Electronic government and its tax impact on income tax collection: in the commercial sector of the Portoviejo Canton, 2021

Governor electrónico e seu impacto tributário na arrecadação do imposto de renda: no setor comercial do cantão de Portoviejo, 2021

Gobierno electrónico y su impacto tributario en la recaudación del impuesto a la renta: en el sector comercial del Cantón Portoviejo, 2021

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ABSTRACT

The objective of this research was to analyze the tax impact of electronic government on income tax collection in the commercial sector of the Portoviejo canton. The methodology was developed under the quantitative approach, of a non-experimental type, with a field design, of a descriptive level. The population was made up of seven (07) officials who work in the Strategic Planning and Management Department of the Portoviejo Internal Revenue Service. The results indicated that 71.4% of those interviewed considered that the Electronic government in Portoviejo provides information, procedures and digital services; 67% believed that Portoviejo merchants do not have the necessary knowledge to properly use technologies that facilitate the cancellation of taxes; 69% indicated that there is the necessary technological infrastructure in Portoviejo for merchants to pay their contributions in a timely manner; 100% estimated that tax collection contributes to the quality of life and 90% considered that merchants pay their taxes. It is concluded that: the electronic government offers services adapted to the requirements of the users and the taxpayers of the city of Portoviejo comply with their obligations; however, on many occasions they resort to the support of accountants or managers to formalize the payment of taxes. In the case of those who do not comply with their tax duties, it is generally due to ignorance. It is considered that Ecuador has the necessary technological resources to comply with the requirement of payment of taxes via electronic government.

Keywords: Electronic government, taxes, effectiveness, citizens.

RESUMO

O objetivo desta pesquisa foi analisar o impacto tributário do governo eletrônico na arrecadação do imposto de renda no setor comercial do cantão de Portoviejo. A metodologia desenvolvida se sob a abordagem quantitativa, de tipo não experimental, com delineamento de campo, de nível descritivo. A população foi composta por sete (07) funcionários que trabalham no Departamento de Planejamento e Gestão Estratégica da Receita Federal de Portoviejo. Os resultados indicaram que 71,4% dos entrevistados consideraram que o Governo Eletrônico em Portoviejo oferece informações, procedimentos e serviços digitais; 67% acreditam que os comerciantes de Portoviejo não possuem o conhecimento necessário para utilizar adequadamente tecnologias que facilitem o cancelamento de impostos; 69% indicaram que existe em Portoviejo a infraestrutura tecnológica necessária para que os comerciantes paguem suas contribuições em tempo hábil; 100% estimaram que a arrecadação de impostos contribui para a qualidade de vida e 90% consideraram que os comerciantes pagam seus impostos. Conclui-se que: o governo eletrônico oferece serviços adaptados às exigências dos usuários e os contribuintes da cidade de Portoviejo cumprem suas obrigações; entretanto, muitas vezes recorrem ao apoio de contadores ou gerentes para formalizar o pagamento de tributos. No caso de quem não cumpre os seus deveres fiscais, geralmente é por desconhecimento. Considera-se que Equador dispõe dos recursos tecnológicos necessários para cumprir a exigência de pagamento de impostos via governo eletrônico.

Palavras-chave: Governo eletrônico, impostos, eficácia, cidadãos.

RESUMEN

El objetivo de esta investigación fue analizar el impacto tributario del gobierno electrónico en la recaudación del impuesto a la renta en el sector comercial del cantón Portoviejo. La metodología se desarrolló bajo el enfoque cuantitativo, de tipo no experimental, con diseño de campo, de nivel descriptivo. La población estuvo conformada por siete (07) funcionarios que laboran en el Departamento de planificación y gestión estratégica del Servicio de Rentas Internas de Portoviejo. Los resultados indicaron que el 71,4% de los entrevistados consideró que el gobierno Electrónico en Portoviejo brinda información, trámites y servicios digitales; el 67% opinó que los comerciantes de Portoviejo no cuentan con los conocimientos necesarios para emplear las tecnologías adecuadamente que faciliten la cancelación de los tributos; 69% señaló que se cuenta con la infraestructura tecnológica necesaria en Portoviejo para que los comerciantes realicen el pago de sus contribuciones de forma oportuna; el 100% estimó que la recaudación de los impuestos contribuye con la calidad de vida y el 90% consideró que los comerciantes pagan sus tributos. Se concluye que: el gobierno electrónico ofrece servicios adaptados a los requerimientos de los usuarios y los contribuyentes de la ciudad de Portoviejo cumplen con sus obligaciones; sin embargo, en muchas ocasiones acuden al apoyo de contadores o gestores para formalizar el pago de los impuestos. En el caso de aquellos que no cumplen con sus deberes tributarios, generalmente es por desconocimiento. Se considera que Ecuador cuenta con los recursos tecnológicos necesarios para cumplir con la exigencia del pago de los impuestos vía gobierno electrónico.

