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The challenges of taxation in the digital economy: analysis of the Ecuadorian tax system

Los retos de la fiscalidad en la economía digital: análisis de sistema tributario de Ecuador

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Abstract

The purpose of this research is to evaluate the current state of taxation of the digital economy and project its contribution to the tax system in Ecuador. A methodology of qualitative approach and exploratory scope was used, through a comparative matrix of Latin American countries, their BEPS regulations and an analysis of the effectiveness of the actions taken on taxes on the digital economy. Statistical data was taken from Tax Administrations, the Economic Commission for Latin America and the Caribbean, the Inter-American Center of Tax Administrations and the KPMG Tax News Digital Economy Report. For the projection of fiscal income, the Financial Statements of multinational companies that do not have headquarters in Ecuador were considered and through simple regression the future collection was estimated. The results showed that the projection of digital taxes in Ecuador would be 200.27 million dollars for the period 2022-2025, with 80% corresponding to VAT. In addition, it was revealed that there is a derivative collection not considered as a product of the information provided by digital companies, causing additional potential collection. In the diagnosis of advances in international tax matters in the Region, it is concluded that tax regulations in Latin America respond to the tax challenges of the digital economy on a global scale.

Keywords: Digital economy, collection, tax system, streaming, Ecuador.

Resumen

La finalidad de esta investigación es evaluar el estado actual de la fiscalidad de la economía digital y proyectar su contribución al sistema tributario en Ecuador. Se utilizó una metodología de enfoque cualitativo y alcance exploratorio, mediante una matriz comparativa de países de América Latina, sus normativas BEPS y un análisis de efectividad de las acciones tomadas sobre impuestos a la economía digital. Se tomaron datos estadísticos de Administraciones Tributarias, Comisión Económica para América Latina y el Caribe, Centro Interamericano de Administraciones Tributarias y el Informe Tax News Digital Economy de KPMG. Para la proyección de ingresos fiscales, se consideraron los Estados Financieros de empresas multinacionales que no tienen sede en Ecuador y mediante regresión simple se estimó la recaudación futura. Los resultados mostraron que la proyección de impuestos digitales en Ecuador sería de 200,27 millones de dólares para el periodo 2022-2025, siendo el 80% correspondiente al IVA. Además, se reveló que existe una recaudación derivada no considerada producto de la información que brindan las empresas digitales, provocando un potencial recaudatorio adicional. En el diagnóstico de avances en materia tributaria internacional en la Región, se concluye que la normativa tributaria en América Latina responde a los desafíos tributarios de la economía digital a escala global.

Palabras clave: Economía digital, recaudación, sistema tributario, streaming, Ecuador.

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Introduction

The analysis of the tax planning strategy called Base Erosion and Profit Shifting (BEPS) presumes a reduction of the income from the States that could be used for the benefit of the taxpayers in the form of medical attention, retirement pension payments, and improvements of the tourist infrastructure, among others. For this reason, the first BEPS action on the challenges of the digital economy for the taxation of digital companies carried out an in-depth analysis of the tax aspect of multinational companies whose line of business is digital and is of relevant attention from the point of view of business income as it is related to the principle of income taxation in the place of residence, as well as the application of additional indirect taxes on digital services (Kristel et al., 2020).

The most valuable and highly digitized multinational companies, such as Google, Amazon, and Facebook, consistently pay the lowest effective corporate tax rates, facilitating the concentration of wealth in a small number of companies and the people who control them (OECD, 2018; Kling & Cordero, 1999). However, there is resistance from countries that see raising taxes on multinationals as risky for fear that mobile factors of production will move to lower-tax jurisdictions, leading to loss of jobs, investment, and other economic benefits (Abdul Wahab et al., 2021; Gelepathis & Hearson, 2021).

In an increasingly borderless world, national tax laws cannot do the job alone, global companies, especially digital multinationals, can easily bypass higher tax jurisdictions, so capital moves with fluidity and breakneck speed, but these dramatic efficiencies of the digital economy vastly disrupt tax patterns (Bukht & Heeks, 2018;

Mpofu, 2022). National economies are forced to cooperate, shore up revenue leakage, and seek common ground and global parity between tax systems (Pylypenko et al., 2022).

Based on the above, the following research questions are formulated: Do the current tax regulations in Latin America respond to the tax challenges of advancing the digital economy on a global scale? What is Ecuador doing regarding taxation to face the challenges the digital economy brings? Moreover, what would be the estimated amounts of collection to the tax system if the collection of Income Tax to non-resident MNEs in the country is implemented in Ecuador?

This research aims to evaluate the current state of taxation of the digital economy and its future contribution to the tax system in Ecuador.

Literature Review

Regarding Latin America and the Caribbean, some countries have implemented specific guidelines concerning multinationals that do not have a physical presence in their territory and are their resident citizens who make the purchases, as is the case of VAT on digital services. The first to implement this tax were Argentina, Colombia, and Uruguay in 2018, with an average rate of 21% VAT. For the year 2019, Costa Rica and Paraguay are also executing it, and in the following year, Chile, Ecuador, and Mexico put it into operation.

Adopting this tax in the Region shows collection figures that border on an average contribution of 0.03% to GDP, as seen in Table 1, with Chile having the highest assistance.

