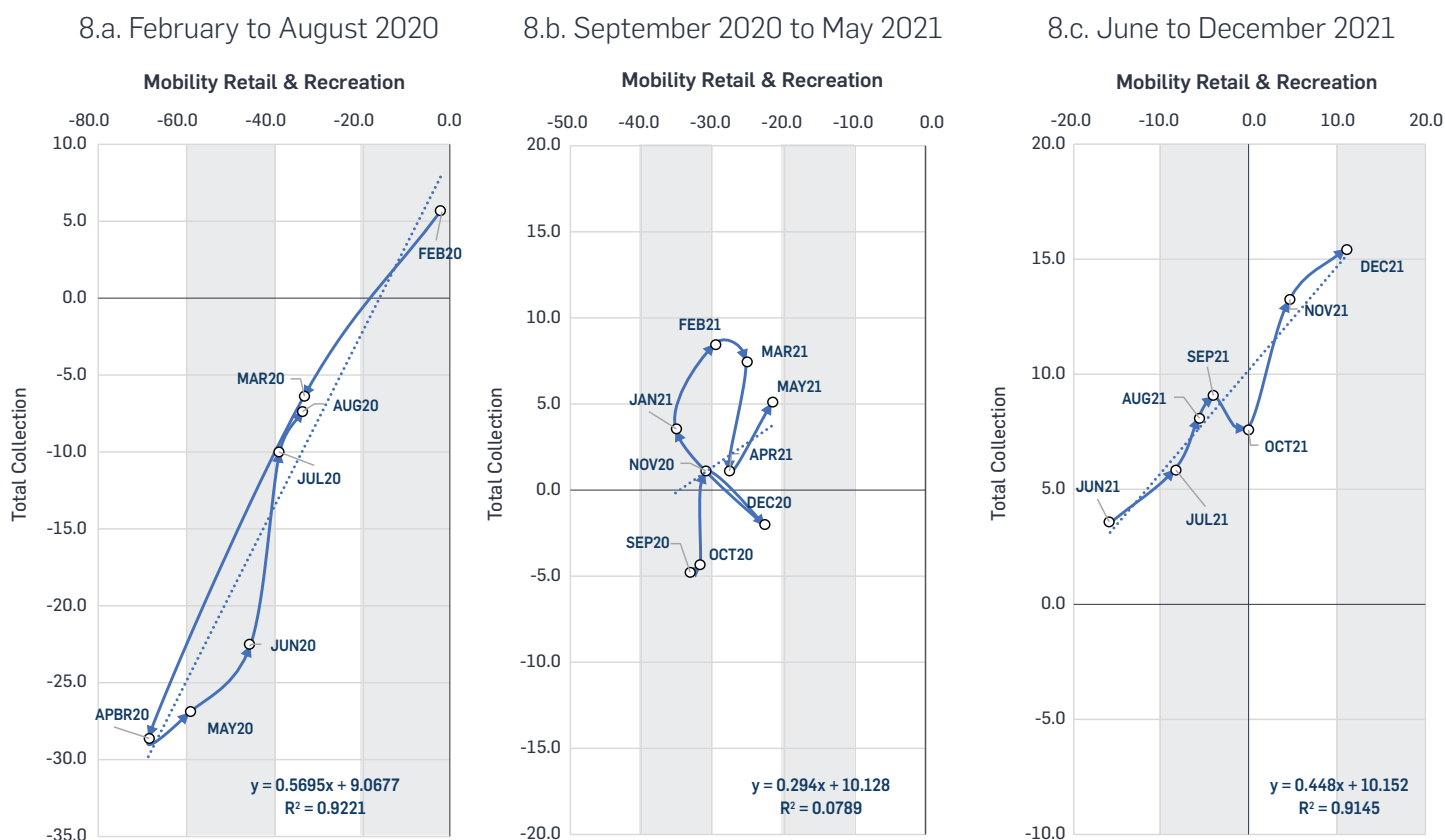
Source: Elaborated by the authors based on data from Google LLC "Google COVID-19 Community Mobility Reports". <https://www.google.com/covid19/mobility/>. (Accessed: March 1, 2022) and the RRC Database (CIAT).

Once again, observation of the evolution of the points in the scatter figure suggests that this relationship, while adequately summarizing what happened over a two-year period (2020-21), has not remained stable throughout the period. Three different time sub-periods can be distinguished:

- From February to August 2020 (Figure 8.a., left), the explanatory power of changes in mobility was extraordinarily high (the R^2 of the linear regression reaches a value of 0.92 with a parameter of 0.57).
- Between September 2020 and May 2021 (Figure 8.b., center) the linear model almost completely loses its explanatory power ($R^2=0.08$).
- Finally, between June and December 2021 (Figure 8.c., right), in a context of tax collection and movement of people tending towards normalization, the relationship between changes in mobility and total tax collection is once again highly significant (R^2 of 0.91 and parameter of the explanatory variable "mobility" of 0,45¹⁸).

¹⁸ It should be noted that, as with the global and regional averages, these adjustment coefficients were calculated without considering the outliers in some countries.

Figure 8.a, 8.b y 8.c. Changes in total tax collection and people's mobility for Retail and Recreation (monthly average; in percentages with respect to the same month in 2019; three subperiods between February 2020 and December 2021)



Source: Elaborated by the authors based on data from Google LLC "Google COVID-19 Community Mobility Reports". <https://www.google.com/covid19/mobility/> (Accessed: March 1, 2022) and the RRC Database (CIAT).

In summary, the limitations on mobility resulting from the measures to curb the advance of the pandemic have been able to explain the main changes in public revenues, especially in the most restrictive periods of 2020. However, the recovery does not seem to be taking place symmetrically in the face of the recovery of mobility, nor homogeneously between countries, at least until mid-2021 when there was still much uncertainty as to the evolution of the pandemic. In the last six months analyzed, however, the linear relationship between changes in mobility and tax collection seems to have been reconstituted, which could provide a useful element for improving tax projections in the coming years.

Beyond the analysis of general trends, as in the case of the main taxes collection, a more detailed analysis of the evolution of mobility in the countries analyzed reveals the different trajectories adopted in this regard, which respond mainly to the different strategies of national and subnational governments to deal with the COVID-19 pandemic.

To illustrate the above, we have selected a group of CIAT member countries -in addition to the global average- for which, although in all cases the general trends in terms of personal mobility are confirmed, differences can be identified in terms of magnitudes and rates of post-pandemic recovery.

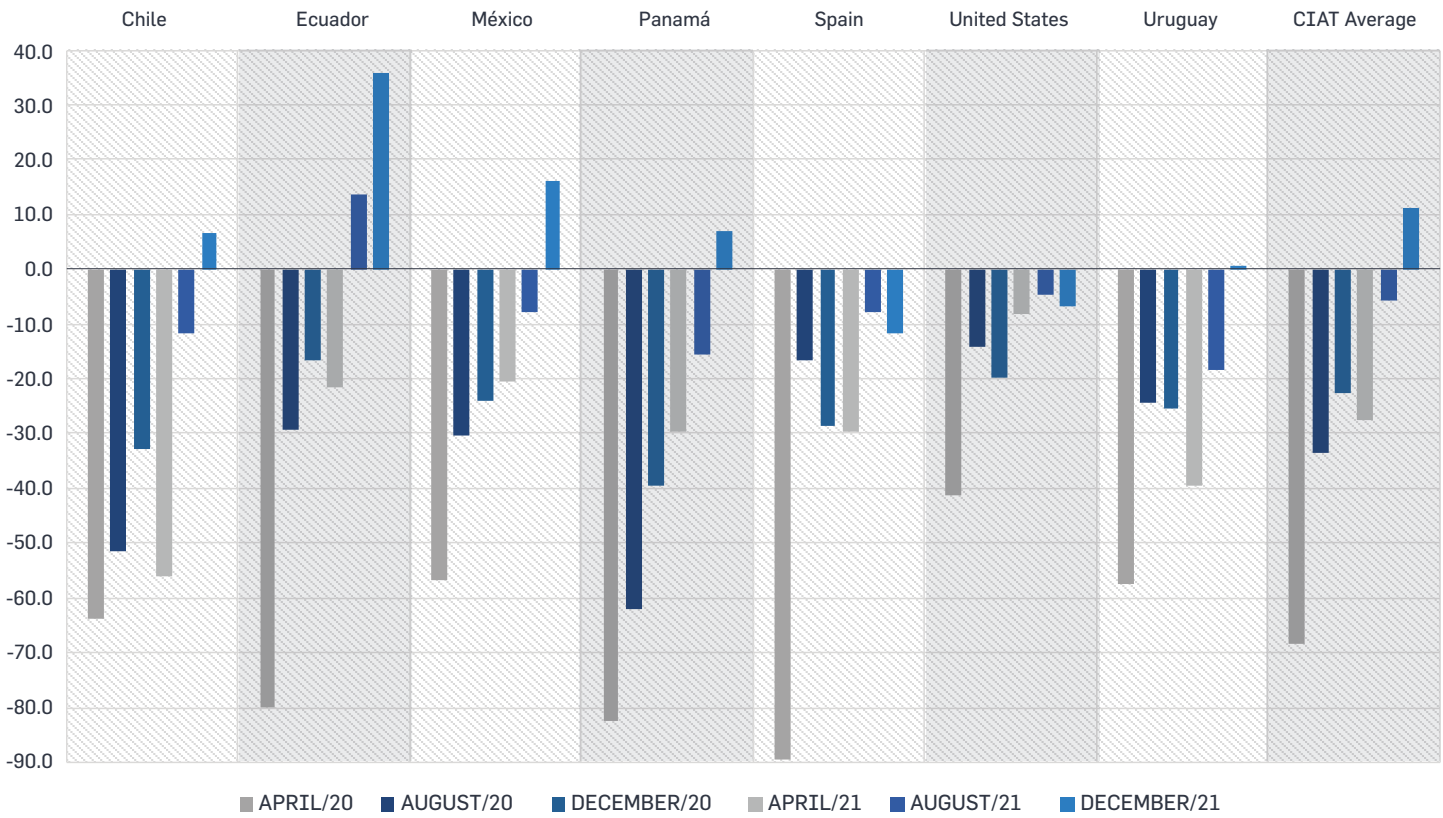
Using as a reference the average monthly changes of trips in Retail Stores and Recreation Places for the months of April, August and December, both in 2020 and 2021, three typical cases were identified where the initial drops were much higher in relative terms (Ecuador, Panama and Spain, with setbacks between 80% and 90%) which then showed different rates of recovery during 2021 (Figure 9).