Palabras-clave: Gobierno electrónico, impuestos, eficacia, ciudadanos.
E-government in the tax sphere is intended to be a support instrument to increase efficiency in the management of tax collection, given its great importance in the provision of economic resources which are necessary to meet the needs of quality public services, health, security and other governmental responsibilities required and demanded by the population. In the current era, the use of Information and Communication Technologies (ICT) is fundamental to achieve this goal, since they allow reconfiguring from the virtual space the access to interrelationships in a faster, more efficient and comfortable way, and with much more scope for the citizen with respect to the procedures to which it gives rise.

In view of the above premises, the report issued by the Secretariat for Political Affairs of the Organization of American States (OAS) defines e-government as the use of Information and Communication Technologies (ICT) by government institutions to qualitatively improve the services and information offered to citizens, increase the efficiency and effectiveness of public management, and substantially increase public sector transparency and citizen participation (OAS, n.d.).

In another contribution on the concept of E-Government, (Barragán & Guevara, 2016) states that it is an ICT application whose main objective is to bring the government closer to the citizen, the company, the employee and the government itself; in order to inform, interact, innovate, integrate and carry out transactions in a secure, timely and real-time manner. For citizens, e-government is established as an important means of institutional participation, which allows the interconnection of the different processes of public management (Cabrera, 2021). According to (Santos & Souza, 2021) e-government is the transformation of every administration, it is the change in the governance model, a management concept that combines the intensive use of ICT with management, planning and operation methods.

Along the same lines, (Pico & Salazar, 2021) define e-government as the use of ICTs by the public administrations of the State through the improvement of their internal management, the supply of services and accurate information, and the means of interaction and exchange with citizens, as well as with the rest of their similar organizations, and even with private enterprise. It is important to mention that in estimates of (Rupérez, 2016) the implementation of e-Government involves a staged process and the fulfillment of a series of phases, which do not necessarily have to be consecutive. Regarding this, (Cardona, 2002) distinguishes five phases: Presence, Interaction, Transaction, Transformation and Democratic Participation. The following is the author’s description of each of these phases:

a) In the stage referred to as Presence: government offices would use ICTs to provide basic information to the public, limiting themselves to a simple presentation from the organization's perspective and progressively shifting towards a citizen's perspective.

b) The Interaction phase: this involves increasing the capacity of the services provided electronically, so that citizens can access critical information, download forms and contact the Institution via e-mail.

c) In terms of Transaction: government institutions make self-service applications available to the public, so that citizens can carry out complete procedures online.

d) Regarding the Transformation phase: it consists of a cultural leap, since it involves a redefinition of government services and the entire operation of the Public Administration.

e) Concerning democratic participation: this implies that citizens actively participate in the definition of public policies and in the review and control of the political activities of elected leaders.

Based on the previous points made by various institutions and researchers, it is clear that e-government is recognized as an online public service, which is made available to users so that they can digitally carry out various processes of interest to them, such as paying their taxes, from the comfort of their home or any place of their choice with an Internet connection access point from a computer, cell phone or other electronic devices, and thus comply with the procedures and obligations set forth in the country's regulations.

At this point it is worth noting that, in Ecuador, as indicated by, (Zamora, Arrobo, & Cornejo, 2018) the Electronic Government Plan (PGE) was created in 2009 as an instrument for the modernization of the State. This plan was projected with the objective of joining institutional efforts to create pioneering and innovative forms of interaction between the Government and the Ecuadorian civil society. Along the same lines, the report issued by the Ministry of Telecommunications and the Information Society (MINTEL) highlights the adoption of ICTs by public institutions to guarantee their operation and achieve greater agility in the management of procedures and resources. In addition, an institutional and regulatory framework was created to guarantee security in online operations. (MINTEL, 2021). The Ecuador Digital Policy translates into modern services, cutting costs, reducing processing times, increasing transparency, and thus providing a better service to citizens (MINTEL, 2021).
The scope of the PGE has reached the provincial levels of Ecuador, however, from various angles it is perceived that, the development of e-government in the Decentralized Autonomous Governments (GAD) has not had the same progress, if compared to the largest providers of e-services corresponding to the central government (Zambrano, Vélez, & Vélez, 2019). In the specific case of Manabi, the e-government ranking at the municipal level places Portoviejo in the first position, with a score of 49.05, mainly due to the dimension Information and Transaction (Zambrano, Vélez, & Vélez, 2019).

