



# REVENUE REPORT COVID-19 (RRC) 1<sup>st</sup> Quarter of 2021



Santiago Díaz de Sarralde Miguez, Julio López and Gaspar Maldonado



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#### CONTENT

Ack	nowledgment	4
Exe	ecutive Summary	5
Met	thodological introduction	9
1.	Evolution of tax collection during the 1st quarter of 2021	11
	1.1 Evolution of global tax collection (Total)	11
	1.2 Evolution of Income Tax collection (IT)	16
	1.3 Evolution of Value Added Tax collection (VAT)	19
	1.4 Evolution of Excise Taxes collection	22
	1.5 Evolution of Other revenue collection	25
2.	Evolution of activity (mobility of people)	30
3.	Overview by regions or country groups	35
Ann	nex: RRC-CIAT Database (on line)	44

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#### **EXECUTIVE SUMMARY**

- After year 2020 in which revenue collection in constant values in the countries analyzed in the Report fell by an average of -9.3% (Excise Tax, -12.1%; Income Tax, IT -8.2%; VAT, -7.8%), although with 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), the monthly variations with respect to 2020 show spectacular growths in relation to the months of harsher confinement. above all, logically, in the taxes most hit by the social isolation measures. More importantly, with respect to 2019, the baseline scenario for assessing the recovery, the improvement in revenue collection is also observed, even though more modestly and not in all countries and tax categories.
- With respect to 2020, the total accumulated collection increases by +13.6% up to April. By month, after stabilizing in January and February (periods compared to 2020 collection figures not yet affected by the pandemic), spectacular growth was recorded in March (+19.6%) and, above all, April (+46.6%), one of the most dramatic months of last year.
- The comparison with 2019 allows us to qualify the extent of the recovery. On a monthly basis, the

increases in January and February are logically higher than those corresponding to 2020, while in March and April (already affected by the pandemic), although growth is maintained, it is reduced to +10.9% and +2.1%, respectively. Cumulatively up to April there was an increase in collections of +4.3%, positive but decreasing since February.

When analyzing this same information by country and in cumulative terms, we see that up to April most of them are in positive territory with respect to the 2019 baseline scenario, with Costa Rica reaching a maximum of +14.7%. The relative position of these countries depends largely on whether the comparison is made with respect to 2020 or 2019 and how they performed during the first months of the pandemic. For example, Panama (the country hardest hit in terms of collection by the pandemic last year) records collection increases relative to 2020 (+2.1%), while maintaining negative figures relative to 2019 (-21.6%). On the contrary, Mexico (the best performing country in LAC during 2020) shows up to April a drop in collection with respect to last year (-2.8%) and almost the same figure in positive (+2.7%) with respect to 2019.

GRAPH 0. Average evolution of cumulative tax collection by type of tax in 2021 (year-on-year changes – compared to 2020 and 2019 -; constant prices; in percentages)



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

- Income tax (IT) collection is the one that increases the most of all the categories analyzed in cumulative terms up to April, +20.8% with respect to 2020 and +7.5% with respect to 2019. Despite sharing positive values, the profile of the monthly evolution is very different, with respect to 2020 the collection increases are increasing monthly when starting to compare with months very affected by the pandemic and the measures of postponement of tax returns and tax income (the monthly increase in April reaches +44.1%), while the opposite happens when comparing with 2019 (the increase in April is only +1.8%).
- In cumulative terms, IT collection by country through April shows positive variations except in the cases of Ecuador, Mexico, and Panama (in the latter the variation is positive with respect to 2020, +15%, and still negative with respect to 2019, -3.3%). It is noteworthy that with respect to 2019 most of the countries with data up to April experience doubledigit growth, led by Spain with +24.8%.
- Value Added Tax (VAT), continues in 2021 the positive trend shown in the last months of last year. The variation in VAT revenue is the most aligned with that of the overall collection, increasing in cumulative

terms up to April by +10.2% with respect to 2020 and +5.6% with respect to 2019. By months with respect to 2020, after the stabilization of January and February (which are compared to last year's collection figures not yet affected by the pandemic) it records large growths in March (+21.8%) and, above all, April (+51%). In relation to 2019, revenue growth was recorded in all months, with a maximum of 16.7% in March and a remarkable +9.4% in April.

- By countries, it is noteworthy that all of them recorded monthly increases in VAT revenues in April with respect to 2020 and most of them also with respect to 2019 (with the exceptions of Ecuador, Jamaica, and Panama). In cumulative values through April the recovery is also generalized with respect to 2019, with the same three exceptions and with Morocco (+29.1% with respect to 2019) and Costa Rica (+25.4%) leading the recovery.
- In the first months of the year 2021, the collection of Excise Taxes continues to be the hardest hit by the crisis. With respect to 2020 up to April, its accumulated average collection is the one that increases the least (+5.5%) despite registering in that month the highest monthly increase (+60.3%). With respect to 2019, the accumulated collection up to April is still in negative territory (-2.9%) and most of the months the variations are still negative.
- By countries, all of them register positive monthly variations in April 2021 compared to the same month of 2020, although for almost half of them the comparison becomes negative compared to April 2019. Cumulatively from January to April 2021, only half of the countries are in positive values compared to 2019.
- The aggregate chapter of **Other Revenues** is of less analytical importance due to its high heterogeneity among the countries considered with available

information, although in some cases its weight is much more relevant than the average given the expanded collection powers of their respective Tax Administrations (for example, in Argentina, Brazil and the United States). In 2020 their cumulative drop up to December was higher than the average, showing little improvement in relative terms. This pattern of behavior seems to continue in 2021, with an accumulated collection with respect to 2019 up to April still in negative territory (-1%), despite the growth recorded in its comparison with 2020 (+12.5%, with a record monthly increase of 61.7%).

- By country, the picture is very similar to that described for Excise Taxes, with great heterogeneity, although it is worth noting that Argentina, Brazil and the United States (the three countries for which these revenues are most relevant) recorded cumulative positive variations even with respect to 2019, prolonging the improvement already observed in them at the end of 2020 and which allowed them to cushion, in part, the significant collection losses recorded in IT and Excise Taxes throughout the year.
- To contrast the effects of the activity control measures implemented in the fight against the pandemic, this Report uses **mobility data** provided by Google, which provide the possibility of inferring or anticipating, at least to some extent, the prospects for the evolution of tax revenues.
- After the deep fall in these indicators during the months of March and, especially, April 2020, a growing trend in mobility and a gradual rebound in economic activity have been observed, although the recovery has not been complete. So far in 2021, the improvement in the indicators has been very small. Only movements to supermarkets and pharmacies, linked to first necessity goods, have slightly exceeded those made before the crisis.

- Previous editions of the RRC have already analyzed the correlation between mobility and tax collection, both in average values and by means of a panel data analysis. A simple linear regression model between the two variables mentioned above achieved a high level of fit. However, this relationship was not stable throughout the year, being much stronger until June, while from the middle to the end of the year the relationship between variations in mobility and total revenue became somewhat more diffuse. Incorporating the data for the first four months of 2021 confirms the loss of explanatory power, especially when isolating the behavior between July 2020 and the present.
- Finally, in order to take advantage of the possibilities offered by the large amount of statistical information gathered, a final section was prepared to provide an **overview by groups of selected countries**, according to generally accepted geographic-economic criteria.
- In cumulative values, the Central America+DR region leads the recovery with respect to 2020, closely followed by the rest (except the Caribbean), while in relation to 2019 it is the non-Latin American countries (Other countries) that register a stronger and more stable recovery (+13, 1% up to April), followed by Central America+DR (+5.6%), Mercosur+Mexico (+4.2%) and the LAC average (+3%), while Andeans+Chile (-1.5%) and Caribbean countries -(-3.5%) show negative figures.