In the case of Ecuador, with a behavior similar to that observed in El Salvador and Nicaragua, monthly changes in mobility moved into positive territory during the third quarter (+13.7% in August), increasing by 35.7% in December of that year compared to the pre-pandemic level.

In the second country (Panama), with trends similar to those identified in countries such as Argentina, Brazil, Colombia, Peru or the Dominican Republic -as well as for the average of CIAT member countries-, mobility only recovered towards the end of last year with moderate monthly increases compared to the situation in January 2020.

In the third example (Spain), which also serves to illustrate similar examples in the northern hemisphere such as the United States and Italy, by the end of 2021 the mobility indicator in Retail and Recreation had still not recovered, showing values in negative territory (even with some setbacks throughout the period analyzed).

Figure 9. Changes in people’s mobility for Retail and Recreation for selected countries and CIAT average (monthly averages; in percentages; February 2020 to December 2021)



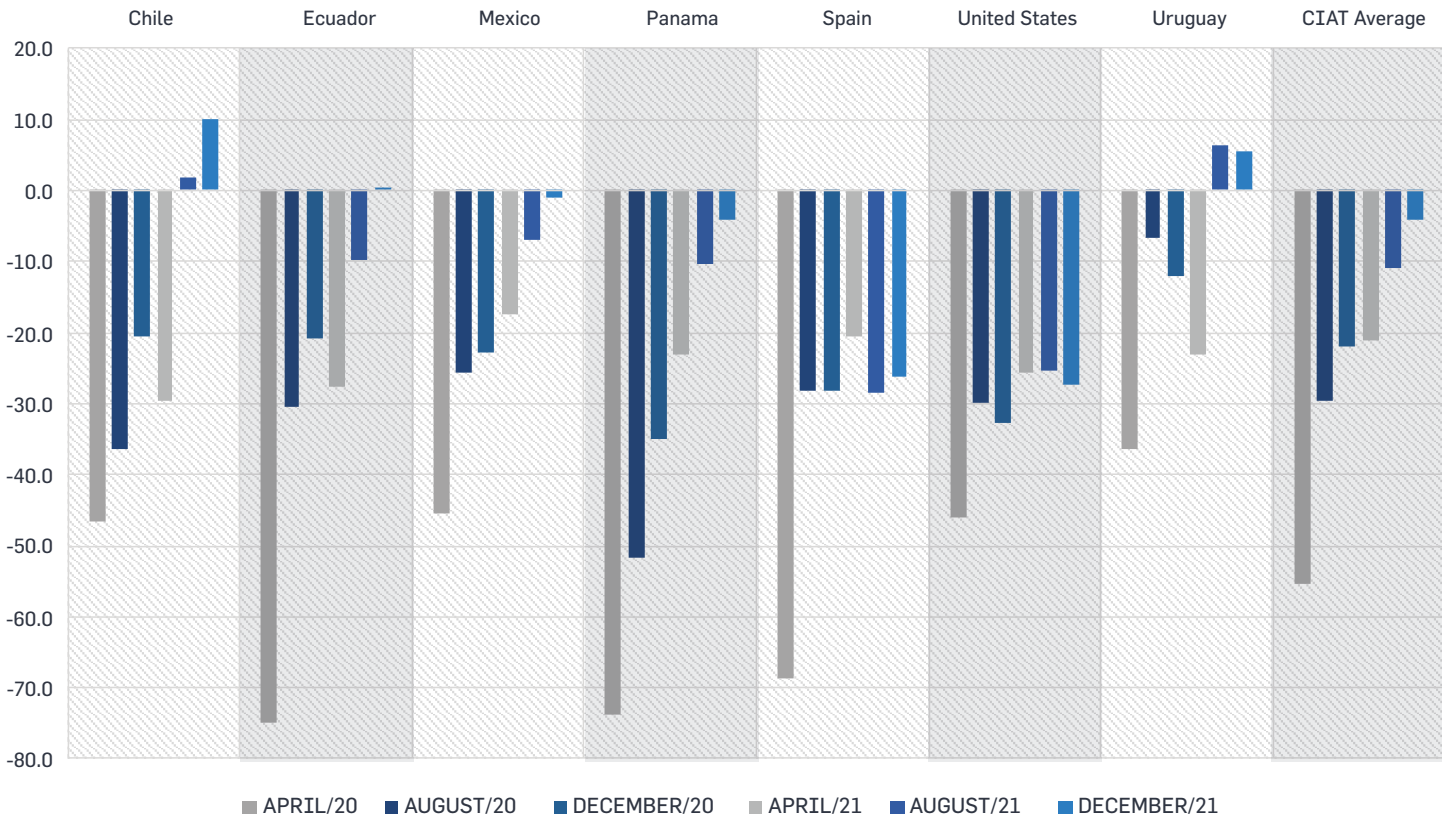
Source: Elaborated by the authors based on data from Google LLC "Google COVID-19 Community Mobility Reports". <https://www.google.com/covid19/mobility/> (Accessed: March 1, 2022) and the RRC Database (CIAT)

Although the data on people's mobility in its different dimensions maintain some general patterns, the detailed analysis can provide some useful conclusions. For example, the evolution of mobility in Workplaces (Figure 10) shows some coincidences with what was observed in the commercial sector (Retail and Recreation) such as the deep drop in the month of April 2020 and the subsequent recovery in the following months.

However, there are also very evident differences: while some countries have managed to recover and even surpass pre-pandemic levels of mobility (Chile and Uruguay are indicative of a similar result in Argentina, Brazil, or Colombia), others have not yet reached this goal despite significant upturns in this aspect (Mexico, Panama and the average of the CIAT countries).

It is also possible to distinguish a considerable group of countries that remain with mobility indicators far below and far from those recorded at the beginning of 2020 (The United States and Spain, although Italy, Jamaica, Dominican Republic and Trinidad and Tobago should also be included). Beyond certain seasonal patterns linked to this type of commuting (vacations, holidays) that may differ significantly from country to country, we cannot ignore the possibility that these persistent sharp declines in commuting represent more profound changes in work habits and behaviors, such as remote and virtual work, which could have economic and social consequences that have not yet been fully explored.

Figure 10. Changes in people's mobility for Workplaces for selected countries and CIAT average (monthly average; in percentages; February 2020 to December 2021)



Source: Elaborated by the authors based on data from Google LLC "Google COVID-19 Community Mobility Reports". <https://www.google.com/covid19/mobility/> (Accessed: March 1, 2022) and the RRC Database (CIAT).

3. OVERVIEW BY REGION OR GROUP OF COUNTRIES

As can be seen from the previous sections, the large amount of information collected, organized and systematized for a broad set of CIAT member countries makes it possible to identify certain general trends such as those presented in the previous sections, both in terms of tax revenues and personal mobility indicators (used as a proxy variable for effective levels of economic activity). However, as is usually the case and has been recurrently highlighted, within the averages calculated there is a high degree of heterogeneity and variety of cases.