As has been indicated, the introduction of electronic government in the public administration brings with it the possibility of carrying out more quickly and efficiently the various operations that make up its daily work, among them, the collection of taxes generated by taxpayers. It should be said that taxation as an instrument for redistribution and the achievement of economic and social policy goals, are normally established in the Constitution (García Novoa, 2013)(Martínez Avendaño, 2021). (Martínez Avendaño, 2021) as resources of the collectivity that have to be transferred to the different stages of the country, to be subsequently returned to the citizenry, as public services and goods. In the Social State, it is not taxation but taxation that is the instrument of solidarity. That is why we speak of a Tax State (García Novoa, 2013).

In line with these definitions, (García Castro, 2021) refers, tax collection is directly associated with the generation of public resources. Income tax is levied on the generation of benefits by taxpayers who make economic life in the country. Its collection level is an indication of the level of prosperity. On the other hand, (Valdiviezo, Lluchicasa, & Soto, 2021) denote, income tax is considered as the main source of income for the country’s economy, which fulfills its effect through obligations acquired by taxpayers, hence, the degree of importance of tax collection for the benefits it grants back in services to its citizens.

In attention to what has been expressed, the States at a global level and in particular the Ecuadorian nation, seek to guarantee the economic resources to cover public expenditures, in this framework of ideas, (Mejía, Pino, & Parrales, 2019) estimate, the tax system in Ecuador has become one of the main sources of public income, tax obligations represent a significant part that guarantee the development of social and economic policies for the benefit of the community, in this sense tax obligations should be an important object of not only external but also managerial control.

It is precisely at this point where e-government provides the public administration with a good practice for managing and streamlining conventional procedures through ICTs, since it allows, as suggested by (Velasquez, 2020) to pay income tax (ISR), to calculate it or even to return its surplus to the taxpayer, in addition to reducing waiting times, speeding up the process and making it more accessible to taxpayers.

However, despite what has been outlined, according to (Mejía, Pino, & Parrales, 2019) in Ecuador there is a lack of incentives for citizens to pay their taxes according to the conditions set forth by law. Similarly (Serrano, 2021) indicates, in the Ecuadorian nation the evasion rate of non-compliance in the payment of Income Tax by companies is 65.3%, according to the latest available data obtained by ECLAC. In the same line (Yugcha, 2020) states that, although it is true that the Internal Revenue Service (SRI) through strategies has managed to promote tax culture in a formidable amount of Ecuadorians, there is another set of them that due to ignorance or the fact of not submitting to tax laws tend to evade taxes.

On the same subject, (Andrade & Celvallos, 2020) emphasize that tax culture should be promoted to contribute to the country’s development, since there is still a significant proportion of collection for late payment interest and tax fines, which even exceeds the collection of the Simplified Tax System (RISE), which paradoxically make up more than half of the total number of companies in the country.

In this regard, according to statistics from the Internal Revenue Service (SRI), the share of national revenue for the period from January to December 2020 was in the order of US$12,381,845 (SRI, 2021). (SRI, 2021). Of this amount, the subtotal for Income Tax Collected corresponded to 4,406,689 USD$; the amount for individuals was 155,781USD$ and for legal entities 1,092,781USD$. In reference to the period from January to December 2021, the national percentage of the participation in the collection was 84% for a total internal subtotal of 11,274,913 USD$; as for the Income Tax Collected for natural persons is equivalent to 143,140 USD$ and for legal persons 569,505 USD$ (SRI, 2021). (IRS, 2021).

Based on the data generated by the SRI on Income Tax Collection for the period 2020, during which the pandemic crisis developed where the confinement measures were established and where ICT played a fundamental role at all levels, it is observed that there was less national collection for that period compared to the year 2021 (see table 1).