- Comparing with 2019 by taxes cumulatively through April, the aggregate of non-Latin American CIAT countries (Others) presents the best collection performance in this first four-month period in the aggregate total, IT, VAT and Excise Taxes. It is followed by Central America+DR (with an outstanding increase in IT) and Mercosur+Mexico (with an outstanding increase in VAT). The Andeans+Chile countries show negative figures both in the total aggregate and in IT and Excise Taxes, in addition to a total stagnation in VAT (only the other revenues aggregate, less significant in this group of countries, shows a clear growth). On the other hand, the two Caribbean countries experienced a significant drop in VAT collection, which dragged their overall result into negative territory.
- The CIAT web page (<u>https://www.ciat.org/revenue-statistics/?lang=en/</u>) "Monthly Collection Database (Annex)") provides additional detailed information on the monthly and cumulative evolution -in constant and current values- of all the tax administrations analyzed.

#### **METHODOLOGICAL INTRODUCTION**

The crisis resulting from COVID-19 has created a situation without precedent in history that makes information more necessary than ever for understanding the situation and designing responses.

The Revenue Reports COVID-19 (RRC) prepared by CIAT aim 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, in this case covering the first four-month period of the year 2021.

The information collected comes from the tax administrations of CIAT member countries, most of the time published in the form of monthly or quarterly bulletins<sup>1</sup>, 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, social security<sup>2</sup>; the different monthly collection and accounting schedules; the effects of deferrals granted to taxpayers<sup>3</sup>; 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 RRCs summarize the main information available up to their publication<sup>4</sup>, including summary tables of the evolution of the administrations' overall revenue collection and its main components (income taxes, VAT, excise taxes and other revenues applied) with their monthly variations with respect to 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. Since this is a dynamic 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 23), which has provided greater robustness to the general trends identified on the basis of the averages calculated.

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

<sup>2</sup> In this regard, see: Díaz de Sarralde, S. (2019) "Overview of Tax Administrations: structure; income, resources and personnel; operation and digitalization ISORA (International Survey on Revenue Administration) / 2019"

<sup>3</sup> In this regard, please see: CIAT, OCDE, IOTA (2020) "Tax Administration Responses to COVID-19: Measures Taken to Support Taxpayers".

<sup>4</sup> Updates to the RRC are published in the CIAT Book and Working Paper series. See: <u>The Revenue Report COVID-19 | Inter-American Center of Tax</u> <u>Administrations (ciat.org)</u>.

The most important developments by country will be summarized below, 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 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 base in Excel format (RRC Database) will be made available to the interested public, with details by tax figures, constant and current values, and monthly collection structure<sup>5</sup>.

<sup>5</sup> See <u>https://www.ciat.org/recaudacion/</u>, "Monthly collection database (Annex)".

#### 1. EVOLUTION OF TAX COLLECTION DURING THE 1<sup>ST</sup> QUARTER OF 2021

This section analyzes the evolution of the global collection of tax administrations, in general, in constant terms (deflated by the evolution of the consumer price indexes of each country) and its disaggregation into income taxes (IT), value added tax (VAT), Excise Taxes and a set that includes the rest of the tax resources, comparing both 2020 and 2019.

This new edition of the RRC contains information available for the first four months of 2021, which allows us to analyze the signs of a slow recovery in tax collection levels during the last few months.

After year 2020 in which revenue collection in constant values in the countries analyzed in the Report fell by an average of -9.3% (Excise Taxes, -12.1%; Income Taxes, IT, -8.2%; VAT, -7.8%), although with significant heterogeneity by country (from -26.9% in Panama and -22.5% in Honduras to +8.2% in Morocco, together with Mexico); VAT, -7.8%), although with 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), the monthly variations with respect to 2020 show spectacular growths in relation to the months of harsher confinement, above all, logically, in the taxes most hit by the social isolation measures. More importantly, with respect to 2019, the base scenario

for assessing the recovery, there is also an improvement in tax collection, although more modest and not in all countries and tax categories.

From the outset, it should be borne in mind that these data are surrounded by a great deal of uncertainty due to the different rates of evolution of the pandemic by country and the complexity of the analysis. 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, it should be borne in mind that we are in a transition period, conditioned by the timing of policy and tax administration measures and by the temporary shifts in consumption decisions.

#### 1.1 Evolution of global tax collection (Total)

With respect to 2020 (Graph 1a), total accumulated collection increased by +13.6% up to April. By months, after the stabilization of January and February (months compared to 2020 collection figures not yet affected by the pandemic), spectacular growth was recorded in March (+19.6%) and, above all, April (+46.6%), one of the most dramatic months of last year due to the harsh measures of social distancing and the correlative measures to support taxpayers by postponing tax returns and payment of taxes.

GRAPH 1A. Evolution of the total tax collection of the tax administrations (in percentage variation with respect to the same month of 2020 -monthly and cumulative-; simple averages; constant prices; January-April 2021



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

The comparison with 2019 (Graph 1b) allows us to qualify the extent of the recovery. On a monthly basis, the increases in January and February are logically higher than those corresponding to 2020, while in March and April (already affected by the pandemic), although growth is maintained, it is reduced to +10.9% and +2.1%, respectively. Cumulatively up to April there was an increase in collections of +4.3%, positive but decreasing since February.

GRAPH 1B. Evolution of the total tax collection of the tax administrations (in percentage variation with respect to the same month of 2019 -monthly and cumulative-; simple averages; constant prices; January-April 2021)



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

By country, Table 1 shows the monthly variations with respect to 2020 and 2019, showing the relevance of making this double comparison in order to correctly interpret the figures. As an example, it can be seen how spectacular growths in the month of April with respect to 2020 are significantly reduced and even turn into negative figures with respect to 2019, although, as we have already mentioned, the averages remain in positive territory.

### TABLE 1.Evolution of the monthly total collection of tax administrations (in percentage changes<br/>compared to the same month of 2020 and 2019; constant prices; January to April 2021)

Countries	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	 Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
Argentina	4.9	6.7	18.5	37.1	-0.9	1.3	8.8	5.0
Bolivia								
Brazil	1.6	6.1	16.0	39.3	6.1	3.0	13.7	3.5
Chile	-4.7	3.0	7.8		8.2	0.5	6.8	
Colombia	-7.0	-8.8	5.8		1.8	-2.3	6.5	
Costa Rica	1.5	-2.3	32.9	45.7	-2.8	11.4	36.5	10.5
Ecuador	-7.2	5.0	4.6	7.5	-2.3	-3.0	11.0	-30.8
El Salvador	1.5	5.4	16.2	59.5	5.7	11.4	16.7	10.9
Spain	-1.6	-4.3	-4.7	87.5	6.2	-1.0	10.5	28.5
United States	1.9	29.9	10.2		8.9	42.7	12.3	
Guatemala	-0.6	4.7	61.8	6.3	7.4	12.5	14.1	16.4
Honduras	25.0	-2.6	56.9	50.0	30.5	-3.8	35.0	-4.8
Italy	1.8	-8.0	9.0		5.5	0.1	4.1	
Jamaica	-9.6	-14.4	-2.3	24.0	-9.4	-13.1	-0.1	-9.2
Morocco	15.3	9.3	-7.7	48.8	23.4	22.8	3.3	17.3
Mexico	-5.8	-3.2	2.4	-5.6	4.4	-5.0	33.3	-20.0
Nicaragua	17.0	12.5			38.6	94.9		
Panama	-60.5	-34.0	79.3	67.9	-58.9	-27.2	5.1	-20.5
Paraguay	10.0	2.3	11.2	141.8	11.4	7.0	0.1	9.6
Peru	-4.0	7.5	37.9	69.6	-0.1	7.1	16.0	7.6
Dominican Republic	-6.6	9.2	22.5		-2.9	12.9	3.4	
Trinidad & Tobago	4.9	43.8	23.3		1.2	24.6	-20.4	
Uruguay	-5.8	-7.2	9.7	19.6	-4.6	-10.3	12.9	7.8
Monthly Average	-1.3	2.8	19.6	46.6	3.5	8.5	10.9	2.1

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

Analyzing this same information in cumulative terms (Table 2), we see that as of April most countries are in positive territory with respect to the 2019 baseline scenario, with Costa Rica reaching a maximum of +14.7%. Their relative position depends largely on whether the comparison is made with respect to 2020 or 2019 and how they performed during the first months of the pandemic. For example, Panama (the country hardest hit in terms of collection by the pandemic last year) records collection

increases relative to 2020 (+2.1%), while maintaining negative figures relative to 2019 (-21.6%). On the contrary, Mexico (the best performing country in LAC during 2020) shows up to April a drop in collection with respect to last year (-2.8%) and almost the same figure in positive (+2.7%) with respect to 2019.