Table 1.
VAT Collection (millions of dollars)

Country	Period	Collection	%GDP
Argentina	2018	53	0,01
	2019	79	0,02
Chile	Jun-Dec 2020	119,6	0,04
	2021	203,2	0,05
Colombia	Jul-Dec 2018	12,2	0,004
	2019	77	0,02
Costa Rica	Oct 2020	1,7	0,003
	Sep-Dec 2020	7,4	0,01
Ecuador	2021	21,6	0,02
	2021	11,43	0,03
Paraguay	2018	2,7	0,004
	2019	18,4	0,03

Note: Taken from Jiménez y Podestá (2021) based on CIAT (2022).

It should be noted that each State proposed different nuances for the form of collection, prioritizing the withholding mechanism. In the case of Uruguay, it opted to collect the tax directly from non-resident suppliers. However, the taxation of income derived from these transactions remains limited and will require global solutions, such as those proposed in the BEPS Inclusive Framework (CEPAL, 2020).

Ecuadorian regulations applied to digital services

It is worth mentioning that Ecuador is not a member of the Inclusive Framework of the OECD, but it is committed to the tax changes that are being presented. Since 2017 it has been part of the Global Forum on Transparency and Exchange of information for tax purposes; following the same line, it is also part of the Multilateral Convention on Mutual Administrative Assistance (CAAM) in Tax Matters, allowing Ecuador to combat tax evasion and avoidance more efficiently.

Considering the BEPS actions and, to some extent, trying to adhere to the guidelines, for the year 2020 voluntarily, it puts VAT on digital services into operation, applying the same national VAT rate of 12% VAT for the use of platforms. Digital, such as Netflix, Amazon Prime, Uber, Play Station Network, LinkedIn, HBO, Flickr, Zoom, Facebook, and Twitter, do not have tax residence in the country (Durdu, 2020).

For this, the Internal Tax Regime Law is reformed, where the import of digital services is included as taxable services. The generating event will be verified at the time of payment by the resident in favor of the non-resident provider of the digital services.

It also mentions that payments for digital services will be charged on the commission received in the cases of delivery services such as Uber Eats; that is, it will be set only for the intermediation of the service.

According to the Regulation of the Tax Simplification and Progressivity Law, VAT payment is made through withholding Financial Institutions from consumers and cataloging non-resident companies as VAT collection agents, provided they register with the cadaster. Still, at the same time, it allows local companies to issue a purchase statement to support their expenses in importing digital services; non-resident MNEs

would not be obliged to issue invoices, so there is no mandatory registration for these companies.

To request registration in the RUC, the process is not automatic; the application must be sent by email and attach the requested requirements; for taxpayers' information, although there is information in Spanish and English, the process is done through email, and support is not online.

Being our economic reality, having a high rate of informality that borders 50% according to the National Institute of Statistics and Censuses (INEC), the mechanism that works best in our environment, according to the KIT of digital VAT tools for Latin America and the Caribbean (VAT KIT), is that of withholding at source. However, it specifies that there are problems if it is the only means of collection and recommends establishing a regime for VAT collection from non-resident suppliers, possibly in combination with withholdings.

The problems that have been detected according to the VAT KIT in this collection mechanism are a critical lack of data, the difficulty in correcting errors in VAT returns, and the risks of evasion or avoidance, these difficulties being a reality for Ecuador, for example, there are complaints about improper VAT charges to users who acquired a movable asset and not a digital service, since when canceling with a credit card the Bank does not identify if the payment abroad to companies such as Apple, was for goods or digital services. Alternatively, if the purchase has been subject to a refund or cancellation, the bank has already proceeded to collect it and not the MNE; therefore, the difficulty of returning the VAT paid is excellent.

Another problem arises when the service user is abroad and cancels a service consumed outside Ecuador, as with transport service platforms. When withdrawing with a credit card., the Financial Institution withholds the VAT, even when the consumption does not occur in the country.

Lastly, these described problems derive from evasion or avoidance because payments can be made with foreign credit cards, and residents of Ecuador can use the service, and there would be no way to collect VAT.

Regarding the companies that must pay the tax, it maintains a list updated until April with a total of 640 providers with different denominations to be able to link them at the time of payment with the credit card, for example, Uber, register trip,

eat, cash, credits, Paypal, pass, conference, lime, that is, the list is extensive because being the same company, it places the specification for the collection in detail.

Of the total number of suppliers, 20 of them are domiciled in Ecuador or have a PE, among which are online food delivery platforms such as Glovo, Rappi, and Pedidos Ya; those of electronic commerce such as free market and OLX; and subscription television such as GolTV, the tax base being its commission income. As of April 15, 2022, the company Xsolla and Mo Technologies have registered in the SRI cadaster

to act as VAT collection agents, according to the list available on the AT website (SRI, 2022).

These figures show the lack of effectiveness in registering foreign companies without residence in the country, and the payment of VAT falls on the final consumer. Now, regarding the collection for the year 2020 from September to December of 7 million dollars and 2021, 22 million dollars, which for collection purposes has positively impacted its application.

Table 2 below summarizes the advances in taxation for businesses in the digital economy in Latin America concerning VAT up to June 2022.

Table 2.
Summary of Advances in Taxation in Terms of the Digital Economy in Latin America.