Table 1. Comparative Analysis of Income Tax Collected at National Level Period 2020-2021

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Individuals</td>
<td>USD$ 155,781</td>
<td>USD$ 1,092,781</td>
</tr>
<tr>
<td>Legal entities</td>
<td>USD$ 143,140</td>
<td>USD$ 569,505</td>
</tr>
</tbody>
</table>

Note: Prepared by the authors. Source: (SRI, 2021)
From the above it can be inferred that a percentage of citizens in compliance with their responsibility and obligation to pay income tax during the crisis period of 2020 and the so-called new normality or post-pandemic period of 2021, made effective use of e-government tools to comply with such regulatory procedure. In reference to the decrease in the payment of income tax in 2020 in Ecuador compared to the following year, part of this may be related to the following, as stated by (Quispe & Ayaviri, 2021) the presence of an external factor such as Covid-19 significantly deepens the negative effect on the company's income and financial results and on future investments. There is a direct relationship between the economic cycle and tax revenues.

In the same framework (Diaz, Morán, López, & Maldonado, 2022) presented the report of the Inter-American Center of Tax Administrations (CIAT) that brings together 23 countries, of which Ecuador is a member, when weighting the figures of the total collection in 2021, with respect to 2020 they find that, all groups exhibit relative drops associated with the COVID-19 pandemic in the first quarter, showing a remarkable recovery, especially during the second quarter. In the Ecuadorian case, CIAT figures on the total accumulated collection of tax administrations in 2021, show negative rates from January to March (7.2%; -2.4% and -0.1%) respectively, however, at the end of the year in December of that same year the balance was favorably inclined closing at an average rate of 12.9%, which shows a gradual recovery underway.

Contextualizing, in the Canton of Portoviejo, province of Manabí, Ecuador, there are a significant number of taxpayers, both natural and legal, who have tax obligations according to the estimated in the laws of the country. In this sense, according to (SRI, 2021) in the year 2020 in the canton of Portoviejo, the amount of tax collection was 45,095,526 USD$. Likewise, in estimates of this same organization for the year 2021 the total income tax collection in the canton of Portoviejo reflects an amount of 56,558,813 USD$ (SRI, 2021).

These figures follow the trend observed at the national level, i.e., there is evidence of lower tax collection in Portoviejo in 2020 during the pandemic period, as opposed to 2021, the post-pandemic period, where a slight but significant increase in tax payments and therefore in tax collection in Portoviejo is expected (see Table 2).

| Table 2. Comparative Analysis of Income Tax Collected in Portoviejo-Manabí Period 2020-2021 |
|---------------------------------|-----------------|
| Income Tax Collected            | USD$            |
| January-December 2020           | 45,095,526      |
| January-December 2021           | 56,558,813      |

Note: Prepared by the authors. Source: (SRI, 2021)

It should be added in this section, according to (Suárez, Pacheco, Flores, & Bravo, 2022) that the economic activities with an important percentage participation in the gross value added (GVA) of Portoviejo in 2018, contemplate among others, wholesale and retail trade as the third most representative activity in Portoviejo, surpassed by the construction sector, transport and communications. Likewise, these authors highlight that retail trade in Portoviejo is mostly carried out within the spectrum of informal work in the busiest areas of the city (Suárez, Pacheco, Flores, & Bravo, 2022).

Based on the aforementioned approaches and in order to inquire about the situation that the society of this locality must contribute to the nation through the payment of taxes and voluntary compliance with tax obligations, this paper aims to analyze the tax impact of e-government in the collection of income tax in the commercial sector of the canton of Portoviejo, considering the experiences of taxpayers in the use of the same.

**METHODOLOGY**

The present study is ascribed to the quantitative approach, under a non-experimental, field research, and descriptive level, oriented to reveal the most characteristic details of the Electronic Government (e-Government) that have an impact on the collection of taxes from the commerce sector in the canton of Portoviejo. For (Hernández, Fernández, & Baptista, 2014) non-experimental research is that which is carried out without deliberately manipulating variables, i.e., phenomena are observed as they occur in their natural context, and then analyzed. On the other hand, these same authors indicate that descriptive research can be defined as “that which seeks to specify important properties of people, groups, communities or any other phenomenon that is subjected to analysis. A series of questions is selected and each of them is measured independently in order to describe what is being investigated” (p.102).