A valid option to observe these particularities is to gather all the countries for which official information is available according to generally accepted geographic-economic criteria. This complementary approach to data contained in the RRC database aims to visualize and identify similarities and/or differences at the level of regions or groups of countries in the recent evolution of variables related to tax collection and population mobility, enhancing the potential variants of the information collected. Based on the available statistical information, the following country groups will be considered here:

- **Mercosur + Mexico:** Argentina, Brazil, Paraguay, Uruguay and Mexico¹⁹.
- **Andeans + Chile:** Bolivia²⁰, Chile, Ecuador, Colombia and Peru.

- **The Caribbean:** Jamaica and Trinidad & Tobago.
- **Central America + Dom. Rep.:** Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama and Dominican Republic.
- **Others:** EE.UU., Spain, Italy and Morocco.
- **Latin America and the Caribbean:** Argentina, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Dominican Republic, Trinidad & Tobago and Uruguay.

Taking into account the grouping criteria of the countries surveyed, the analysis first focuses on the evolution of total tax collection, in cumulative terms for each of the months of the year, based on simple averages of the year-on-year changes calculated at constant values for each of the groups formed.

In this way, it can be seen how the tax revenues of countries sharing certain characteristics have evolved during the year 2021, after having felt the strong and extraordinary impact of the COVID-19 pandemic and the extraordinary measures of confinement and social isolation that all of them, with different scopes, were forced to adopt in response to the uncertain global context. As in the section dedicated to the analysis of collection by country and in general average, an attempt has been made to

19 Because of Mexico's geographic location, it could be gathered with the Central American countries; however, its macroeconomic and tax characteristics make it more comparable to the Mercosur countries, mainly Argentina and Brazil.

20 In order to be consistent with the averages calculated in the first section of this Report, we have chosen to exclude data (quite far from the regional trends and only available until June 2021) in order to avoid artificial biases in the average values for this group/region.

weight the collection behavior in relation to the figures available both for the previous year (2020) and for a less volatile year such as 2019 (Table 11).

In the first variant, it can be seen that the Andean countries (including Chile) and Central American countries (including the Dominican Republic), which were, together with the Caribbean countries, the regions whose tax revenues were most severely affected by the pandemic, are the ones that show a weak start to the year 2021 with average year-on-year changes in their total accumulated revenues, compared to 2020, in negative territory in January and up to February, as the case may be. However, as the months go by, it is these same groups of countries that end up accumulating the

largest relative increases in their tax revenues at the end of December. In the case of the Caribbean countries, however, the recovery is perceived as much weaker and more limited.

On the other hand, Mercosur countries (including Mexico) and Others (all in the Northern Hemisphere), whose cumulative total collections had been, on average, more resilient to the impacts of the pandemic during 2020, maintained successive positive year-on-year changes throughout 2021, with a marked growth in the second quarter that waned towards the end of the year, with more moderate final balances.

Table 11. Evolution of total tax cumulative collection of tax administrations in 2021 by country groups (in percentage changes compared to the same month in 2020 and 2019; constant prices; January to December)

Percentage Changes 2021/2020

Regions or country groups	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	May 21/20	Jun 21/20	Jul 21/20	Aug 21/20	Sep 21/20	Oct 21/20	Nov 21/20	Dec 21/20
MERCOSUR + Mexico	1.0	0.9	4.3	12.3	16.6	15.6	14.7	13.2	11.4	10.2	9.0	8.2
ANDEANS + Chile	-5.7	-2.6	2.4	11.7	17.3	20.8	21.8	24.2	24.3	24.3	24.2	24.2
CENTRAL AMERICA + Dom. Rep.	-3.2	-2.3	9.0	18.3	24.6	28.7	28.0	27.9	26.4	25.4	24.3	23.6
THE CARIBBEAN	-2.3	3.6	6.7	6.7	5.9	9.7	9.2	8.2	4.7	8.5	9.1	13.2
OTHERS	4.3	4.5	2.8	15.1	20.8	23.0	15.5	14.0	13.7	13.7	11.0	12.4
LATIN AMERICA AND THE CARIBBEAN	-2.5	-0.8	5.9	13.9	18.7	21.2	20.8	20.8	20.2	19.0	18.4	18.3

Percentage Changes 2021/2019

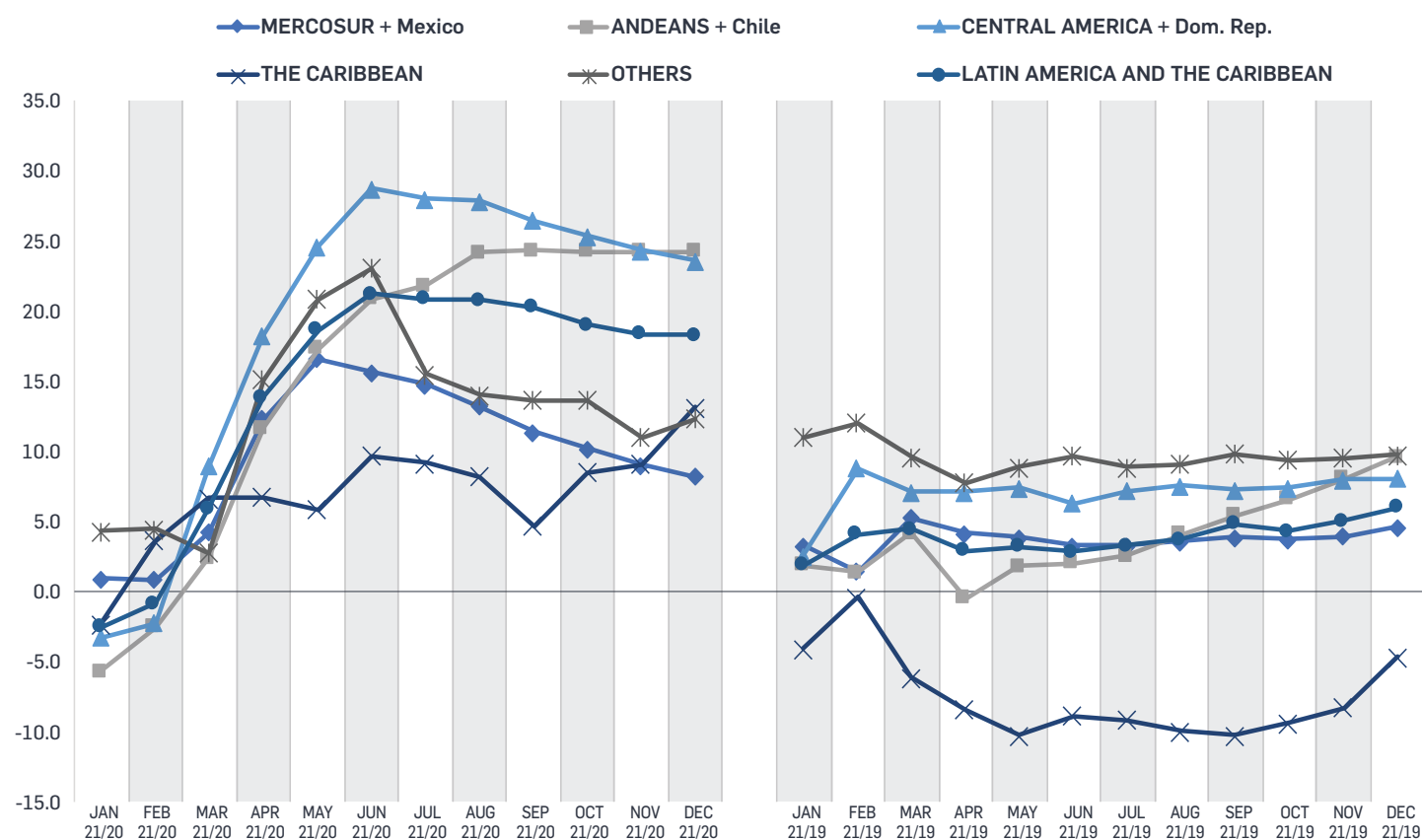
Regions or country groups	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19	May 21/19	Jun 21/19	Jul 21/19	Aug 21/19	Sep 21/19	Oct 21/19	Nov 21/19	Dec 21/19
MERCOSUR + Mexico	3.3	1.4	5.3	4.2	3.9	3.3	3.3	3.6	3.9	3.7	3.9	4.6
ANDEANS + Chile	1.9	1.4	4.2	-0.4	1.8	2.0	2.5	4.1	5.4	6.6	8.1	9.6
CENTRAL AMERICA + Dom. Rep.	2.5	8.8	7.1	7.1	7.4	6.3	7.2	7.6	7.3	7.4	8.0	8.0
THE CARIBBEAN	-4.1	-0.4	-6.1	-8.4	-10.3	-8.8	-9.1	-10.0	-10.3	-9.3	-8.3	-4.6
OTHERS	11.0	12.0	9.6	7.7	8.8	9.7	8.9	9.1	9.9	9.4	9.5	9.8
LATIN AMERICA AND THE CARIBBEAN	1.9	4.1	4.5	2.9	3.2	2.8	3.3	3.8	4.8	4.3	5.1	6.0

Source: Elaborated by the authors based on official information from the tax administrations.