Country	Year	VAT Rate	Taxpayer	OECD Guidelines
Argentina	2018	21%	B2C Transactions	It does not comply with the provisions of the preparatory phase. Non-resident suppliers are not required to register as VAT payers. The VAT taxpayer is the buyer.
Brazil	2018	2% - 5% Municipalities	B2C & B2B Transactions	Fails. There is a tax in certain States, and it is managed with various policies and parameters. If it complies, Digital platforms must register with the SII, whether or not they reside in the country. There are 199 digital platforms registered until 2021 (Netflix, Google, and Apple, among others). It has a digital platform in two languages and assists non-resident MNEs so that they can comply with their tax obligations.
Chile	2020	19%	B2C & B2B Transactions	It partially complies since the registration of suppliers was initially mandatory, but later the measures were made more flexible and allowed VAT withholding without registration.
Colombia	2018	19% standard 5% reduced	B2C & B2B Transactions	It does not comply with the provisions of the preparatory phase. Non-resident suppliers are not required to register as VAT payers.
Costa Rica	2019	13% Standard Reduced rates	B2C Transactions	It does not comply with the provisions of the preparatory phase.
Ecuador	2020	12%	B2C Transactions	Non-resident suppliers are not required to register as VAT payers. The VAT taxpayer is the buyer.
Mexico	2020	16%	B2C & B2B Transactions	Complies. Digital platforms must register for the SAT, whether or not they reside in the country. There are 154 digital platforms registered until 2022. It has a digital platform and assists non-resident MNEs so that they can comply with their tax obligations.
Paraguay	2019	10%	B2C Transactions	It does not comply with the provisions of the preparatory phase. The VAT taxpayer is the buyer.
Uruguay	2018	22%	B2C & B2B Transactions	Complies. Digital platforms must register with the DGI, whether or not they reside in the country. Post checks are already running.

Note: Taken from CEPAL (2019) & KPMG (2022). Information of each Tax Administration.

There are similarities in the application of VAT in the Latin American countries under analysis, among which it can be highlighted that they have not created new taxes on the digital economy, but rather, have channeled the existing one and that it has a more significant impact on the collection, as is the case of VAT.

Most have opted to collect via withholding through Financial Institutions, except in the case of Chile, Mexico, and Uruguay; for this reason, it is considered that these countries are more aligned with the OECD guidelines. The VAT rate in most cases is the same as for other types of local transactions, and the taxpayers are the final consumers in all cases, combining with B2C in countries aligned with OECD parameters.

The good practices analyzed by Latin American peers allow Ecuador to set new challenges for VAT management and not only take it to the consumer collection field, which, although representative, does not generate the real purpose of implementing BEPS actions, which is to avoid the erosion of taxable bases and profit transfers of large MNEs.

Challenges in indirect digital taxation for Ecuador

Next, the challenges that Ecuador must face in indirect taxes are detailed, referencing the OECD guidelines and the reality of the Latin American environment.

1. The essential feature of the VAT design is that the tax is collected through a multiphase process, so the entry of non-resident companies to the SRI cadaster must be strengthened.
2. Strengthen the registry of foreign suppliers.
3. Have a platform that provides easy access to registration, guidance, and support to comply with your tax obligations.
4. Receive information on service users from Financial Institutions to have relevant information for controls, for example, payment reports, as is the case in Chile.
5. Receive information from external providers to be able to designate as taxpayers those who carry out local activity but do not have an RUC, for example, Airbnb in property rental services as done by Uruguay.
6. Following the example of Mexico, although it is more difficult for Ecuador because it does not have as much of a market as they do, it is carrying out subsequent controls with the blocking of web addresses, given the persistence in not registering in the

cadaster or worse still not making payments corresponding VAT.

Methodology

Due to the diversity of the context and to answer the research questions, the present work will have a qualitative approach. Regarding the scope of the research, this will be exploratory, which investigates a problem that has not been thoroughly studied or examined in the past (Romero-Subia et al., 2022). This research scope is generally carried out to understand the existing problem better but naturally does not yield a conclusive result (Stebbins, 2001; Vergara-Romero et al., 2022). It must be borne in mind that the digital economy is not new; however, in recent years, it has evolved rapidly and allowed the development of new business models.

In exploratory research, the research process varies depending on discovering new data or knowledge (Macas-Acosta et al., 2022). Also known as interpretive research or the grounded theory approach, the results of this research provide answers to questions such as what, how, and why (Klein et al., 2022; Stebbins, 2001).

As a data collection instrument, a comparative matrix has been designed that includes reference countries in Latin America, their regulations regarding BEPS, and an analysis of the effectiveness of the actions taken. The information to be analyzed will be:

1. Indirect taxes on the digital economy in Latin America.
2. Ecuadorian regulations applied to digital services.
3. Direct taxes of the digital economy in Latin America.
4. Ecuadorian regulations applied to non-residents.

The countries from which the information will be obtained will be Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico, Paraguay, Uruguay, and Ecuador, which have implemented direct and indirect taxes on digital services in the Region.

The documents used to obtain information will be reports, statistical data from the income institutions of the selected countries, laws and regulations related to the digital economy, and reports from entities such as CEPAL, CIAT, the KPMG Tax News Digital Economy Report, and

the application of KPMG on BEPS and the Digital Economy.

For the analysis, the regulations and actions taken by the region's countries regarding the collection of digital services will be reviewed and compared (Vishnevsky et al., 2022); after this, the best practices applied concerning the tax will be selected. Income and VAT will be analyzed if they adjust to the parameters established by the OECD (Faúndez-Ugalde et al., 2021).