With respect to field research in estimates of (Arias, 2012) “consists of the collection of all directly from the subjects under investigation, or from the reality where the facts occur, without manipulating or controlling any variables, i.e., the
researcher obtains the information, but does not alter the existing conditions” (p. 31). In this case, the primary data were obtained through officials belonging to the planning and strategic management department of the Internal Revenue Service of Portoviejo.

Likewise, the present study was supported by a documentary research, which allowed the conformation of the theoretical support and also the bibliographic data was accessed in relation to the values of the tax collection in the city of Portoviejo, whose information is found in the SRI’s web page. For this purpose, (Morales, 2003) argues, as in the process of documentary research, documents are essentially available, which are the result of other research, of reflections of theoreticians, which represent the theoretical basis of the area under investigation, knowledge is built from the reading, analysis, reflection and interpretation of these documents. In the case of the present research concerning e-government and its tax impact on income tax collection in the commercial sector of the Portoviejo canton, 2021.

The population consisted of seven (07) officials working in the Planning and Strategic Management Department of the Internal Revenue Service of Portoviejo, who are closely linked to the subject under investigation and gave their informed consent to participate in this research. According to (Arias, 2012) the population is defined as “a finite or infinite set of elements with common characteristics to which the conclusions of the research will be extended. This is delimited by the problem and the objectives of the study”. (p. 81).

As for the sample, given the small size of the population, the entire population will be taken for the study in question. (Chávez, 2007) “the census sample is that portion that represents the entire population” (p.205).

Regarding the data collection techniques and instruments, this study used a survey as a data collection technique and a nine (09) item questionnaire with heterogeneous closed dichotomous and multiple choice questions as an instrument. For (Arias, 2012) through the survey, “it is intended to obtain information provided by a group or sample of subjects about themselves, or in relation to a particular topic” (p. 70). On the other hand (Hernández, Fernández, & Baptista, 2014) state that “a questionnaire consists of a set of questions regarding one or more variables to be measured” (p. 217).

On the other hand, the documentary information of interest was collected in the database of digital pages such as Google Scholar, indexed journals, pages of normative documents with SRI and digital repositories of national and international universities, among others. Documentary techniques consist of the identification, collection and analysis of documents related to the fact or context studied (Jurado Rojas, 2005). (Jurado Rojas, 2005).

To support the information gathered by the measurement instrument and guarantee its applicability, it is necessary to evaluate its validity and reliability. In the opinion of (Chávez, 2007) “validity is the efficiency with which an instrument measures what it is intended to measure” (p. 193). In this sense, the validity of the instrument was subjected to the judgment of experts, both in methodology and in the research subject.

Regarding the reliability of the instrument, (Hernández, Fernández, & Baptista, 2014) denote “it refers to the degree to which its repeated action to the same subject, produces the same results” (p.242). In this sense, for the calculation of the reliability of the instruments we will proceed to use the Cronbach’s Alpha internal consistency model, in this way the same was applied to a pilot sample different from the study sample, but with very similar characteristics. Once the pilot test was carried out, the Cronbach’s statistic gave a value of 0.83, which, according to the criteria of (Palella & Martins, 2012) is of high reliability and therefore the instrument can be applied to the entire population.

Lastly, in the present research, the quantitative data were processed through the Descriptive Statistical Method, which according to (Hernández, Fernández, & Baptista, 2014) proposes as the description of the data to then analyze and relate them to each other with their variables. For its part, the bibliographic information collected was treated using the document content analysis technique. In estimates of (López Noguero, 2002) content analysis can be considered as a particular form of document analysis. With this technique it is not the style of the text that is to be analyzed, but the ideas expressed in it, being the meaning of the words, themes or phrases what is to be quantified.

Finally, for the presentation of the results, a series of tables were designed to show the frequency distribution measures used for the purposes of the analysis with their respective percentage values obtained through the data processing technique employed.

**RESULTS**

The findings are presented below, after the ordering, systematization, reflection and interpretation of the information collected through the application of the data instrument and, having carried out these activities, we proceeded to represent the percentage analysis of the results obtained; for this purpose, frequency distribution tables and bar graphs were used.
Table 3. Frequency distribution of the question Do you consider that the electronic government in Portoviejo offers digital information, procedures and services?

<table>
<thead>
<tr>
<th>Response options</th>
<th>Frequency (F)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>5</td>
<td>71.4</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>28.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Own elaboration (2023). Data collection instrument

Figure 1. Frequency distribution of the question Do you consider that the electronic government in Portoviejo offers digital information, procedures and services?