TABLE 2.Evolution of the cumulative total collection of tax administrations (in percentage changes<br/>compared to the same month of 2020 and 2019; constant prices; January to April 2021)

Countries	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	 Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
Argentina	4.9	5.7	9.5	15.3	-0.9	0.1	2.8	3.3
Bolivia								
Brazil	1.6	3.5	7.1	13.4	6.1	4.8	7.4	6.4
Chile	-4.7	-1.3	1.4		8.2	4.5	5.2	
Colombia	-7.0	-7.6	-3.6		1.8	0.4	2.3	
Costa Rica	1.5	-0.2	12.5	18.2	-2.8	2.9	15.8	14.7
Ecuador	-7.2	-2.4	-0.1	2.0	-2.3	-2.6	1.7	-10.5
El Salvador	1.5	3.3	7.2	23.7	5.7	8.2	10.9	10.9
Spain	-1.6	-3.2	-3.6	17.6	6.2	1.8	3.7	11.7
United States	1.9	11.3	11.0		8.9	20.0	17.6	
Guatemala	-0.6	1.5	16.7	13.3	7.4	9.4	11.0	12.6
Honduras	25.0	12.5	25.8	32.8	30.5	14.5	21.4	11.4
Italy	1.8	-2.8	0.6		5.5	3.0	3.4	
Jamaica	-9.6	-11.9	-7.7	-2.6	-9.4	-11.2	-6.3	-7.0
Morocco	15.3	12.7	3.0	10.4	23.4	23.2	13.8	14.6
Mexico	-5.8	-4.7	-2.0	-2.8	4.4	0.2	11.0	2.7
Nicaragua	17.0	14.4			38.6	66.5		
Panama	-60.5	-47.6	-8.5	2.1	-58.9	-43.9	-21.9	-21.6
Paraguay	10.0	6.4	8.0	32.3	11.4	9.4	6.1	7.3
Peru	-4.0	1.1	11.9	25.0	-0.1	3.1	7.5	7.5
Dominican Republic	-6.6	0.4	6.6		-2.9	4.0	3.8	
Trinidad & Tobago	4.9	19.2	21.0		1.2	10.4	-5.9	
Uruguay	-5.8	-6.4	-1.1	3.6	-4.6	-7.2	-0.8	1.4
Cumulative Average	-1.3	0.2	5.5	13.6	3.5	5.5	5.3	4.3

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

As will be seen below, the rates of recovery of revenue collection also evolve unevenly in the different taxes, which, given the different tax structures and the unique temporal

distribution of their revenues throughout the year<sup>6</sup>, provides more detailed information on the impact of the crisis on tax collection in the countries.

<sup>6</sup> The "RRC Database" includes the detail of the monthly composition of the total collection by tax figures in 2020 and 2019 and, as previously mentioned, the patterns of temporal distribution of the collection for each of the countries in 2019.

#### 1.2 Evolution of Income Tax collection (IT)

Graphs 2a and 2b show with the same format used previously for the overall collection (monthly and cumulative comparison with respect to 2020 and 2019) the information available for income taxation, jointly considering the contribution of individuals and legal entities , and the general conclusions are similar, although with differences in terms of magnitudes.

Income tax collection is the one with the highest increase of all the categories analyzed in cumulative terms up to April, +20.8% with respect to 2020 and +7.5% with respect to 2019. Despite sharing positive values, the profile of the monthly evolution is very different, with respect to 2020 the increases in collection are increasing monthly when starting to compare with months very affected by the pandemic and the measures of postponement of tax returns and tax income (the monthly increase in April reaches +44.1%), while the opposite happens when comparing with 2019 (the increase in April is only +1,8%).

## GRAPH 2A. Evolution of the income tax collection (in percentage variation with respect to the same month of 2020 -monthly and cumulative-; simple averages; constant prices; January-April 2021)



<sup>7</sup> In these Reports we have opted for the aggregation of personal and corporate income taxes given 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 <u>Morán, D. and Rojas A. (2019)</u> "<u>Equivalent fiscal pressure in Latin America and the Caribbean: An analysis of the stylized facts in the past decade / 2019</u>," CIAT Working Papers 5-2019" the possibility of disaggregation between personal and corporate income in the different countries can be consulted.

GRAPH 2B. Evolution of the income tax collection (in percentage variation with respect to the same month of 2019 -monthly and cumulative-; simple averages; constant prices; January-April 2021)



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

Especially in the case of this tax, it should be noticed that the collection calendar is very different according to the month considered and, in many countries, April is usually one of the strongest revenue periods (among them Bolivia, Dominican Republic, Peru, Mexico, United States, El Salvador, Ecuador, Colombia, Chile, Paraguay . One of the fiscal relief and liquidity protection measures most widely used in the countries analyzed in response to the crisis caused by the COVID-19 pandemic was the granting of deferrals in Income Tax payments, which produced a significant alteration in the tax revenue calendar usually observed for this tax (April -26%, May -14.8% and June -21.2%, registered the largest monthly drops last year). In 2020, since the month of July, a change of trend was verified with a strong recovery of the resources generated by Income Tax in most countries, possibly reinforced by the lagged entry of collection whose obligation had been intentionally deferred in the previous months, which again

<sup>8</sup> There are clear exceptions such as Spain (July, October), Italy (December) or Brazil (between August and December). The others usually have a peak in March (Panama, Costa Rica, Morocco) or May (Argentina).

will affect the patterns we will observe during this year in the future.

As in the case of global collection, the general trends are the result of very disparate year-on-year variations among the

countries analyzed, conditioned by the evolution suffered in 2020. Thus, for example, in monthly terms (Table 3) the largest increase in April with respect to 2020 corresponds to Paraguay (+242%), which in turn recorded in 2020 the largest drop in relation to 2019 (-68%).

### TABLE 3.Evolution of the monthly income tax collection (in percentage variation with respect to<br/>the same month of 2020 and 2019; constant prices; January-April 2021)

Countries	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
Argentina	12.3	12.2	24.3	35.8	-0.9	0.1	9.7	-5.8
Bolivia								
Brazil	3.2	13.0	18.8	26.2	14.5	3.1	23.3	1.6
Chile	-17.0	-4.2	-4.3		-1.1	0.1	0.4	
Colombia	-4.0	-9.6	3.5		13.5	-3.8	8.0	
Costa Rica	-2.7	14.1	53.8	1.1	-28.6	30.4	46.8	11.7
Ecuador	6.7	22.5	7.3	-16.8	12.5	20.9	0.2	-44.8
El Salvador	-0.0	-0.7	7.5	70.9	5.0	9.7	3.5	8.9
Spain	-4.2	6.3	1.7	125.9	10.1	12.9	27.6	39.7
United States	7.7	88.6	21.6		17.1	122.5	22.7	
Guatemala	2.0	-1.0	72.0	-3.9	18.8	4.6	9.1	25.5
Honduras	135.0	-7.4	60.3	31.6	192.0	-11.9	12.8	-13.0
Italy	-2.0	-4.7	3.9		0.6	-0.9	3.0	
Jamaica	-2.3	-5.0	10.0	19.0	0.9	9.1	11.9	23.6
Morocco	26.6	19.9	-10.6	41.6	30.7	30.4	0.8	5.6
Mexico	-2.6	-3.1	9.2	-16.1	-1.9	-5.7	52.7	-38.1
Nicaragua	11.2	11.6			53.4	200.8		
Panama	-50.7	-43.2	136.1	16.5	-44.5	-19.8	30.1	-20.2
Paraguay	26.3	10.4	27.4	242.4	14.5	47.0	11.7	9.0
Peru	-0.7	5.6	45.0	71.6	3.5	12.6	9.5	13.3
Dominican Republic	-1.8	29.2	2.8		14.1	39.2	-4.4	
Trinidad & Tobago	5.5	31.4	10.0		-0.3	15.6	-38.3	
Uruguay	-3.7	-14.8	10.0	15.4	-2.8	-20.2	15.8	10.5
Monthly Average	6.6	7.8	24.3	44.1	14.6	22.6	12.2	1.8

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

In cumulative terms, Income Tax collection by country (Table 4) up to April shows positive variations except in the cases of Ecuador, Mexico and Panama (in the latter case the variation is positive with respect to 2020, +15%, and still

negative with respect to 2019, -3.3%). It is noteworthy that with respect to 2019 most of the countries with data up to April experience double-digit growth, led by Spain with +24,8%.