Regarding collection estimates, data will be taken from the CEPAL report on the Fiscal Panorama of Latin America (CEPAL, 2019) on the allocation of revenue by country according to each digital multinational to determine the percentage proportion of income they would generate in Ecuador.

Concerning multinationals, the four largest worldwide are chosen for analysis, which are not resident in Ecuador and is the most used nationally in each segment. Therefore, Netflix, Airbnb, Uber, and Apple are chosen for the analysis; Subsequently, their Financial Statements will be reviewed, taken from the page of the U.S. Securities and Exchange Commission (SEC) and segmenting income by the Latin American Region (Latam) for the years 2019, 2020 and 2021.

Finally, an income projection of the five digital MNEs will be made for the years 2022 to 2025 through simple regression of the data. The potential collection of Ecuador will be estimated on the income of multinationals that do not operate in the country.

Results and Discussion

In this section, the questions related to the problem exposed for the object of study are answered, and, in turn, the results are discussed. Do the current tax regulations in Latin America respond to the tax challenges of advancing the digital economy on a global scale?

In the last five years, tax regulations in LATAM have advanced on international tax issues, especially with VAT and Income taxes, which are the predominant collections of tax agencies. In VAT, similarities are observed in its application between the countries analyzed, being in most cases the same rate as for traditional services and opting for collection through withholding at source carried out by Banks.

Regarding Income Tax, the countries that are applying some derivation for its collection are Argentina, Mexico, Paraguay, and Uruguay, taking into account the jurisdictional link of significant economic presence to provide tax authority to the State where there is a digital presence of a signature without the requirement of having a permanent establishment in the country.

What is Ecuador doing regarding taxation to face the challenges the digital economy brings?

Ecuador is adopting measures to adapt to the challenges of international taxation, increasing tax collection, and having a global reach in companies that provide services in the country. Among these measures are the adoption of international standards, the updating of tax laws, the strengthening of the tax administration, and the participation in international forums.

For Ecuador, the challenge in Income Tax is more significant than VAT since there is currently no specific regulation on this subject; being able to create the figure of significant economic presence with the extension of the territoriality and permanence criteria to be able to expand the enforcement of its tax regulations to foreign companies.

When the challenges that the digital economy brings with it are not considered in the tax systems, significant tax collection is not obtained, which will increase year after year. For this reason, it is imperative to consider the recommendations and experiences of countries in the Region to take full advantage of measuring this source of income for the State.

What would be the estimated amounts of collection to the tax system if the collection of Income Tax to non-resident MNEs in the country is implemented in Ecuador?

In the case of Ecuador, an estimate of tax revenue from the digital economy in VAT and Income Tax is made during the years 2022 to 2025. In the case of VAT, there are already historical figures for 2021 for what is considered the collection base, while, in the Income Tax, it would be an assumption of what the SRI could receive if it applied an average rate of 3%.

The multinationals selected for the estimate are Netflix, Airbnb, Uber, and Apple; the information was taken from their Financial Statements for 2019 to 2021 regarding sales in Latin America.

It is essential to mention that the calculations according to Pillars I and II implementation guidelines have been excluded from the estimates since they are not yet in force. Pillar II is more advanced and expected to enter the workforce in 2023. Ecuadorian regulations must be modified for its application and include the global minimum tax of 15%, although since it does not belong to the MI, its application is not mandatory. Pillar I is expected to enter into force in 2024 and still presents a preliminary version in public consultation. You could even take the position of Chile and wait for an international consensus to start applying the Income Tax to MNEs, but this passive position could be reflected in ceasing to collect taxes in this way.

Sales trend in Latin America for Netflix

The sales trend in the last three years for Latin America has been growth, showing a positive variation of 12.92% between 2019 and 2020 and 13.31% between 2020 and 2021, as reported in its Financial Statements published in the SEQ.

Even for the year 2022, it mentions in its quarterly reports that the Region represented the highest revenue growth compared to other regions worldwide.

According to data from Statista, it is forecast that by the end of 2026, the number of subscriptions to video-on-demand (SVOD) platforms in Latin America will exceed 115.6 million subscriptions. In that same year, the paid streaming video platform with the most significant presence in the region is expected to be Netflix, with 42.4% of all SVOD subscriptions in Latin America.

In the same portal, an estimate is presented for the year 2022, in which the Brazilian market for video-on-demand (VoD) streaming, consumption, and video downloads, would generate income of 970 million US dollars, which would make it the largest video-on-demand market in Latin America. In Mexico, it is expected that about 495 million dollars in revenues will be generated.