On the other hand, the results look very different when compared with the figures for 2019 (Figure 11). In general, for all the groups of countries, the average percentage increases are narrower and closer, but in the Caribbean, the average implies a year-on-year fall that

is maintained with oscillations during the twelve months analyzed. For Latin America and the Caribbean (LAC), a fairly heterogeneous group of countries, the average growth in total cumulative tax collection was moderate, although it consolidated in the second half of last year.

Figure 11. Evolution of total tax cumulative collection of tax administrations by country groups in 2021 (percentage changes compared to the same month in 2020 and 2019; constant prices; January-December)



Source: Elaborated by the authors based on official information from the tax administrations.

Regarding the mobility of individuals, it is also feasible to identify similarities and differences in the temporal evolution of these indicators for the different groups of countries considered. For example, regarding movements to Retail Stores and Recreation Places, all country groups show the sharp drop experienced in April

2020, followed by a recovery of relatively variable speed and intensity (Figure 12).

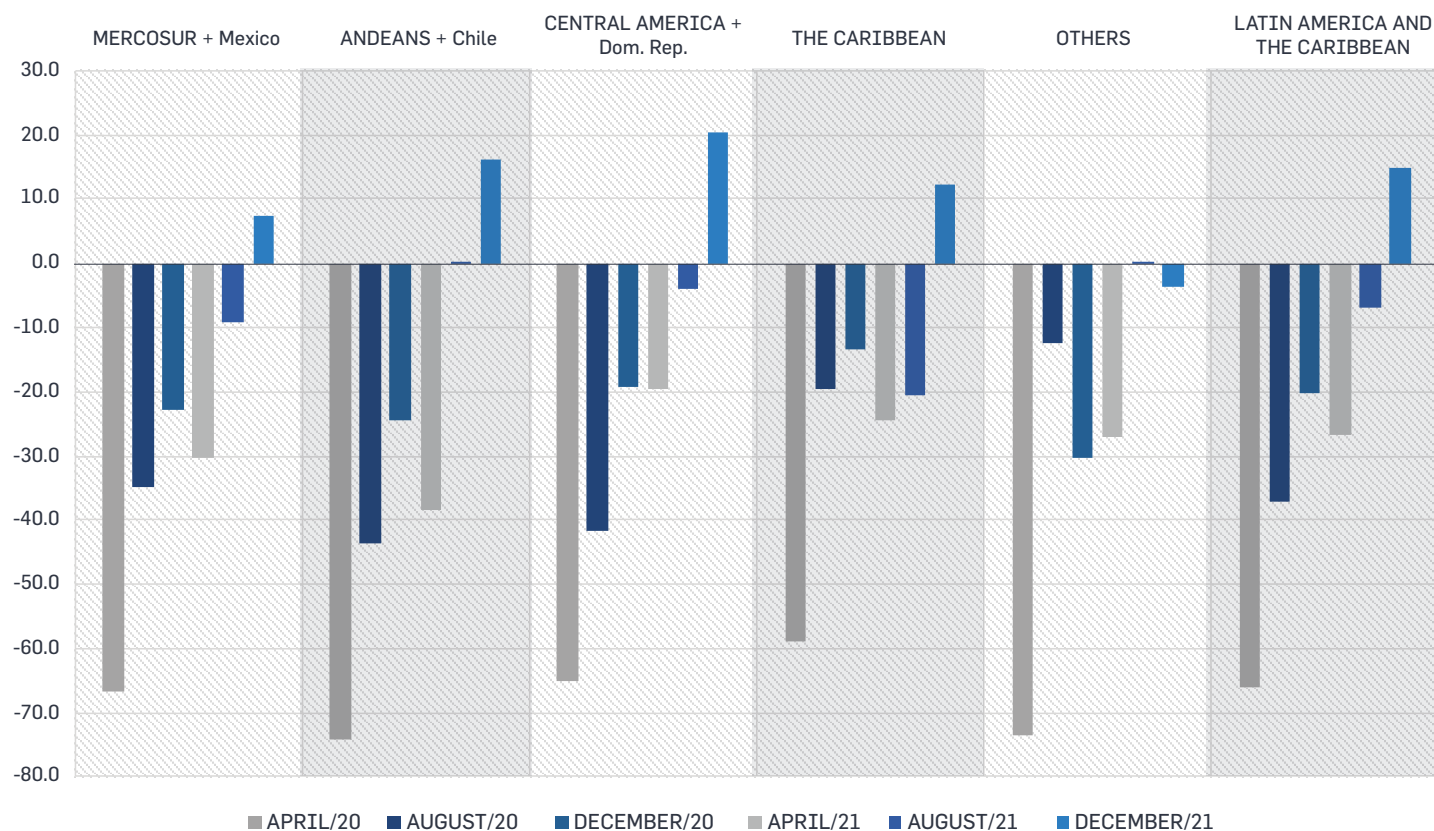
However, the continuation of this trend in 2021 shows some differences since, at the end of December, the groups most affected in their collections since the

beginning of the pandemic (Andeans, Central America, and the Caribbean) are precisely those that show the most significant increases with respect to the levels observed in January 2020.

Accordingly, the resulting average increase for the LAC countries is within these margins, following the trends

indicated, above that calculated for the Mercosur group. The only exception is the remaining group of “Other” countries which, on average and despite gradual progress, had not managed to recover pre-crisis mobility levels by the end of 2021.

Figure 12. Changes in people’s mobility for Retail and Recreation by country groups (monthly averages; percentage change rates, April/August/December 2020 and 2021)



Source: Elaborated by the authors based on data from Google LLC “Google COVID-19 Community Mobility Reports”: <https://www.google.com/covid19/mobility/> (Accessed: March 1, 2022) and the RRC Database (CIAT).

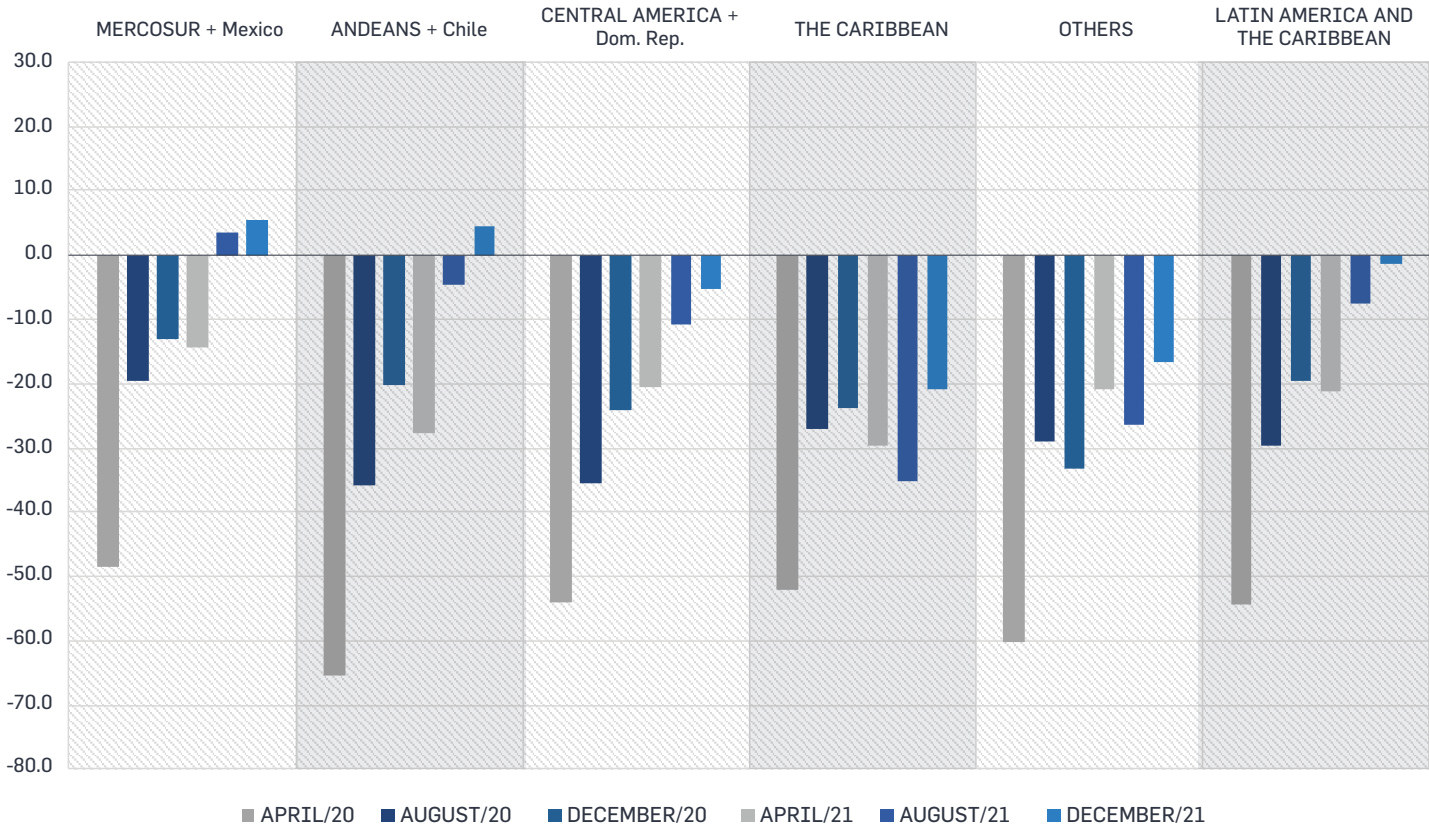
Something similar can be noted with respect to the relative year-on-year changes in mobility to Workplaces when weighted by the selected country groups (Figure 13). All of them experience the aforementioned sharp drop in the month of April 2020, followed by a generalized rebound in relative mobility levels during the rest of 2020 and also 2021.