TABLE 4.Evolution of the cumulative income tax collection (in percentage variation with respect to<br/>the same month of 2020 and 2019; constant prices; January-April 2021)

Countries	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	 Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
Argentina	12.3	12.2	15.7	19.9	-0.9	-0.4	2.5	0.4
Bolivia								
Brazil	3.2	6.4	9.5	13.3	14.5	10.3	13.6	10.3
Chile	-17.0	-11.3	-9.2		-1.1	-0.5	-0.2	
Colombia	-4.0	-6.6	-4.2		13.5	5.0	5.8	
Costa Rica	-2.7	4.1	29.7	23.9	-28.6	-10.8	17.3	16.4
Ecuador	6.7	12.1	10.5	-2.3	12.5	15.6	10.0	-21.2
El Salvador	-0.0	-0.3	1.9	30.2	5.0	6.9	5.9	7.5
Spain	-4.2	-0.4	0.2	32.7	10.1	11.2	15.1	24.8
United States	17.1	39.7	34.8		17.1	39.7	34.8	
Guatemala	2.0	0.8	23.9	12.6	18.8	13.0	11.2	15.7
Honduras	135.0	78.0	72.8	50.0	192.0	97.1	63.7	14.7
Italy	-2.0	-2.9	-1.2		0.6	0.1	0.9	
Jamaica	-2.3	-3.7	5.2	6.9	0.9	4.9	9.5	11.2
Morocco	26.6	23.8	2.4	7.7	30.7	30.6	12.6	11.3
Mexico	-2.6	-2.8	2.2	-1.9	-1.9	-3.6	15.5	-0.9
Nicaragua	11.2	11.5			53.4	125.8		
Panama	-50.7	-46.8	14.7	15.0	-44.5	-33.1	0.8	-3.3
Paraguay	26.3	19.1	22.2	69.5	14.5	26.2	20.2	15.1
Peru	-0.7	2.1	16.2	31.8	3.5	7.5	8.3	10.1
Dominican Republic	14.1	24.6	15.3		14.1	24.6	15.3	
Trinidad & Tobago	5.5	13.4	11.6		-0.3	4.9	-23.1	
Uruguay	-3.7	-8.6	-2.4	2.3	-2.8	-11.0	-2.4	1.1
Cumulative Average	7.7	7.5	12.9	20.8	14.6	16.5	11.3	7.5

Source: Prepared by the authors based on official information from tax administration.

#### 1.3 Evolution of Value Added Tax collection (VAT)

VAT, being the main instrument of tax collection in most of the countries analyzed and having partly cushioned the deep fall in overall collection during the second quarter of last year, showed a progressive improvement in its average collection performance since July, reaching positive figures in the last two months of 2020.

This positive trend continues in 2021. The variation in VAT revenues is the one that is most aligned with that of the

overall collection, increasing in cumulative terms up to April by +10.2% compared to 2020 (Graph 3a) and +5.6% compared to 2019 (Graph 3b).

By months with respect to 2020, after the stabilization of January and February (which are compared to last year's collection figures not yet affected by the pandemic), large growth was recorded in March (+21.8%) and, above all, April (+51%). In relation to 2019, collection growth is recorded in all months, with a maximum of 16.7% in March and a remarkable +9.4% in April.

**GRAPH 3A.** Evolution of VAT tax collection (in percentage variation with respect to the same month of 2020 -monthly and cumulative-; simple averages; constant prices; January-April 2021)



Source: Prepared by the authors based on official information from tax administration.

### GRAPH 3B. Evolution of VAT tax collection (in percentage variation with respect to the same month of 2019 -monthly and cumulative-; simple averages; constant prices; January-April 2021)



By countries, it is noteworthy that all of them recorded monthly increases in VAT revenues in April with respect to 2020 (Table 5) and most of them also with respect to 2019 (with the exceptions of Ecuador, Jamaica and Panama).

In cumulative values up to April (Table 6) the recovery is also generalized with respect to 2019, with the same three exceptions. A striking case is that of Mexico, with a cumulative drop of -0.1% compared to 2020 and, in contrast, a notable increase, +16.1%, compared to 2019, which is explained by its extraordinary results in the first four months of 2020 compared to 2019 (recording then VAT growths of +16.2%, when the average drop was already -4.6%). Morocco (+29.1% compared to 2019) and Costa Rica (+25.4%) lead the cumulative recovery up to April.

Countries	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
Argentina	-1.5	6.2	27.4	35.1	-4.2	-3.3	7.9	0.5
Bolivia								
Brazil	7.7	6.7	11.5	28.9	12.8	9.8	14.7	9.8
Chile	6.7	20.9	34.8		26.1	17.3	26.5	
Colombia	-7.7	-7.9	7.1		-1.4	0.2	5.7	
Costa Rica	-1.1	-1.7	9.5	115.9	15.0	23.8	27.6	37.9
Ecuador	-13.5	0.2	-0.1	45.1	-7.8	-10.6	-6.9	-11.0
El Salvador	5.8	12.5	23.3	53.0	15.0	16.1	28.7	21.3
Spain	10.1	-6.1	-15.1	71.3	3.6	-4.0	-1.4	22.0
United States								
Guatemala	2.1	7.9	62.5	7.4	9.7	13.2	16.7	15.5
Honduras	-4.9	-0.1	59.2	76.2	-4.7	-0.5	40.8	3.4
Italy	25.5	-4.8	27.1		32.9	-5.8	8.1	
Jamaica	-19.7	-16.7	-12.2	15.0	-17.3	-21.2	-9.0	-20.0
Morocco	7.5	14.1	16.5	36.6	31.8	25.1	32.9	26.6
Mexico	-1.4	-0.1	-7.8	12.2	19.2	8.9	14.7	21.5
Nicaragua	28.4	22.4			32.9	27.8		
Panama	-70.2	-29.2	-3.6	95.4	-72.3	-37.8	-23.4	-24.1
Paraguay	5.3	3.3	7.2	80.5	15.3	0.4	0.1	16.7
Peru	-3.6	12.3	40.9	70.5	-2.8	8.6	25.3	9.8
Dominican Republic	-11.2	-2.6	34.7		-7.2	2.9	1.8	
Trinidad & Tobago	20.2	94.0	98.8		21.6	58.3	109.7	
Uruguay	-7.4	-1.6	13.2	22.6	-1.6	-5.4	12.8	11.2
Monthly Average	-1.1	6.2	21.8	51.0	5.5	5.9	16.7	9.4

#### TABLE 5.Evolution of monthly VAT tax collection (in percentage variation with respect to the same month<br/>of 2020 and 2019; constant prices; January-April 2021)

### TABLE 6.Evolution of cumulative VAT tax collection (in percentage variation with respect to the same<br/>month of 2020 and 2019; constant prices; January-April 2021)