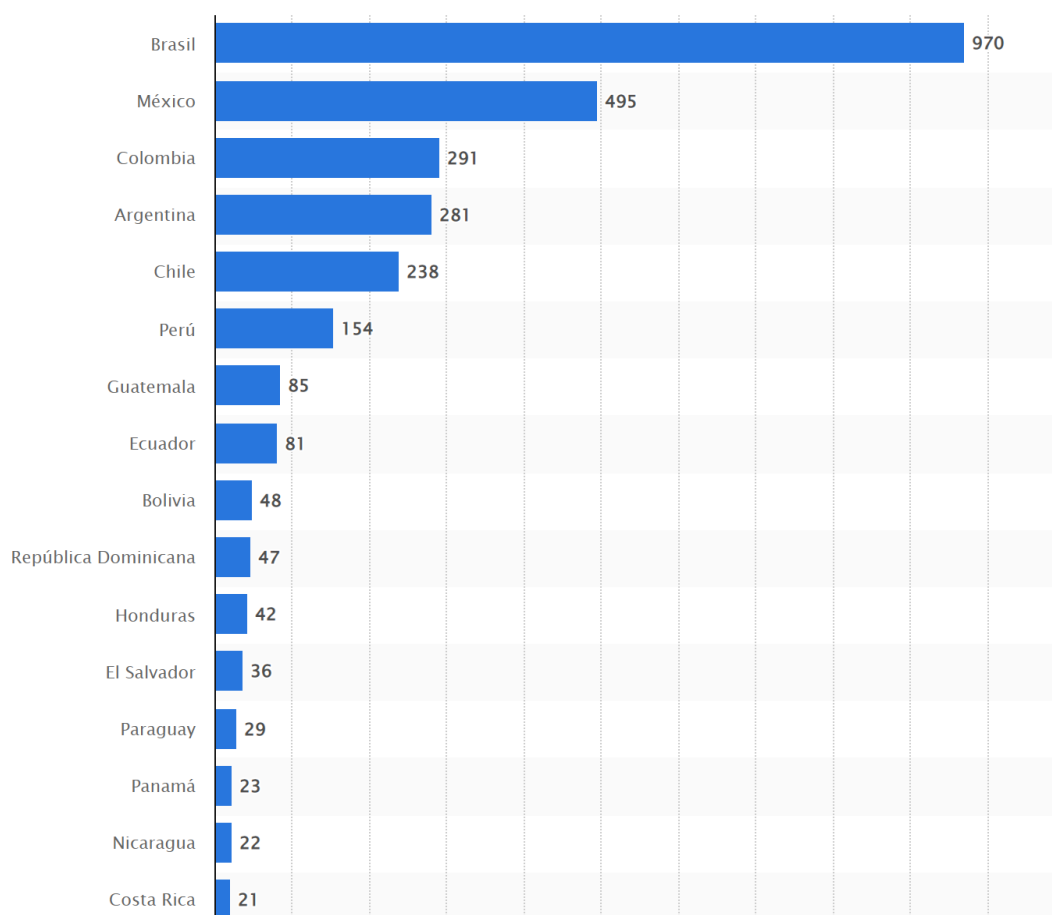


Figure 1. Netflix Revenue from VoD Services in Latin American and Caribbean Countries in 2021 (millions of dollars).

Source: Statista, (2022).

Figure 1 shows that Netflix has its largest market in Brazil, while Ecuador ranks eighth with 81 million by 2021.

For purposes of estimating revenue from Netflix in Latin America for the years 2022 to 2025, the equation that can be seen in Figure 2 was

considered, reflecting figures of \$3,958 million for 2022, \$4,348 for 2023, \$4,739 for the year 2024 and \$5,130 million by 2025. These figures will allow the association to the income generated by the VoD service provided in Ecuador and thus estimate the collection of taxes on digital services for the coming years.

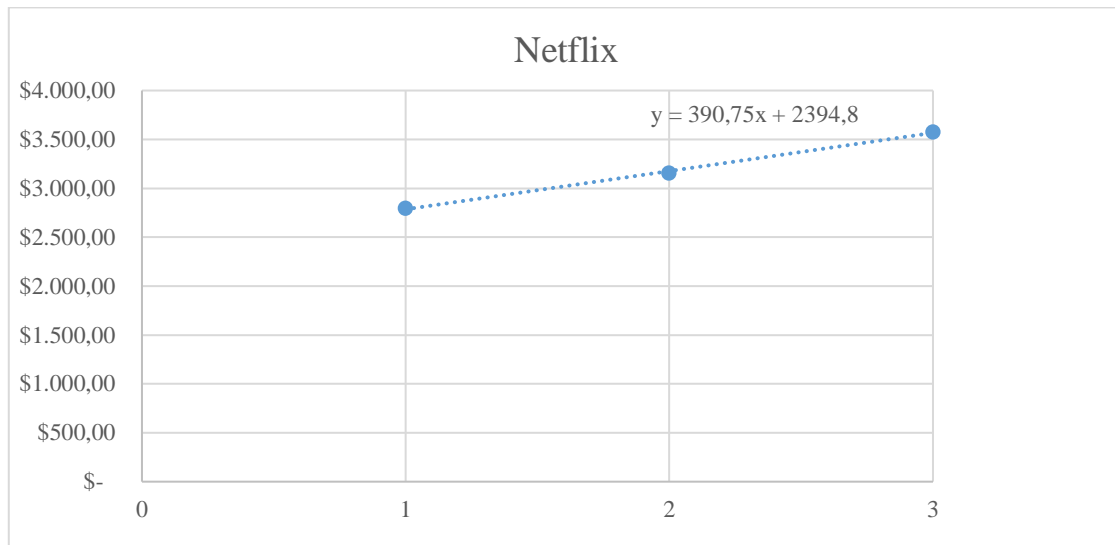


Figure 2. Netflix Sales Trend in Latin America 2019-2021.
Source: U.S. Securities & Exchange Commission (2022).

Airbnb sales trend in Latin America

The type of business that Airbnb presents has different characteristics; since they are an intermediary between those who provide their home for rent and the users who want to rent it, this causes the risk of not paying taxes to be higher since it not only includes the multinational but involves the owners of the real estate.

Worldwide there are 4 million hosts on Airbnb, and 90% of them are individuals; it is estimated that in total, Airbnb hosts have earned a total of 100,000 million dollars to date, with recent years being the fastest growing from income.