However, in this dimension of people’s mobility, for reasons that go beyond the scope of this Report and include -among others- the permanent adoption of different modalities of remote work from home, the recovery has not only been slower but, in specific cases such as the Caribbean countries or the “Others” group, it is still far from complete and there is no certainty

that it will be consolidated in future years. In fact, the only groups of countries that show, on average, very

limited improvements in commuting to work are those of Mercosur (plus Mexico) and the Andeans (plus Chile).

Figure 13. Changes in people’s mobility for Workplaces by country groups (monthly averages; percentage change rates, April/August/December 2020 and 2021)



Source: Elaborated by the authors based on data from Google LLC “Google COVID-19 Community Mobility Reports”. <https://www.google.com/covid19/mobility/> (Accessed: March 1, 2022) and the RRC Database (CIAT).

The analysis performed by regions or groups of countries can be extended to the different categories of main taxes identified in the tax structures of the countries surveyed, also taking as a reference for year-on-year comparison both 2020 and 2019.

In the case of Income Tax, the average figures obtained for the percentage changes of the accumulated collection

of the tax are in line with the results discussed for the total collection of the countries. All groups of countries will achieve encouraging relative improvements, on average, by the end of 2021 if the data for the previous year are considered. These increases are relativized when compared to 2019 in all cases, including the group of Caribbean countries where the percentage change is transformed into a slight year-on-year drop (Table 12).

Table 12. Evolution of Income Tax cumulative collection in 2021 by country groups (in percentage changes compared to the same month in 2020 and 2019; constant prices; January to December)

Percentage Changes 2021/2020

Regions or country groups	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	May 21/20	Jun 21/20	Jul 21/20	Aug 21/20	Sep 21/20	Oct 21/20	Nov 21/20	Dec 21/20
MERCOSUR + Mexico	7.1	5.3	9.4	20.6	9.8	22.0	18.7	16.6	12.9	11.5	10.1	8.6
ANDEANS + Chile	-3.8	-1.0	3.3	14.8	18.0	20.3	19.0	20.2	20.3	21.1	21.6	21.9
CENTRAL AMERICA + Dom. Rep.	-7.0	8.3	21.6	25.4	27.3	31.1	28.5	27.0	24.1	22.9	20.6	22.3
THE CARIBBEAN	1.6	4.9	8.4	5.2	3.7	9.3	8.0	7.4	2.0	8.1	8.3	14.9
OTHERS	7.0	11.7	6.6	25.0	11.9	10.9	16.7	14.6	14.4	14.8	12.0	13.6
LATIN AMERICA AND THE CARIBBEAN	-1.1	5.0	12.7	19.5	18.2	23.8	21.4	20.4	18.6	17.7	16.5	17.6

Percentage Changes 2021/2019

Regions or country groups	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19	May 21/19	Jun 21/19	Jul 21/19	Aug 21/19	Sep 21/19	Oct 21/19	Nov 21/19	Dec 21/19
MERCOSUR + Mexico	4.7	4.3	9.9	5.2	5.7	3.8	3.2	3.7	3.9	4.3	4.8	5.8
ANDEANS + Chile	7.0	6.8	5.9	-4.1	0.5	-0.3	0.2	1.3	3.4	5.0	6.3	8.5
CENTRAL AMERICA + Dom. Rep.	3.0	16.3	16.6	11.7	12.2	6.9	8.6	9.2	7.6	8.0	8.6	8.3
THE CARIBBEAN	0.3	4.9	-6.8	-7.5	-7.9	-7.5	-8.2	-9.1	-0.5	-9.1	-8.6	-5.0
OTHERS	14.6	20.4	15.8	9.7	12.9	14.9	12.8	12.3	13.1	11.6	11.5	11.0
LATIN AMERICA AND THE CARIBBEAN	4.1	9.2	9.8	4.2	5.5	2.8	3.4	3.9	5.0	4.4	5.1	6.2

Source: Elaborated by the authors based on official information from the tax administrations.

As for VAT, the average evolution of its accumulated collection according to the selected groups of countries shows some particular characteristics. It should be recalled that, when the effects of the pandemic and the restrictions on mobility initially began to manifest themselves, VAT was the tax whose collection was the most resilient, within a context of sharp generalized falls, with a slow and gradual recovery in the second

part of the year. During the year 2021, a continuity in the aforementioned recovery is observed, not only compared to 2020 but also to 2019 (where relative year-on-year increases are more moderate). The group of Caribbean countries has the particularity of showing an average relative growth in 2020 that is lower than in 2019, which is linked to a reduced tax comparison base (Table 13).

Table 13. Evolution of VAT cumulative collection in 2021 by country groups (in percentage changes compared to the same month in 2020 and 2019; constant prices; January to December)

Percentage Changes 2021/2020

Regions or country groups	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	May 21/20	Jun 21/20	Jul 21/20	Aug 21/20	Sep 21/20	Oct 21/20	Nov 21/20	Dec 21/20
MERCOSUR + Mexico	0.5	1.5	4.1	10.1	12.1	13.4	14.1	13.9	13.4	12.6	11.3	10.6
ANDEANS + Chile	-4.5	0.0	5.9	12.5	20.9	25.9	28.3	30.1	30.6	30.2	29.5	28.9
CENTRAL AMERICA + Dom. Rep.	-7.3	-3.5	3.3	12.9	21.6	26.8	28.2	28.9	28.6	27.8	27.3	24.7
THE CARIBBEAN	0.3	15.3	23.2	24.5	18.2	16.4	14.3	11.2	3.8	9.7	10.1	10.5
OTHERS	14.4	5.0	7.1	16.8	18.8	20.8	22.4	20.3	18.9	17.9	17.3	15.9
LATIN AMERICA AND THE CARIBBEAN	-3.7	0.7	6.3	13.3	18.4	21.7	22.8	23.0	23.1	22.1	21.4	20.2

Percentage Changes 2021/2019

Regions or country groups	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19	May 21/19	Jun 21/19	Jul 21/19	Aug 21/19	Sep 21/19	Oct 21/19	Nov 21/19	Dec 21/19
MERCOSUR + Mexico	8.3	5.3	6.8	7.9	5.6	5.6	6.1	6.7	7.1	7.0	7.1	7.6
ANDEANS + Chile	3.5	3.5	6.3	5.9	5.0	6.0	6.7	7.7	9.1	10.3	12.0	13.3
CENTRAL AMERICA + Dom. Rep.	-1.7	2.0	4.9	6.9	7.3	8.9	9.2	9.6	9.8	9.8	10.5	10.4
THE CARIBBEAN	2.1	9.2	19.9	16.3	10.8	14.4	12.4	8.6	-14.0	7.1	7.8	10.5
OTHERS	22.8	11.8	12.2	13.8	9.6	9.7	9.8	9.6	9.7	10.1	10.2	10.5
LATIN AMERICA AND THE CARIBBEAN	2.7	4.0	7.4	8.0	6.7	8.0	8.2	8.3	7.4	8.8	9.6	10.3

Source: Elaborated by the authors based on official information from the tax administrations.