Countries	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	 Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
Argentina	-1.5	1.9	9.4	14.9	-4.2	-3.8	-0.1	0.1
Bolivia								
Brazil	7.7	7.2	8.6	13.0	12.8	11.4	12.4	11.7
Chile	6.7	12.7	19.0		26.1	21.9	23.3	
Colombia	-7.7	-7.7	-2.9		-1.4	-1.1	1.2	
Costa Rica	-1.1	-1.4	2.0	17.6	15.0	18.9	21.7	25.4
Ecuador	-13.5	-8.2	-5.9	2.5	-7.8	-9.0	-8.4	-9.0
El Salvador	5.8	8.8	13.4	21.3	15.0	15.5	19.7	20.1
Spain	10.1	-2.9	-5.2	9.3	3.6	-2.4	-2.2	3.9
United States								
Guatemala	2.1	4.7	18.8	15.7	9.7	11.2	13.0	13.6
Honduras	-4.9	-2.7	15.6	25.7	-4.7	-2.8	11.2	9.3
Italy	25.5	7.4	14.1		32.9	9.2	8.7	
Jamaica	-19.7	-18.2	-16.3	-10.2	-17.3	-19.3	-16.1	-17.1
Morocco	7.5	10.5	12.5	17.9	31.8	28.6	30.1	29.1
Mexico	-1.4	-0.8	-3.2	-0.1	19.2	14.5	14.6	16.1
Nicaragua	28.4	25.3			32.9	30.3		
Panama	-70.2	-52.2	-39.0	-21.6	-72.3	-56.7	-46.7	-41.1
Paraguay	5.3	4.4	5.2	17.9	15.3	8.0	5.4	8.1
Peru	-3.6	3.3	13.5	23.6	-2.8	2.2	8.9	9.2
Dominican Republic	-11.2	-7.4	3.4		-7.2	-2.7	-1.3	
Trinidad & Tobago	20.2	48.8	62.7		21.6	37.7	55.9	
Uruguay	-7.4	-4.9	0.9	5.5	-1.6	-3.3	1.9	4.1
Cumulative Average	-1.1	1.4	6.3	10.2	5.5	5.2	7.7	5.6

*Source:* Prepared by the authors based on official information from tax administration.

#### 1.4 Evolution of Excise Taxes collection

As pointed out in previous editions of this Report, the initial restrictions on mobility and the stoppage of commercial and industrial activities adopted to prevent the spread of the COVID-19 pandemic have been determining factors for Excise Taxes to register, on average, the largest monthly drops in collections, especially in April, May and June. Subsequently, the monthly collection of Excise Taxes showed a certain recovery, limiting the average year-on-year decreases. In cumulative terms, Excise Taxes collection is the one that has shown, on average, the deepest declines from May onwards, ending the year with a -13.1%.

In the first months of 2021, Excise Taxes collection continues to be the hardest hit by the crisis. With respect to 2020 up to April (Graph 4a) its average accumulated collection is the one that increases the least (+5.5%) despite registering in that month the highest monthly increase (+60.3%). Regarding 2019 (Graph 4b), the accumulated collection up to April is still in negative territory (-2.9%) and most of the months the variations are still negative.

**GRAPH 4A.** Evolution of Excise Taxes collection (in percentage variation with respect to the same month of 2020 -monthly and cumulative-; simple averages; constant prices; January-April 2021)



Source: Prepared by the authors based on official information from tax administration.

## GRÁFICO 4B. Evolution of Excise Taxes collection (in percentage variation with respect to the same month of 2019 -monthly and cumulative-; simple averages; constant prices; January-April 2021)



By countries, all register positive monthly variations in April 2021 with respect to the same month of 2020 (Table 7), although for almost half of them the comparison becomes

negative with respect to April 2019. Cumulatively from January to April 2021 (Table 8), only half of the countries are in positive values compared to 2019.

## TABLE 7.Evolution of monthly Excise Taxes collection (in percentage variation with respect<br/>to the same month of 2020 and 2019; constant prices; January-April 2021)

Countries	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	 Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
Argentina	26.6	12.8	52.7	89.9	0.3	14.0	21.6	12.7
Bolivia								
Brazil	14.4	22.6	37.8	52.3	5.5	17.9	22.7	10.2
Chile	-31.9	-23.1	-22.7		-42.4	-20.3	11.9	
Colombia	-31.3	-20.9	-20.7		-33.3	-10.4	-30.3	
Costa Rica	-1.0	-23.1	7.5	27.7	10.7	-19.7	19.1	-25.1
Ecuador	-14.5	-6.4	-14.4	75.3	-11.1	-10.6	-9.8	-10.5
El Salvador	10.5	1.7	12.6	49.9	5.3	18.7	18.5	27.8
Spain	-9.3	-24.9	-11.8	8.7	-5.5	-22.3	-7.9	1.1
United States	-45.6	-27.8	-2.2		-50.6	-11.9	-21.2	
Guatemala	-10.4	-0.9	30.1	50.8	-4.8	20.5	11.0	6.2
Honduras	-1.0	-3.7	36.2	49.4	0.2	-4.6	38.8	4.9
Italy	-28.1	-30.4	-11.6		-26.7	-28.7	-9.1	
Jamaica	27.4	-9.1	-11.8	82.2	24.3	3.3	-10.1	3.8
Morocco	-11.5	2.0	20.5	70.5	-24.5	33.1	15.5	17.0
Mexico	-21.2	-12.1	-13.8	1.0	4.9	-29.5	-17.1	0.7
Nicaragua	14.6	1.2			20.7	23.8		
Panama	-72.8	-33.9	14.9	212.5	-72.1	-33.2	-16.0	-31.0
Paraguay	-32.7	-46.9	-45.9	10.6	-26.4	-50.5	-56.1	-44.0
Peru	-8.3	1.1	-2.1	105.3	10.7	-0.0	12.7	-0.7
Dominican Republic	-3.3	-7.7	20.7		-12.6	-7.9	15.3	
Trinidad & Tobago	-24.1	0.7	9.8		-27.7	-11.4	25.4	
Uruguay	-12.9	-4.3	-7.8	17.5	-23.6	7.4	7.0	-13.8
Monthly Average	-12.1	-10.6	3.7	60.3	-12.7	-5.6	2.0	-2.7

### TABLE 8.Evolution of cumulative Excise Taxes collection (in percentage variation with respect<br/>to the same month of 2020 and 2019; constant prices; January-April 2021)

Countries	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
Argentina	26.6	18.7	28.5	40.5	0.3	7.2	11.8	12.0
Bolivia								
Brazil	14.4	18.3	24.5	30.3	5.5	11.2	15.1	13.9
Chile	-31.9	-27.7	-26.3		-42.4	-32.9	-23.9	
Colombia	-31.3	-29.1	-25.9		-33.3	-29.0	-29.5	
Costa Rica	-1.0	-12.0	-5.5	1.2	10.7	-4.9	3.0	-6.0
Ecuador	-14.5	-11.1	-12.2	-0.2	-11.1	-10.9	-10.6	-10.5
El Salvador	10.5	6.4	8.4	17.2	5.3	10.9	13.3	16.9
Spain	-9.3	-17.2	-15.5	-9.5	-5.5	-14.1	-12.1	-8.6
United States	-45.6	-36.5	-25.2		-50.6	-33.6	-28.7	
Guatemala	-10.4	-5.9	4.7	13.1	-4.8	6.4	8.0	7.6
Honduras	-1.0	-2.2	10.0	17.6	0.2	-2.1	10.8	9.3
Italy	-28.1	-29.4	-23.5		-26.7	-27.8	-21.6	
Jamaica	27.4	9.7	2.6	14.1	24.3	14.9	6.5	5.9
Morocco	-11.5	-4.4	4.5	16.5	-24.5	-0.3	5.6	8.4
Mexico	-21.2	-18.0	-16.9	-13.1	4.9	-11.4	-13.0	-10.0
Nicaragua	14.6	7.7			20.7	22.2		
Panama	-72.8	-54.2	-35.8	-16.4	-72.1	-53.4	-40.8	-38.3
Paraguay	-32.7	-40.1	-41.7	-34.3	-26.4	-40.0	-45.1	-44.8
Peru	-8.3	-4.4	-3.7	10.0	10.7	5.7	7.8	5.7
Dominican Republic	-3.3	-5.3	2.7		-12.6	-10.5	-2.6	
Trinidad & Tobago	-24.1	-11.1	-3.8		-27.7	-18.8	-5.6	
Uruguay	-12.9	-9.0	-8.6	-3.6	-23.6	-11.5	-6.0	-7.9
Cumulative Average	-12.1	-11.7	-7.6	5.5	-12.7	-10.1	-7.5	-3.1

Source: Prepared by the authors based on official information from tax administration.