The scope of the service it provides is active in 98% of the world, allowing it to elucidate the content of this company and how complex its global taxation would be (Airbnb, 2022).

Although these figures are encouraging for the MNE, from 2019 to 2020, there was a 27.98% decrease in sales for the Region, going from \$336 million to \$242 million for 2020, as a result of the COVID-19 pandemic. This atypical behavior compared to previous years affects the sales trend, as shown in figure 3, so the revenue estimate for the coming years will be cautious. Even more so since, in some countries, there are still lockdowns for short periods.

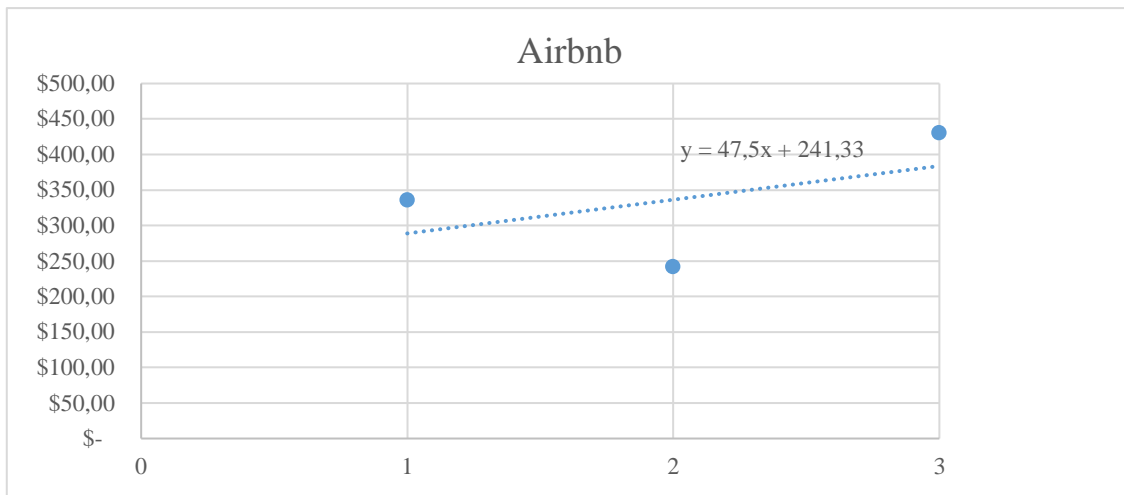


Figure 3. Airbnb Sales Trend in Latin America 2019-2021.
Source: U.S. Securities & Exchange Commission (2022).

Sales trend in Latin America of Uber

Uber in Latin America has found a market in which cooperative "taxis" maintain licenses to operate, so it has had to adapt its business model in the Region. According to *América Economía* magazine, Latam was once a haven for Uber from stiff competition in the United States and European regulatory battles. However, the region has experienced massive demonstrations by taxi drivers against this type of transport, operating in a gray area in most countries.

Uber Technologies uses a massive network to power movement from point A to point B; this includes business divisions such as connecting consumers with independent ride-sharing service providers and connecting other consumers with restaurants, grocery stores, and other stores through delivery service providers.

One of the segments mentioned is drivers who own cars and are looking for a form of income, but they do not have an operating permit and do not pay taxes on the income they receive; similar to the case of Airbnb, the problem is not only the MNE that it does not pay taxes, but individuals are not regulated before the TA to carry out economic activity, which triggers a growth in informality and hinders the reduction of tax gaps.

In the COVID-19 pandemic, mobility restrictions significantly affected company revenues worldwide, and Latam was no exception; as can be seen in figure 4, sales decreased in 2020 compared to 2019 with a negative variation of 30.45%, and for the following period it is possible to recover with 9.42%. However, it still does not reach sales before the pandemic.

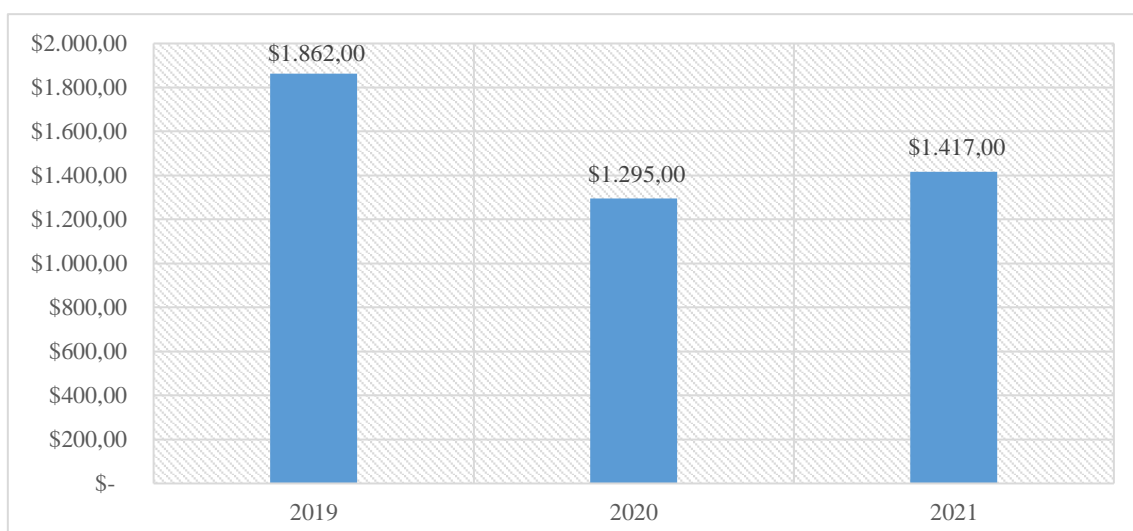


Figure 4. Uber Sales in Latin America 2019-2021.
Source: U.S. Securities & Exchange Commission (2022).