As discussed in the case of IT, the average year-on-year changes in cumulative Excise taxes collection by country group reflect the unequal intensity and depth of the negative impacts of the economic crisis associated with the COVID-19 pandemic and, of course, the different pace and consistency of the subsequent recovery underway.

In 2021, with respect to 2020, all groups show relative declines during the first quarter, which are then diluted to end the year in positive ground with the exception of the

“Mercosur (plus Mexico)” group, where a slight average decline is recorded (Table 14). With regard to the figures for 2019, the panorama is much more overwhelming and worrying since, except for Central America, which still shows an insignificant increase as of December in the accumulated figures, all the groups register negative figures throughout the year 2021.

Table 14. Evolution of Excise taxes cumulative collection in 2021 by country groups (in percentage changes compared to the same month in 2020 and 2019; constant prices; January to December)

Percentage Changes 2021/2020

Regions or country groups	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	May 21/20	Jun 21/20	Jul 21/20	Aug 21/20	Sep 21/20	Oct 21/20	Nov 21/20	Dec 21/20
MERCOSUR + Mexico	-5.2	-6.0	-2.8	3.9	8.5	9.0	5.3	3.7	1.8	0.3	-1.0	-2.3
ANDEANS + Chile	-21.5	-18.1	-17.0	-8.0	2.9	6.6	10.0	12.1	14.2	13.2	12.3	11.1
CENTRAL AMERICA + Dom. Rep.	-9.1	-9.4	-2.2	8.4	17.5	23.1	24.4	24.5	24.1	22.4	21.3	19.3
THE CARIBBEAN	1.7	-0.7	-0.6	10.8	7.6	5.9	6.9	7.0	11.5	7.5	8.5	9.4
OTHERS	-23.6	-21.9	-14.9	-0.3	11.0	17.7	16.5	14.6	7.5	6.7	-0.7	4.9
LATIN AMERICA AND THE CARIBBEAN	-9.5	-9.4	-5.5	3.8	10.7	13.6	14.0	14.0	14.5	12.6	11.7	10.4

Percentage Changes 2021/2019

Regions or country groups	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19	May 21/19	Jun 21/19	Jul 21/19	Aug 21/19	Sep 21/19	Oct 21/19	Nov 21/19	Dec 21/19
MERCOSUR + Mexico	-7.9	-8.9	-7.4	-7.4	-6.3	-6.5	-7.3	-6.9	-6.4	-7.6	-7.4	-7.5
ANDEANS + Chile	-19.0	-16.8	-14.0	-12.5	-12.6	-12.9	-12.8	-12.0	-11.8	-11.5	-10.8	-9.2
CENTRAL AMERICA + Dom. Rep.	-7.5	-4.5	0.9	0.5	0.1	0.8	1.8	0.9	1.2	0.4	1.0	1.6
THE CARIBBEAN	-1.7	-2.0	0.5	-1.5	-9.8	-13.6	-12.0	-12.1	-10.4	-12.7	-11.9	-9.6
OTHERS	-26.8	-18.9	-14.2	-12.5	-10.8	-8.1	-8.9	-7.3	-6.6	-6.3	-5.2	-4.0
LATIN AMERICA AND THE CARIBBEAN	-9.5	-8.1	-4.8	-4.8	-5.6	-5.9	-5.5	-5.6	-4.8	-5.9	-5.4	-4.6

Source: Elaborated by the authors based on official information from the tax administrations.

Finally, Table 15 shows the evolution of the year-on-year changes in the accumulated collection of Other Revenue, on average for each of the groups of countries analyzed. The results allow us to confirm that, beyond the drops observed in the first two months of the year in the groups of Andean, Central American and Caribbean countries (in the latter case they lasted until June), all groups or regions ended 2021 with positive year-on-year increases of varying magnitude when compared to 2020 figures.

On the other hand, when taking as a reference those corresponding to the year 2019, it can be seen that the relative collection losses of the first two months are verified for all groups of countries (including LAC) with the exception of the so-called "Others". Mercosur (plus Mexico) keeps negative figures in the average year-on-year change of the accumulated collection of these taxes during the first half of 2021, something that is confirmed in the Caribbean group for the entire annual period under analysis.

Table 15. Evolution of Other Revenue cumulative collection in 2021 by country groups (in percentage changes compared to the *same month in 2020 and 2019*; constant prices; January to December)

Percentage Changes 2021/2020

Regions or country groups	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	May 21/20	Jun 21/20	Jul 21/20	Aug 21/20	Sep 21/20	Oct 21/20	Nov 21/20	Dec 21/20
MERCOSUR + Mexico	2.2	2.0	2.6	10.5	11.7	14.0	18.9	18.0	16.4	15.7	13.8	13.7
ANDEANS + Chile	-7.1	-4.3	4.6	14.9	20.2	23.4	22.6	28.7	26.1	24.3	25.6	24.8
CENTRAL AMERICA + Dom. Rep.	-10.1	-5.8	7.7	24.0	33.8	35.9	36.6	37.7	37.0	35.6	35.9	34.8
THE CARIBBEAN	-26.8	-20.7	-16.4	-7.7	-2.5	-0.1	2.4	2.3	5.6	1.1	2.1	2.6
OTHERS	6.0	0.9	-0.5	2.6	7.7	12.0	12.7	13.2	13.3	14.1	11.3	13.2
LATIN AMERICA AND THE CARIBBEAN	-7.9	-5.0	2.8	14.7	20.7	23.1	24.9	26.1	26.6	23.7	23.6	23.0

Percentage Changes 2021/2019

Regions or country groups	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19	May 21/19	Jun 21/19	Jul 21/19	Aug 21/19	Sep 21/19	Oct 21/19	Nov 21/19	Dec 21/19
MERCOSUR + Mexico	-10.7	-7.5	-2.7	-2.0	-2.4	-1.5	1.6	2.0	2.3	2.4	2.5	3.3
ANDEANS + Chile	-6.3	-4.8	11.9	8.6	8.1	7.6	6.7	11.0	8.3	6.9	8.5	8.3
CENTRAL AMERICA + Dom. Rep.	-9.0	-3.9	2.3	5.7	6.1	7.0	7.4	8.0	8.9	9.6	9.9	10.5
THE CARIBBEAN	-30.2	-24.6	-18.4	-16.6	-18.2	-17.2	-18.1	-18.2	-16.4	-18.0	-16.3	-14.8
OTHERS	10.2	14.7	7.3	6.8	4.9	5.5	4.9	7.4	9.5	10.3	10.0	11.4
LATIN AMERICA AND THE CARIBBEAN	-11.5	-7.5	0.1	1.3	1.1	1.7	2.6	3.7	5.2	3.8	4.4	5.0

Source: Elaborated by the authors based on official information from the tax administrations.

/1 For the calculation of the average in "Other Revenue" (in the tables and figures referring to this item), the data for Chile is not considered because it presents extreme changes that would artificially bias the average values (in addition to Bolivia, due to lack of information), although it has been proven that this item represents only 1% of the total collection of this country.

4. FINAL COMMENTS

Having completed the sixth edition of CIAT's Revenue Report COVID-19, this final section will attempt to provide a brief balance of the valuable detailed information it has gathered on tax collection from a broad and diverse set of CIAT member countries.

At this point in time, with data updated until December 2021, the monthly monitoring of tax administrations' revenues has become a useful tool for monitoring the effects of the COVID-19 crisis on public finances throughout the Latin American and Caribbean region and developed countries of reference (such as the United States, Spain and Italy), differentiating between countries, sub-regions and tax categories.

The effects of social distancing measures on mobility have helped explain the changes in tax collection, which facilitated short-term revenue forecasts during the pandemic, especially in the first half of 2020. As long as the crisis continues, monthly tax statistics will continue to be much needed. These data could then be used to develop further research on the effectiveness of measures taken during this extraordinary crisis and to learn how to cope with future events.

The latest available data show the slow and prolonged recovery that has been taking place in most of the countries analyzed since mid-2020, which, although with very different oscillations among countries, confirms its continuity throughout the year 2021. On average and at constant values, the cumulative tax revenues of some twenty-three countries increased by 17.2% in the last year with respect to the previous annual period.

As usual, and especially in the midst of one of the greatest economic crises of the last few centuries, caution is required when interpreting these results. First, because the rates of recovery are very different across regions and countries (for example, the Central American region leads the recovery, with the exception of Panama). Second, because the time series has been greatly disrupted by the extraordinary drop in tax revenues and GDP during 2020.

In this context, the comparison of the accumulated collection during the monthly periods of 2021 with respect to those corresponding to calendar year 2019 represents a better guide to assess the effective strength of the aforementioned recovery. Indeed, this comparative shows a less pronounced but nevertheless encouraging increase in tax resources at the general level with a real year-on-year rise of 6.7% at the end of December.