According to the results obtained, it was determined that 71.4% of the officials interviewed consider that the e-government in Portoviejo provides information, procedures and digital services, which offers the opportunity to carry out the processes of payment of taxation in merchants.

Table 4. Frequency distribution of the question: Do you consider that Portoviejo’s merchants have the necessary knowledge to make contributions through e-Government?

<table>
<thead>
<tr>
<th>Response options</th>
<th>Frequency (F)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>2</td>
<td>33</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>67</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Own elaboration (2023). Data collection instrument

Figure 2. Frequency distribution of the question: Do you consider that Portoviejo’s merchants have the necessary knowledge to make contributions through e-Government?

Based on the data found, 67% of the interviewees belonging to the Planning and Strategic Management Department of the Internal Revenue Service of Portoviejo consider that the merchants of Portoviejo do not have the necessary knowledge
to use the technologies adequately to facilitate the payment of taxes; while 33% consider that there is knowledge among the merchants of the processes for the payment of their contributions through the tools provided by the e-Government.

Table 5. Frequential description of the question: Do you consider that Ecuador has the necessary technological infrastructure for the merchants of Portoviejo to pay their contributions?

<table>
<thead>
<tr>
<th>Response options</th>
<th>Frequency (F)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>5</td>
<td>69</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>31</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Own elaboration (2023). Data collection instrument

The results show that 69% of the officials indicate that the necessary technological infrastructure is in place in Portoviejo for merchants to pay their taxes in a timely manner. In contrast, 31% consider that there are not adequate means to provide this service, which generates weaknesses that affect the collection of economic income from this tax for the State.

Table 6. Frequency description of the question: Do you consider that the collection of taxes contributes to the quality of life in the canton of Portoviejo?

<table>
<thead>
<tr>
<th>Response options</th>
<th>Frequency (F)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Own elaboration (2023). Data collection instrument

In relation to what was stated by the officials, 100% believe that tax collection contributes to the quality of life, since the economic income is used for public policies and social programs.
Electronic government and its tax impact on income tax collection: in the commercial sector of the Portoviejo Canton, 2021

Table 7. Frequency description of the question: Do you consider that in the commercial sector of the Portoviejo canton, during 2021 the merchants paid the Income Tax?

<table>
<thead>
<tr>
<th>Response options</th>
<th>Frequency (F)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>6</td>
<td>90</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Own elaboration (2023). Data collection instrument

Figure 5. Frequency description of the question: Do you consider that in the commercial sector of the Portoviejo canton, during 2021 the merchants paid the Income Tax?

Note: Own elaboration (2023). Data collection instrument

The results show that the majority of those interviewed (90%) consider that merchants pay their taxes through the mechanisms available to them by the State, while 2% maintain that the opposite is the case.

DISCUSSION

At the end of the data analysis process, it is clear that the officials belonging to the Ecuadorian Revenue Service consider that the official website of the Planning and Strategic Management Department of the SRI offers the services necessary to carry out the corresponding payments by the merchants of Portoviejo, as described in the definition provided by (Gómez, 2007) E-government is the combination of information and communication technologies, on the one hand, and service-oriented government leadership to simplify processes and bring government services closer to the citizen.

Likewise, it was found that 67% of the officials interviewed belonging to the Internal Revenue Service of Portoviejo consider that there is no knowledge among merchants about the mechanisms for the payment of taxes through the electronic government; this corresponds to the findings of the research carried out by (Moreira & Hidalgo, 2020) according to which the existing problems in terms of e-government in Ecuador are alarming, due to the neuralgic deficiency due to the lack of knowledge about the technologies applied to e-government.

In line with the above, with reference to Portoviejo (Panchana Romero, 2022) (Panchana Romero, 2022) based on information obtained through the Internal Revenue Service (SRI), this author indicates that for the year 2019, although a good amount of taxes were collected, also, it was observed that for fines and interest shows exuberant values (128, 926.04 USD$) paid by taxpayers due to many factors, among which it can be believed that it is due to the lack of tax culture of taxpayers.

Regarding the consultation on whether the necessary technological infrastructure exists for Portoviejo Merchants to make the payment, most of the officials (69%) consider that it does; however, a weakness of the System to generate an impact on contributions as they consider (Otoya & Llamas, 2017) The phenomenon of the digital economy is materialized in the advances in communication and information technologies, which have rapidly modernized the ways of exchanging goods and services, affecting the fiscal control of the States.