The income recorded in its Financial Statements comprises three segments; the first is Mobility Income, mainly from the fees paid by drivers for the use of the platform; the second, delivery income, is given by the use that merchants and couriers make of the delivery platform and the last; freight revenue, consisting of revenue from freight transportation services provided to shippers. This allows knowing the company's scope so far in its services, identifying the national segment that has income from work through the platform, and carrying out respective tax controls.

Although Uber has not yet recovered from its market loss during the confinement period, the revenue trend in figure 5 shows that the recovery in sales levels, if the factors do not change, will take a few years to recover pre-pandemic levels. The impact on the economy and the increase in unemployment generated a growth in informality, being one of the jobs taken by people who work in parallel to the use of the platform; in Ecuador, the segment above is known as "informal taxi drivers".



Figure 5. Uber trend in Latin America 2019-2021.
Source: U.S. Securities & Exchange Commission (2022).

Apple's Latin American sales tren

For Apple, the trend is presented with growth figures for the following years; this is due to the favorable variations, as observed in figure 6, for the years 2019 to 2020, which registered an increase of 6.54%, while the income variation in 2020 and 2021 were 23.08%. A relevant piece of data found in the annual performance reports for

products and services shows an increase in sales for services by 27%, which includes sales of the Company's advertising, AppleCare, cloud, digital content, and payments.

The increase described in its notes to the Financial Statements shows the importance of taxation focused on cross-border digital services.

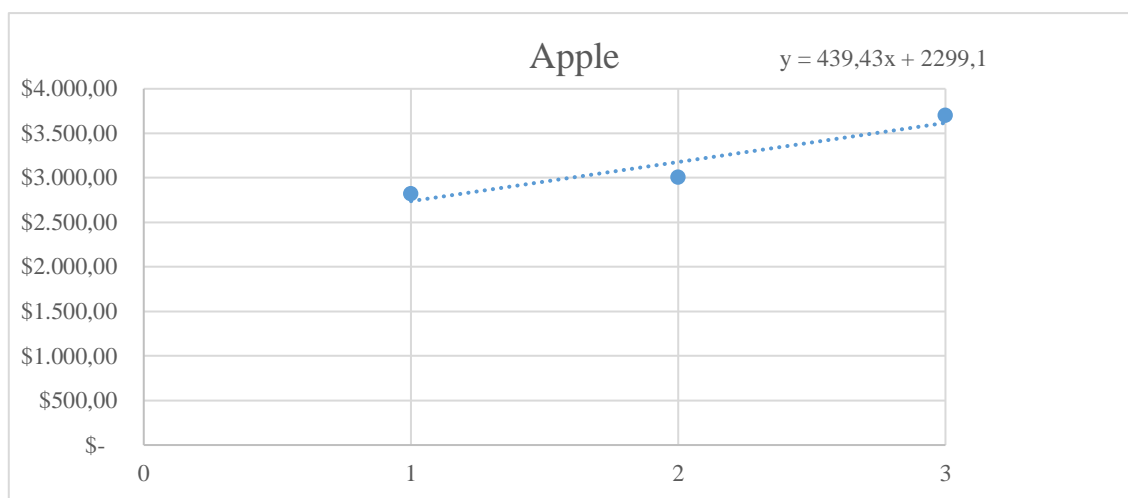


Figure 6. Apple trend in Latin America 2019-2021.
Source: U.S. Securities & Exchange Commission (2022).

The reality that these services continue to expand and are not taxed prevents competition under similar conditions and implies a growing impact on tax revenues. Local economic activities in Latin America, although they are not highly digitized if they are displaced by these business models, as is the case of accommodation services that do pay corresponding taxes, as well as the permits that those who provide mobility must obtain to local people or companies that sell imported products paying tariffs and taxes. In contrast, foreign ones do so without any type of specific national regulation for them.

The negative impact on the income of local legal affects future collection levels, an effect that could further deepen if local companies or companies from traditional sectors seek to move towards the digital sector and industry out their operations from abroad, still causing plus the loss of revenue.

Table 3 shows the consolidated sales that these four large multinational companies NAUA (Netflix, Airbnb, Uber, and Apple) have had in Latin America in fiscal periods 2019-2021.

Table 3.
Summary of NAUA sales in Latin America (millions of dollars)

	EMN	2019	2020	2021
Sales in LATAM	Netflix	2795,4	3156,7	3576,9
	Airbnb	336	242	431
	Uber	1862	1295	1417
	Apple	2823,45	3008	3702,31

Source: U.S. Securities & Exchange Commission (2022).

Estimation of tax revenue from digital taxes in Ecuador

Considering the sales trend of four large multinationals for the years 2022 to 2025 in figures, as shown in Table 4, and taking as a reference the estimates of the 2019 CEPAL Report on the Fiscal Panorama in Latin America, Ecuador has a 2.23 % of the average share of revenue of the mentioned MNEs.