At the country level, as emphasized, there is a wide heterogeneity of realities. In addition to the aforementioned factors, which make it necessary to be cautious when drawing general conclusions, there is the influence of the inflationary phenomenon which, after decades and as a result of a series of triggers beyond the scope of the analysis contained in this Report, has once again become a concern for the macroeconomic policies of different countries in different latitudes. For this reason, since their origins, the RRC have included the consideration of tax collection figures deflated from the retail consumer price indexes provided by the respective official sources.

To give an approximate idea of the diversity of possible analyses provided by the enormous amount of statistical information collected, Table 16 summarizes the results in terms of year-on-year percentage changes in total cumulative tax collection at the end of December, in current and constant values, for three relevant comparisons.

The “Dec 20/19” column refers to the year in which the pandemic and its economic consequences fully impacted the previous year. The so-called “Dec 21/20”

takes into consideration the most recent full year and is weighted with the year 2020 (which could be considered “exceptional” precisely for the reasons mentioned above). Finally, “Dec 21/19” aims to evaluate the expected recovery of tax revenues compared to a less volatile year than 2020 in order to have more realistic figures on average. In addition, the results allow us to verify the large identifiable differences depending on whether or not the effect of price inflation on revenue figures is taken into account.

Table 16. Year-on-year changes of cumulative total tax collection in 2020 and 2021 (in percentages with respect to December of the reference year; current and constant prices)

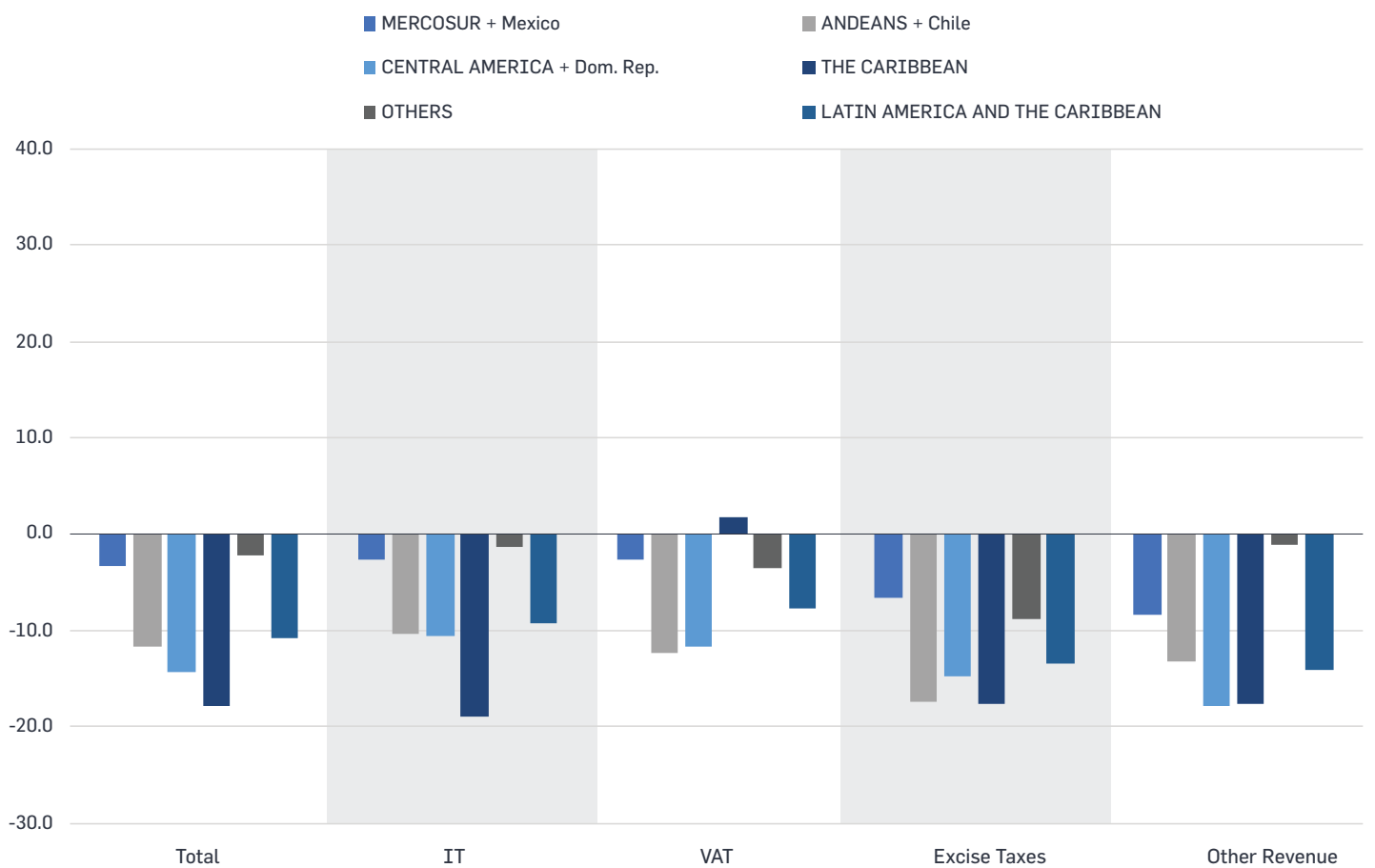
Countries	Current values			Constant values		
	Dec 20/19	Dec 21/20	Dec 21/19	Dec 20/19	Dec 21/20	Dec 21/19
Argentina	32.2	64.5	117.5	-7.4	10.9	2.8
Bolivia	-23.2	n.a.	n.a.	-24.0	n.a.	n.a.
Brazil	-2.4	25.4	22.5	-5.5	15.9	9.5
Chile	-6.6	40.2	31.0	-9.5	33.9	21.3
Colombia	-7.1	18.8	10.4	-9.4	15.0	4.2
Costa Rica	-11.2	28.2	13.8	-11.9	26.0	11.0
Dominican Republic	-9.5	40.7	27.4	-13.0	30.3	13.3
Ecuador	-13.2	12.9	-2.0	-12.9	12.9	-1.7
El Salvador	-5.9	26.0	18.7	-5.5	21.9	15.2
Guatemala	-3.7	29.4	24.6	-6.7	24.1	15.8
Honduras	-19.8	37.1	10.0	-22.5	31.2	1.7
Italy	-5.5	10.3	4.2	-5.3	8.0	2.2
Jamaica	-10.2	12.5	1.1	-14.5	6.2	-9.2
Mexico	4.3	6.8	11.4	0.8	1.1	2.0
Morocco	-5.4	8.5	2.7	8.2	10.0	19.0
Nicaragua	1.5	26.5	28.4	-2.1	20.6	18.1
Panama	-27.9	12.7	-18.7	-26.9	10.9	-18.9
Paraguay	0.3	11.1	11.5	-1.3	6.0	4.6
Peru	-13.4	41.0	22.1	-15.1	35.0	14.7
Spain	-8.8	15.1	4.9	-8.5	11.4	2.0
Trinidad & Tobago	-16.3	22.7	2.7	-16.8	20.2	-0.0
United States	-2.3	25.7	22.8	-3.5	20.1	15.8
Uruguay	6.8	15.5	23.3	-2.7	7.0	4.2
CIAT AVERAGE	-6.4	24.2	17.7	-9.4	17.2	6.7

SOURCE: Elaborated by the authors based on official information from the tax administrations.