#### 1.5 Evolution of Other revenue collection

The aggregate chapter corresponding to other tax revenues ("Other revenue") is of less analytical importance given its high heterogeneity and residual nature by definition. However, in some administrations it is much more relevant than the average, given their extended collection powers -especially those related to social security contributions- and may significantly affect the aggregate evolution of revenues. Specifically, in Argentina, the weight of the Other revenue oscillated between 47% and 55% of the total during 2020, in Brazil between 41% and 54% of the total,

and in the United States between 21% and 72%, while in the other countries surveyed, the representativeness of this component of the tax structure was generally below 20%<sup>9</sup>.

The average monthly evolution of "Other revenue" during 2020 was in line with the other taxes previously analyzed, with a maximum fall in May and more limited year-on-year decreases during the last months. However, its accumulated fall up to December (-12.7%), was higher than the average (-9.3%) and very close to that of the Excise Taxes, showing a scarce improvement in relative terms of the effective performance of this remaining set of levies.

<sup>9</sup> The percentage structures of monthly tax collection for each country can be consulted at the following link: <u>https://www.ciat.org/revenue-statistics/?lang=en</u>, "Monthly Tax Collection Database (Annex)".

This pattern of behavior seems to continue in 2021, with cumulative collection with respect to 2019 through April (Graph 5b) still in negative territory (-1%), despite the

growth recorded in its comparison with 2020 (+12.5%, with a record monthly increase of 61,7%).

### **GRAPH 5A.** Evolution of Other revenue collection (in percentage variation with respect to the same month of 2020 -monthly and cumulative-; simple averages; constant prices; January-April 2021)



**GRAPH 5B.** Evolution of Other revenue collection (in percentage variation with respect to the same month of 2019 -monthly and cumulative-; simple averages; constant prices; January-April 2021)



Source: Prepared by the authors based on official information from tax administration.

By country, the picture is also very similar to that described for Excise Taxes, with great heterogeneity, although it is worth highlighting that Argentina, Brazil and the United States (the three countries for which these revenues are most relevant) record cumulative positive variations even with respect to 2019, prolonging the improvement already observed in them at the end of 2020 and which allowed them to cushion, in part, the significant collection losses recorded in Income Taxes and Excise Taxes throughout the year.

## TABLE 9.Evolution of monthly Other revenue collection (in percentage variation with respect<br/>to the same month of 2020 and 2019; constant prices; January-April 2021)

Countries	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	 Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
Argentina	4.5	4.2	9.0	34.2	0.9	3.2	7.8	11.3
Bolivia								
Brazil	-2.2	2.6	16.1	52.7	-0.6	-0.9	9.5	1.0
Chile	203.9	-514.6	-78.2		120.6	-144.4	-87.2	
Colombia	-3.5	-4.9	17.8		-7.7	1.6	26.7	
Costa Rica	24.6	-5.3	38.9	125.4	20.1	-12.6	23.8	10.6
Ecuador	-9.7	-0.8	14.2	63.4	-10.0	-8.1	97.7	5.7
El Salvador	-18.1	-4.2	12.3	29.6	-30.3	-6.0	7.5	-0.2
Spain	-1.1	-0.0	52.0	2.9	-4.3	7.7	2.2	-12.6
United States	-5.4	-1.5	0.7		-0.9	3.3	4.9	
Guatemala	-6.0	8.5	62.1	13.7	-4.8	30.9	54.7	7.3
Honduras	-6.8	-5.0	96.9	133.0	-9.0	-4.7	51.1	12.1
Italy	5.9	-7.5	1.8		14.2	58.8	8.9	
Jamaica	-23.2	-23.2	-21.0	16.4	-26.3	-27.3	-19.3	-22.0
Morocco	24.5	-16.0	-44.3	99.8	31.9	-7.9	-34.9	26.0
Mexico	-16.5	-0.9	8.1	1.6	-20.8	0.2	52.5	1.2
Nicaragua	2.9	-0.8			28.3	30.9		
Panama	-55.5	-18.5	80.1	125.5	-50.2	-18.2	-18.6	-9.2
Paraguay	19.6	11.9	-16.1	136.7	-31.7	-7.1	-35.3	-12.5
Peru	-10.5	0.8	30.0	57.3	-3.7	-3.5	11.1	-6.4
Dominican Republic	-11.4	21.0	43.3		-17.1	13.4	8.1	
Trinidad & Tobago	-30.3	-4.0	5.0		-34.1	-8.9	9.3	
Uruguay	5.5	-7.3	12.8	34.0	-1.4	-10.9	6.8	2.1
Monthly Average	4.1	-25.7	16.3	61.7	-1.7	-5.0	8.9	0.9

## **TABLE 10.**Evolution of cumulative Other revenue collection (in percentage variation with respect<br/>to the same month of 2020 and 2019; constant prices; January-April 2021)

Countries	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
Argentina	4.5	4.4	5.8	11.8	0.9	2.0	3.7	5.5
Bolivia								
Brazil	-2.2	-0.2	4.5	12.8	-0.6	-0.7	2.3	2.0
Chile	203.9	36.3	-44.7		120.6	-57.8	-74.2	
Colombia	-3.5	-4.2	3.3		-7.7	-3.4	6.4	
Costa Rica	24.6	13.1	19.5	31.0	20.1	7.2	11.5	11.3
Ecuador	-9.7	-5.6	3.8	12.6	-10.0	-9.1	26.6	21.5
El Salvador	-18.1	-11.3	-3.7	9.9	-30.3	-19.3	-11.0	-6.1
Spain	-1.1	-0.5	13.4	9.6	-4.3	1.8	2.0	-3.6
United States	-5.4	-3.7	-2.3		-0.9	1.0	2.3	
Guatemala	-6.0	-4.3	0.4	6.0	-4.8	-1.2	3.1	4.9
Honduras	-6.8	-5.9	23.1	44.7	-9.0	-6.9	12.6	12.4
Italy	5.9	-2.6	-1.3		14.2	37.4	27.4	
Jamaica	-23.2	-23.2	-22.4	-15.4	-26.3	-26.8	-24.3	-23.7
Morocco	24.5	10.6	-12.0	-1.1	31.9	18.5	-2.3	2.2
Mexico	-16.5	-9.0	-2.0	-1.2	-20.8	-11.0	9.5	7.3
Nicaragua	2.9	1.0			28.3	29.6		
Panama	-55.5	-37.0	1.2	18.7	-50.2	-33.3	-25.5	-21.7
Paraguay	19.6	15.7	1.3	19.3	-31.7	-21.6	-27.4	-23.9
Peru	-10.5	-5.0	5.1	18.7	-3.7	-3.6	1.2	-1.6
Dominican Republic	-11.4	3.6	15.9		-17.1	-3.0	1.0	
Trinidad & Tobago	-30.3	-18.2	-10.4		-34.1	-22.5	-12.4	
Uruguay	5.5	-1.1	3.6	9.5	-1.4	-6.2	-1.8	-0.9
Cumulative Average	4.1	-2.1	0.1	12.5	-1.7	-5.9	-3.3	-1.0

#### 2. EVOLUTION OF ACTIVITY (MOBILITY OF PEOPLE)

A little more than a year ago, governments around the world were forced to implement various measures to control the mobility of people and restrict economic activity in response to the pandemic. The Revenue Reports COVID-19 have been using mobility data collected and disseminated by Google to contrast, and to some extent anticipate, the effects of such measures on government revenues.

Graph 6 shows what has happened, on average, to the movement of people since February 2020 in four different<sup>10</sup> categories. After the deep drop in these indicators during the months of March and, especially, April 2020, a growing trend in mobility and a gradual rebound in economic activity have been observed in the countries under analysis, although the recovery has not been complete, and the movement of people is still limited compared to pre-pandemic movements. So far in 2021, the improvement in the indicators has been very small, showing the reversal of the social distancing measures that have had to be adopted in many countries. Only trips to supermarkets and pharmacies, linked to essential goods and which have always performed better, have slightly exceeded those made before the crisis, followed at a distance by trips to the workplace. On the other hand, as could already be seen in previous RRCs, movements in retail and recreation areas and trips to transport stations continue to be the most affected by the effect of the pandemic.