The taxable base would be the net income, so it is estimated that in Income Tax, it could contribute 6.81 million dollars for 2023, \$7.25 million for 2024, and \$7.69 million for 2025. The

proposal presented is cautious since other digital companies provide services in the country and have not been considered as they do not have figures applied to the Region in their Financial Statements. Although 2022 is still at stake, due to the effects of the Ecuadorian Tax Code in article 11, the validity of the law in the annual Income Tax will apply from the first day of the following calendar year. If we analyze retrospectively, an estimated \$17.63 million have not been received for Income Tax on digital services from 2020 to 2022, which is the average application period in the rest of the Latin American countries.

In the case of VAT, the estimated collection is feasible since the regulations contemplate collecting this tax. As can be seen in table 4, tax revenue is higher for this indirect tax versus the direct one.

The collection of indirect taxes has represented Ecuador over the years, more than 50% of the national contribution, contributing to the country's tax structure with 6% of GDP. Highlighting the relevance of strengthening the collection of this tax

considering the new businesses of the digital economy.

It is estimated that from 2022 to 2025, the collection for the treasury would be \$112.48 million. The form of VAT collection for digital services in Ecuador does not interfere even when Pillar 1 is applied since the current configuration of tax collection is from final consumers and not from MNEs. Therefore, the moratorium given in this Pillar did not impact a future elimination of your collection, at least in the short or medium term.

Table 4.

Estimated tax revenue from taxes on the digital economy in Ecuador (millions of dollars).

	EMN	2022	2023	2024	2025
LATAM Trend	Netflix	3,958	4,348	4,739	5,130
	Airbnb	431	479	526	574
	Uber	1,080	857	635	412
	Apple	4,057	4,496	4,936	5,375
Ecuador	Netflix	88,26	96,67	105,69	114,4
	Airbnb	9,62	10,68	11,74	12,8
	Uber	24,08	19,12	14,15	9,19
	Apple	90,47	100,27	110,07	119,86
TOTAL		212,42	227,03	241,64	256,25
VAT Collection 12%		25,49	27,24	29	30,75
Rent Collection 3%		6,37	6,81	7,25	7,69

Source: U.S. Securities & Exchange Commission (2022) & CEPAL (2019).

Conclusions

The studies around the imposition of the digital economy show how the physical presence of the companies on which the taxation was based is already possible to apply in this type of company. The emerging regulation establishes tax rights based on the value that companies create through participation in consumer or market states. The initiatives on the part of the OECD have evolved to adapt to the new tax challenges that have had more significant growth, to the speed of response by the Tax Administrations, being its last proposal that of Pillars I and II, which are He hopes they will be of great help to regulate the collection of Income Tax worldwide when they come into force.

The initiatives presented regarding taxes on companies belonging to the digital economy are premised on the collection need of the states and to avoid abusive treatment by MNEs to avoid paying their tax obligations by being located in places of low taxation and being digital companies that have a global reach, their income is high. At the same time, the remuneration to society materialized in taxes is low.

In the diagnosis of advances in international tax matters in the Region, it is concluded that the tax regulations in Latin America respond to the tax challenges of advancing the digital economy on a global scale. In most cases, they are structured accordingly. Consumption taxes are not aligned with the OECD guidelines, which seek a consensual solution based predominantly on proposals to change the rules for the taxation of corporate profits of multinationals.

In the estimation of tax revenues from digital taxes in the Ecuadorian tax system, it is concluded that, currently, the contribution to the Ecuadorian State has been 28.80 million dollars in VAT collection for digital services, and it is estimated that this figure will increase. Year after year, due to the supposed increase in consumption reaching annual statistics between 25 and 30 million dollars.

In Income Tax, estimates are shown of the figures that the SRI could collect if it considers the collection of a fee of 3% on income, an amount that amounts to \$28.12 million until 2025, with an approximate annual collection of \$7 million. Finally, it must be considered that although implementing a tax on the digital

economy generates a positive collection effect, the decisions made in this area cannot be unilateral but instead follow the recommendations and guidelines of international organizations that allow adequate or consensual treatment of digital taxes.

Finally, the recapitulation of the work brings a relevant point in the investigation, this being the use of the supply of information that these digital companies can provide, that is, not only for the collection of taxes from them but through the derivation of data. For tax purposes, as a result of the extensive database of operations with subscribers, users, or payments, causing other potential collections. For example, real estate rentals that do not have their activity registered in the RUC base and do not pay taxes are unfair competition for the tourism sector. In Spain, this debate was presented years ago. Currently, they should report those platforms that mediate in the transfer of tourist homes, as is the case of Airbnb, having to identify the owner or owners of the house in the report, enter the full address of the property, the number of rental days including the start and end of the assignment, and the amount received by the owners of the home; All this information is beneficial to be able to place this type of business derived from the digital economy on the radar of the Tax Administration.

Another similar case is that of influencers, YouTubers, or Instagrammers, who receive income and are not subject to paying any tax as residents in the country. Although they should comply with the national regulations for paying income tax or VAT under any regime that their income level allows, they do not do so due to the lack of control or not having the necessary information to identify them quickly. For this reason, it is specified that the data provided by the digital platforms will be a way of supplying information to control national evaders.

Likewise, Financial Institutions that withhold foreign payments for digital services could provide information without prior request, for subsequent controls, for debugging the database of digital companies, and inclusion of new ones in the list so that it can be shortened. The evasion gap in the payment of VAT to digital services.

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