Regarding the question of whether tax collection contributes to the quality of life of the inhabitants of the canton of Portoviejo, 100% consider that it contributes to the quality of life; as pointed out by these same authors (Mejía, Pino, & Parrales, 2019) y (Valdiviezo, Lluvichusca, & Soto, 2021) tax obligations represent a significant part that guarantee the development of social and economic policies for the benefit of society, in this sense tax obligations should be an important object of not only external but also managerial control. This shows that the officials are clear about the primordial role it has, being considered as the main source of income for the country’s economy, which fulfills its effect through obligations.
acquired by taxpayers, which is why tax collection has a degree of importance due to the governmental benefits it provides.

In this same consideration. (Pinchi & Villacorta, 2018) point out, in relation to the fact that tax collection is very important for the regions and departments throughout the country; since this has the purpose of allocating resources to the population, in order to create works and/or public services, then not performing a good tax collection, affects the budgets that it is determined to provide to the community.

Regarding the questioning of tax payment by taxpayers in the commercial sector of the canton of Portoviejo, it was found that 90% of the officials consider that the merchants have paid their taxes to the IRS but despite this, many taxpayers comply by resorting to accountants or people who make their statements in order to comply with their obligations in time to avoid paying fines and interest, but in reality they do not know what is the true meaning of having their tax and accounting obligations up to date, which are affected by not having a proper handling of invoices or sales receipts.

In considerations of (Bordones, Caraballo, & Guevara, 2019) the existence of a tax culture facilitates compliance with formal duties, and also aims to involve the individuals of society in the process and make them aware of the fact that it is a constitutional duty to contribute to the State and to communicate to the same community that the fundamental reasons for taxation are to provide the Nation with the necessary means for it to fulfill its primary function, such as guaranteeing effective and efficient public services to citizens, among other social requirements.

**CONCLUSIONS**

After having investigated among the officials of the Planning and Strategic Management Department of the Internal Revenue Service of Portoviejo and described through the application of the surveys in which the impact of the tax contribution through E-Government is investigated, the following conclusions are presented:

Officials consider that taxes throughout history have become an important source of government revenues and a substantial determinant of the country’s overall economy, which are redirected towards policies and programs that affect the quality of life of the inhabitants.

The electronic government offers services adapted to the requirements of the users and the taxpayers of the city of Portoviejo comply with their obligations; however, in many occasions they turn to the support of accountants or managers to formalize the payment of taxes. In the case of those who do not comply with their tax obligations, it is generally due to lack of knowledge. It is considered that Ecuador has the necessary technological resources to comply with the requirement to pay taxes via e-government.

With respect to this last point, in view of the findings of this research and in comparison with what is outlined in the literature consulted, it is clear that in Ecuador there is indeed the necessary platform to collect the tax via e-government, which has gradually been incorporated in all the provinces and parishes of the country.

Thus, at the national level, the figures provided by the SRI show a collection for the year 2020, corresponding to natural persons of US$ 155,781, compared to US$ 1,092,781 in 2021. On the other hand, the category of legal entities contributed a total of US$ 143,140 in 2020, as opposed to US$ 569,505 in 2021. It is worth mentioning that part of the decrease in income tax collection in 2020 was due to the outbreak of the global health crisis, as already explained in the preceding lines of this document. It can also be seen from the figures that by 2021, there was a certain recovery in the post-pandemic collection.

At the cantonal level, specifically concerning the city of Portoviejo, it was found that IRS statistics for the year 2020, the contribution was 45,095,526 USD$, while for the year 2021, it was estimated at 56,558,813 USD$. This situation is similar to the national context, i.e., there is a decrease in tax payments in 2020 during the pandemic and a gradual recovery in 2021. Specifically, these oscillations in the figures collected for income tax in the referenced years are partly explained by the pandemic affectionation that occurred in the year 2020, of course there is a recovery in the year 2021 compared to the previous year, however, However, it is still not possible to reach the expected figures in the commercial sector of Portoviejo, since most of the activities of this sector are informal in the retail sector, in addition to the fact that the implementation of the tax culture in this Ecuadorian town is more strongly required

**REFERENCES**


Electronic government and its tax impact on income tax collection: in the commercial sector of the Portoviejo Canton, 2021


Contribution of each author to the manuscript:

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