<sup>10</sup> 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.

## **GRAPH 6.** Variations in the mobility of persons (monthly average by category for all countries analyzed, in percentages)



*Source:* Own elaboration based on Google LLC "Google COVID-19 Community Mobility Reports. <u>https://www.google.com/covid19/mobility/</u> (Accessed: June 2021).

The monthly variation data of the average collection by type of tax with respect to 2019 (Graph 7) show a behavior correlated with the mobility indicators, with a deep drop in the first half of the year and a slow recovery since June 2020.

**GRAPH 7.** Average evolution of monthly tax collection by type of tax (year-on-year changes compared to 2019; constant prices; in percentages)



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

This correlation has already been analyzed in previous editions of the RRC, both in mean values and by means of panel data analysis. A simple linear regression model between the two variables mentioned reached a high level of fit. However, this relationship was not stable throughout the year, being much stronger until June, while from the middle to the end of the year the relationship between variations in mobility and total revenue became somewhat more diffuse. Incorporating the data for the first four months of 2021 confirms the loss of explanatory power (Graph 8a), especially when isolating the behavior between July 2020 and the present (Graph 8b).

**GRAPH 8A.** Average monthly changes in total revenue and people's mobility in Retail and Recreation (monthly average; in percentages; February 2020 to April 2021)



*Source:* Own elaboration based on Google LLC "Google COVID-19 Community Mobility Reports. <u>https://www.google.com/covid19/mobility/</u> (Accessed: March 1, 2021) and the RRC database (CIAT).

GRAPH 8B. Average monthly changes in total revenue and people mobility in Retail and Recreation (monthly average; in percentages; July 2020-April 2021)



*Fuente:* Own elaboration based on Google LLC "Google COVID-19 Community Mobility Reports. <u>https://www.google.com/covid19/mobility/</u> (Accessed: March 1, 2021) and the RRC database (CIAT).

In summary, the limitations on mobility resulting from the measures to curb the advance of the pandemic have helped explaining the main variations in public revenues, especially in the most restrictive periods. However, the recovery does not seem to be taking place symmetrically in the face of the recovery in mobility, nor homogeneously across countries.
### 3. OVERVIEW BY REGIONS OR COUNTRY GROUPS

As can be seen, the large amount of information collected, organized, and systematized for a wide range 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 indicators of personal mobility (used as a proxy variable for effective levels of economic activity). However, as is usually the case and has been highlighted above, within the averages calculated there is a high degree of heterogeneity and variety of cases.

One option for observing these particularities is to group all the countries for which official information is available according to generally accepted geographiceconomic criteria. This complementary approach to the data contained in the RRC database aims 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, thus enhancing the potential variants of the information collected so far. For this purpose, based on available statistical information, the following country groupings are considered:

- **Mercosur + Mexico:** Argentina, Brazil, Paraguay, Uruguay and Mexico<sup>11</sup>.
- Andinos + Chile: Chile, Ecuador, Colombia and Peru.
- **Caribe:** Jamaica and Trinidad & Tobago.
- **Central America + Dominican Republic:** Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama and Dominican Republic.
- **Ohers:** United States, 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.

<sup>11</sup> Although Mexico's geographic location could be grouped with Central American countries, its macroeconomic and tax characteristics make it more comparable to the Mercosur countries, mainly Argentina and Brazil.

Considering the grouping criteria of the countries surveyed, we first focus the analysis on the evolution of total, monthly and accumulated tax revenues, according to the averages calculated for each of the groups formed (Table 11). As we have done in the rest of the paper, comparisons are made in parallel with respect to 2020 (the previous year) and 2019 (the base year prior to the pandemic).

## TABLE 11.Evolution of total collections by country group (in percentages -monthly and cumulative- with<br/>respect to the same period of 2020 and 2019; constant prices; January to April 2021)

Regions or country groups	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
MERCOSUR + Mexico	1.0	0.9	11.6	46.4	3.3	-0.8	13.8	1.2
ANDEANS + Chile	-5.7	1.7	14.0	38.6	1.9	0.6	10.1	-11.6
CENTRAL AMERICA + Dom. Rep.	-3.2	-1.0	44.9	45.9	2.5	16.0	18.4	2.5
THE CARIBBEAN	-1.5	9.8	7.0	12.0	-2.7	3.8	-6.8	-4.6
OTHERS	4.3	6.7	1.7	68.2	11.0	16.1	7.5	22.9
LATIN AMERICA AND THE CARIBBEAN	-2.5	1.9	23.8	43.3	1.9	6.8	11.7	-1.1

### Monthly Percentage Changes

#### **Cumulative Percentage Changes**

Regions or country groups	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
MERCOSUR + Mexico	1.0	0.9	4.3	12.4	3.3	1.5	5.3	4.2
ANDEANS + Chile	-5.7	-2.6	2.4	13.5	1.9	1.4	4.2	-1.5
CENTRAL AMERICA + Dom. Rep.	-3.2	-2.3	10.1	18.0	2.5	8.8	6.8	5.6
THE CARIBBEAN	-1.5	2.4	4.4	-1.3	-2.7	-0.3	-4.1	-3.5
OTHERS	4.3	4.5	2.8	14.0	11.0	12.0	9.6	13.1
LATIN AMERICA AND THE CARIBBEAN	-2.5	-0.8	6.2	13.6	1.9	4.1	4.2	3.0

In terms of monthly collection variations (Graph 9), it is observed that all regions return to positive values with respect to 2020 as of February, while in relation to 2019 the Andeans+Chile, Caribbean and the LAC average countries still present negative variations.

### **GRAPH 9.** Evolution of total monthly collections by country group (changes with respect to 2020 and 2019; constant prices; in percentages; January to April 2021)



In cumulative values (Graph 10), the Central America+DR region leads the recovery with respect to 2020, followed closely by the rest (except the Caribbean), while in relation to 2019 it is the non-Latin American countries (Others) that register a stronger and more stable recovery (+13,

1% up to April), followed by Central America+DR (+5.6%), Mercosur+Mexico (+4.2%) and the LAC average (+3%), while Andeans+Chile (-1.5%) and Caribbean countries -(-3.5%) show negative figures.

## GRAPH 10. Evolution of cumulative total collections by country group (changes with respect to 2020 and 2019; constant prices; in percentages, January to April 2021)



Tables 12 to 15 perform this same regional analysis for the different tax categories: IT, VAT, Excise Taxes and Other.

### TABLE 12.Evolution of IT collection by country group (in percentages -monthly and cumulative- with respect<br/>to the same period of 2020 and 2019; constant prices; January to April 2021)

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Regions or country groups	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
MERCOSUR + Mexico	7.1	3.6	17.9	60.8	4.7	4.9	22.6	-4.6
ANDEANS + Chile	-3.8	3.6	12.8	27.4	7.1	7.5	4.5	-15.7
CENTRAL AMERICA + Dom. Rep.	13.3	0.4	55.4	23.2	30.0	36.1	16.3	2.6
THE CARIBBEAN	1.1	8.8	6.7	9.5	0.2	8.3	-8.8	11.8
OTHERS	7.0	27.5	4.1	83.7	14.6	41.2	13.6	22.7
LATIN AMERICA AND THE CARIBBEAN	6.5	3.4	29.0	38.0	14.6	18.4	11.9	-1.4

#### Monthly Percentage Changes

#### **Cumulative Percentage Changes**

Regions or country groups	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
MERCOSUR + Mexico	7.1	2.0	9.4	20.6	4.7	4.3	9.9	5.2
ANDEANS + Chile	-3.8	-2.2	3.3	14.8	7.1	6.9	6.0	-5.6
CENTRAL AMERICA + Dom. Rep.	15.5	10.5	26.4	26.3	30.0	31.9	19.0	10.2
THE CARIBBEAN	1.1	-1.9	5.6	3.4	0.2	3.3	-4.5	5.6
OTHERS	9.4	8.4	9.1	20.2	14.6	20.4	15.8	18.0
LATIN AMERICA AND THE CARIBBEAN	7.4	3.8	13.9	20.9	14.6	15.7	10.2	5.9