On the other hand, the available data have also allowed the construction of figures and the calculation of averages by regions or groups of countries, which is always useful as a reference parameter for neighboring countries or countries similar in their macroeconomic characteristics. To summarize the main results, and in line with the

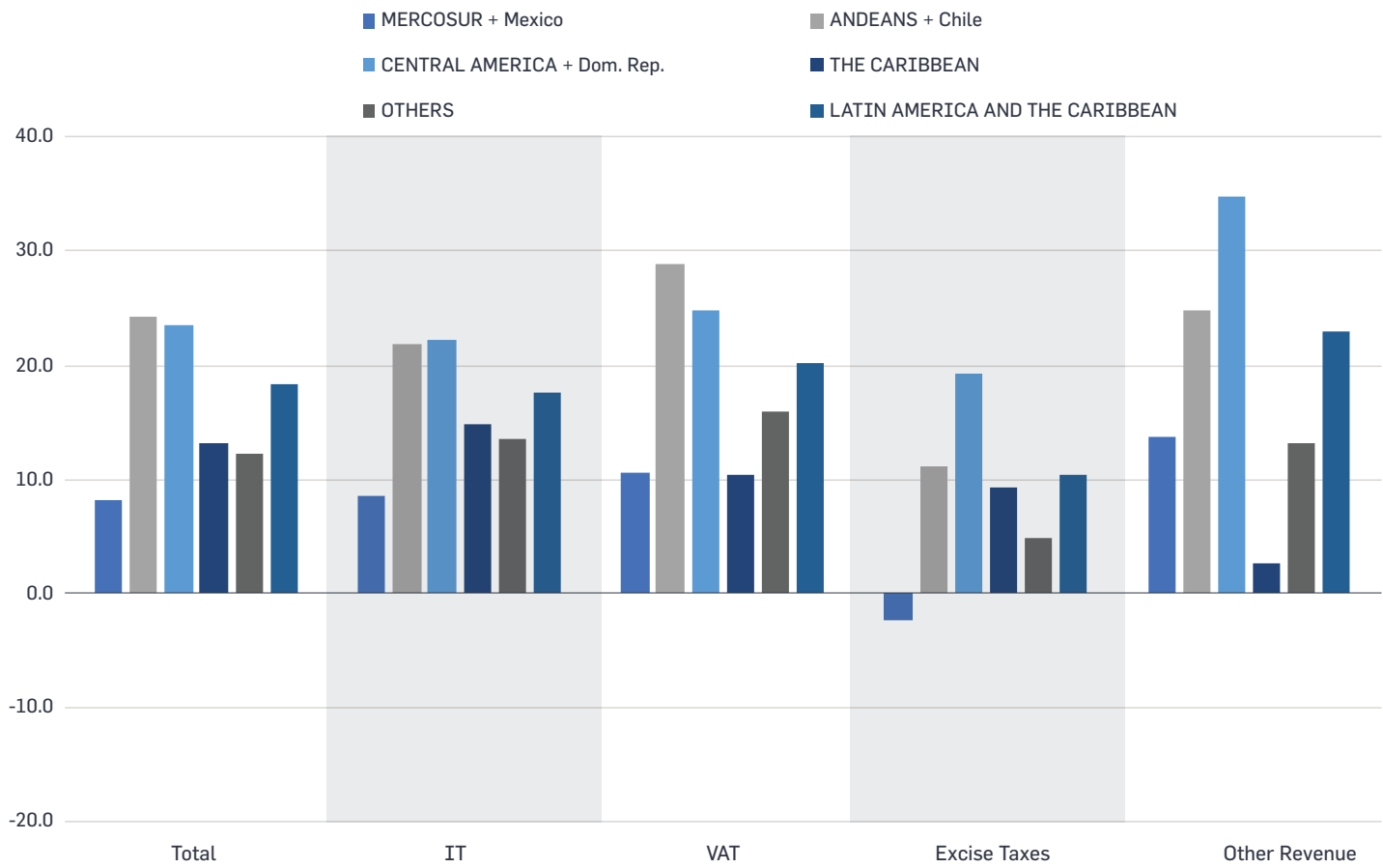
figures corresponding to individual countries, below is a series of illustrations (Figures 14 to 16) that also show i) the negative impact of the pandemic during 2020; ii) the expected recovery in 2021 with respect to the meager and particular figures of the previous year; and iii) the real strength of this recovery when compared to the data for 2019.

Figure 14. Average changes of cumulative total collections in 2020 by country group (in percentages with respect to December 2019; constant prices)



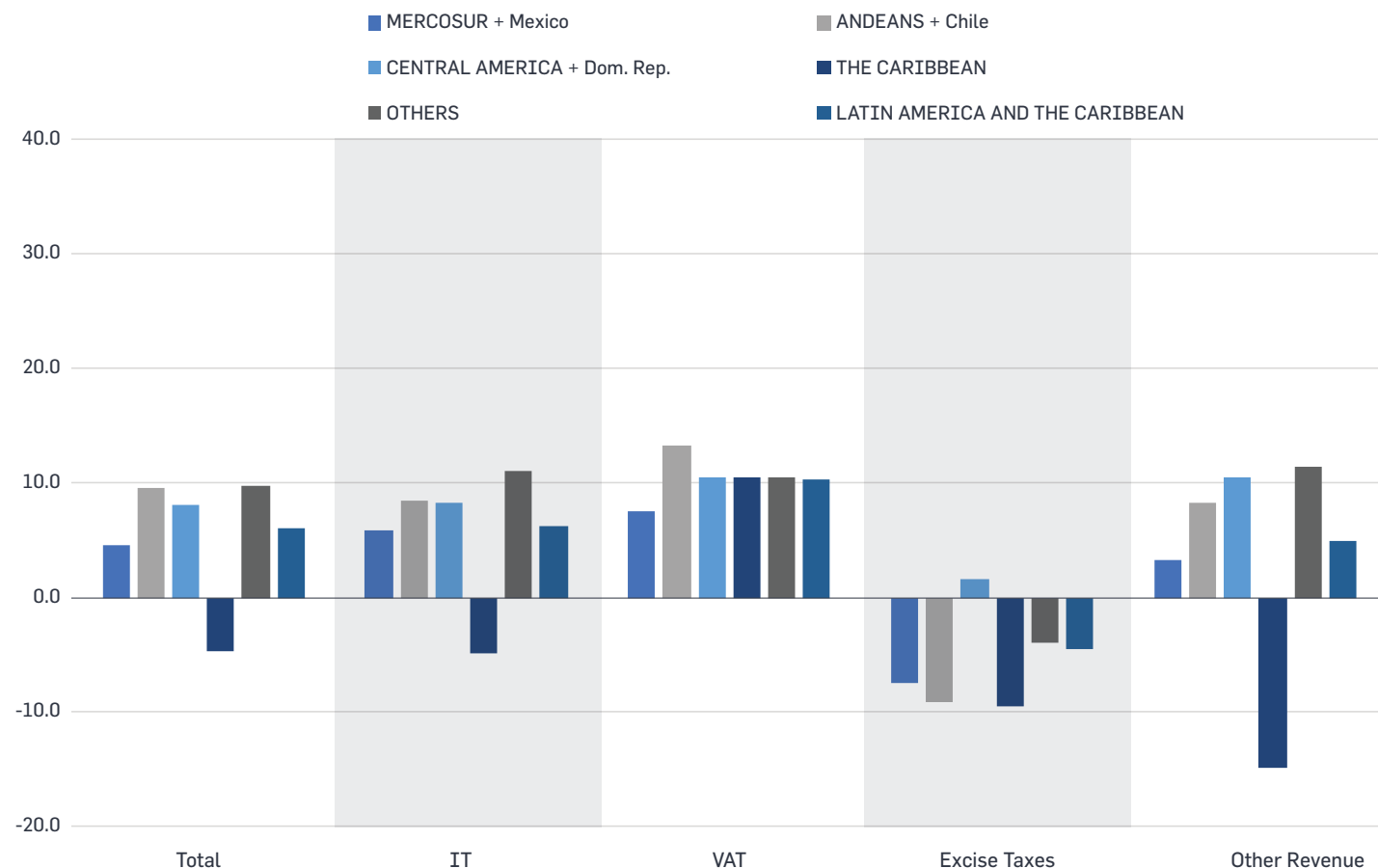
Source: Elaborated by the authors based on official information from the tax administrations.

Figure 15. Average changes of cumulative total collections in 2021 by country group (in percentages with respect to December 2020; constant prices)



Source: Elaborated by the authors based on official information from the tax administrations.

Figure 16. Average changes of cumulative total collections in 2021 by country group (in percentages with respect to December 2019; constant prices)



Source: Elaborated by the authors based on official information from the tax administrations.

In short, in the future, the monitoring of the evolution of total revenue -and that broken down according to its main components- will be key not only to assess the recovery of pre-pandemic levels, but also as a diagnostic tool and evaluation of the effective impact of the different

measures that CIAT countries will undoubtedly have to implement to strengthen available tax revenues, since they constitute the fundamental basis for making feasible public policies which, aggravated by the prolonged crisis, are increasingly demanded by the citizens.

Annex: RRC-CIAT database (online)

As a fundamental complement to this Report, a Monthly Collection Database has been built based on official information from the different tax administrations of a wide range of CIAT member countries. The tax revenue series obtained were opportunely processed and deflated using retail price indexes available at the national Statistical Institutes of each country. Additional detailed information on the monthly and cumulative evolution -in constant and current values- of total and by-tax collection from all tax administrations

surveyed is available on the CIAT web page ([Collection | Inter-American Center of Tax Administrations \(ciat.org\)](https://ciat.org) "Monthly Collection Database (Annex)"). In addition, the "RRC-CIAT Database" includes the detail of the monthly composition of the total collection by tax figures in 2019, 2020 and 2021 and the patterns of temporal distribution of the collection for each of the countries in 2019.



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