## **TABLE 13.**Evolution of VAT collection by country group (in percentages -monthly and cumulative- with respect<br/>to the same period of 2020 and 2019; constant prices; January to April 2021)

Regions or country groups	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
MERCOSUR + Mexico	0.5	2.9	10.3	35.9	8.3	2.1	10.0	11.9
ANDEANS + Chile	-4.5	6.4	20.7	57.8	3.5	3.9	12.6	-0.6
CENTRAL AMERICA + Dom. Rep.	-7.3	1.3	31.0	69.6	-1.7	6.5	15.4	10.8
THE CARIBBEAN	0.2	25.8	28.9	7.5	1.4	12.4	33.6	-10.0
OTHERS	14.4	1.1	9.5	53.9	22.8	5.1	13.2	24.3
LATIN AMERICA AND THE CARIBBEAN	-3.7	7.0	23.9	50.6	2.7	6.0	17.3	7.1

#### Monthly Percentage Changes

#### **Cumulative Percentage Changes**

Regions or country groups	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
MERCOSUR + Mexico	0.5	1.6	4.2	10.3	8.3	5.3	6.8	8.0
ANDEANS + Chile	-4.5	0.0	5.9	13.1	3.5	3.5	6.3	0.1
CENTRAL AMERICA + Dom. Rep.	-7.3	-3.5	2.4	11.7	-1.7	2.0	2.9	5.5
THE CARIBBEAN	0.2	10.2	15.5	-5.1	1.4	6.2	13.3	-8.5
OTHERS	14.4	5.0	7.1	13.6	22.8	11.8	12.2	16.5
LATIN AMERICA AND THE CARIBBEAN	-3.7	0.8	6.2	9.7	2.7	4.1	6.9	3.9

### TABLE 14.Evolution of Excise Taxes collection by country group (in percentages -monthly and cumulative-<br/>with respect to the same period of 2020 and 2019; constant prices; January to April 2021)

Regions or country groups	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
MERCOSUR + Mexico	-5.2	-5.6	4.6	34.3	-7.9	-8.1	-4.4	-6.8
ANDEANS + Chile	-21.5	-12.3	-15.0	90.3	-19.0	-10.3	-3.9	-5.6
CENTRAL AMERICA + Dom. Rep.	-9.1	-9.5	20.3	78.1	-7.5	-0.3	14.5	-3.4
THE CARIBBEAN	1.1	-2.8	-0.7	41.1	-1.1	-2.7	5.1	1.9
OTHERS	-23.6	-20.3	-1.3	39.6	-26.8	-7.4	-5.7	9.0
LATIN AMERICA AND THE CARIBBEAN	-9.5	-8.4	4.9	63.4	-9.5	-5.1	3.8	-4.5

#### Monthly Percentage Changes

#### **Cumulative Percentage Changes**

Regions or country groups	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
MERCOSUR + Mexico	-5.2	-6.0	-2.8	3.9	-7.9	-8.9	-7.4	-7.4
ANDEANS + Chile	-21.5	-18.1	-17.0	4.9	-19.0	-16.8	-14.0	-2.4
CENTRAL AMERICA + Dom. Rep.	-9.1	-9.4	-2.6	6.5	-7.5	-4.5	-1.4	-2.1
THE CARIBBEAN	1.1	-0.5	-0.4	7.1	-1.1	-1.3	0.3	2.9
OTHERS	-23.6	-21.9	-14.9	3.5	-26.8	-18.9	-14.2	-0.1
LATIN AMERICA AND THE CARIBBEAN	-9.5	-9.4	-5.8	5.9	-9.5	-8.1	-5.9	-3.6

Source: Prepared by the authors based on official information from tax administration.

### **TABLE 15.**Evolution of Other revenue collection by country group (in percentages -monthly and cumulative-<br/>with respect to the same period of 2020 and 2019; constant prices; January to April 2021)

Regions or country groups	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
MERCOSUR + Mexico	2.2	2.1	6.0	51.8	-10.7	-3.1	8.3	0.6
ANDEANS + Chile	-7.9	-1.6	20.7	60.4	-7.1	-3.3	45.2	-0.3
CENTRAL AMERICA + Dom. Rep.	-10.1	-0.6	55.6	85.4	-9.0	4.8	21.1	4.1
THE CARIBBEAN	-17.8	-9.1	-5.3	8.2	-20.1	-12.0	-3.3	-11.0
OTHERS	6.0	-6.3	2.5	51.3	10.2	15.5	-4.7	6.7
LATIN AMERICA AND THE CARIBBEAN	-8.0	-1.5	25.6	63.4	-11.7	-1.7	18.3	0.1

#### Monthly Percentage Changes

#### **Cumulative Percentage Changes**

Regions or country groups	Jan 21/20	Feb 21/20	Mar 21/20	Apr 21/20	Jan 21/19	Feb 21/19	Mar 21/19	Apr 21/19
MERCOSUR + Mexico	2.2	2.0	2.6	10.4	-10.7	-7.5	-2.7	-2.0
ANDEANS + Chile	-7.9	-4.9	4.1	15.6	-7.1	-5.4	11.4	9.9
CENTRAL AMERICA + Dom. Rep.	-10.1	-5.8	9.4	22.0	-9.0	-3.9	-1.4	0.2
THE CARIBBEAN	-17.8	-13.8	-10.9	-7.7	-20.1	-16.4	-12.2	-11.9
OTHERS	6.0	1.0	-0.5	4.3	10.2	14.7	7.3	-0.7
LATIN AMERICA AND THE CARIBBEAN	-8.0	-5.1	3.1	13.7	-11.7	-7.6	-1.5	-1.0

As a summary, Table 16 and Graph 11 show the cumulative variations by region and type of tax from January to April 2021 with respect to the same period in 2019.

The aggregate of non-Latin American CIAT countries (Others) presents the best collection performance in this first four-month period in the aggregate Total, IT, VAT and Excise Taxes. It is followed by Central America+DR (with an outstanding increase in IT) and Mercosur+Mexico (with an outstanding increase in VAT). The Andeans+Chile countries show negative figures both in the total aggregate and in IT and Excise Taxes, in addition to a total stagnation in VAT (only the Other revenues aggregate, less significant in this group of countries, shows a clear growth). On the other hand, the two Caribbean countries experienced a significant drop in VAT collection, which dragged their overall result into negative territory. By taxes, as previously mentioned, IT generally shows the highest growth, followed by VAT, while Excise Taxes and the Other revenues remain in negative territory.

## TABLE 16.Evolution of revenue collection by type of tax and country groups (in percentages - cumulative<br/>- with respect to the same period of 2019; constant prices; January to April 2021)

Regions or country groups	Total	IT	VAT	Excises	Others
OTHERS	13.1	18.0	16.5	-0.1	-0.7
CENTRAL AMERICA + Dom. Rep.	5.6	10.2	5.5	-2.1	0.2
MERCOSUR + Mexico	4.2	5.2	8.0	-7.4	-2.0
LATIN AMERICA AND THE CARIBBEAN	3.0	5.9	3.9	-3.6	-1.0
ANDEANS + Chile	-1.5	-5.6	0.1	-2.4	9.9
THE CARIBBEAN	-3.5	5.6	-8.5	2.9	-11.9

Cumulative Percentage Changes April 21 / April 19

**GRAPH 11.** Evolution of tax collection by type of tax and country groups (in percentages - cumulative - with respect to the same period of 2019; constant prices; January to April 2021)



### **ANNEX: RRC-CIAT DATABASE (ON LINE)**

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 all the tax administrations analyzed is available on the CIAT web page (<u>https://www.ciat.org/revenue-statistics/?lang=en</u> "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 2020 and 2019 and the temporal distribution patterns of the collection for each of the countries in 2019.



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