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Importance of Forensic Audit with Respect to Income Tax Evasion (ISR) in Panama

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Abstract

In all countries, the Tax Administration (TA) in Panama faces challenges intrinsic to problems related to tax evasion. The objective of this article is to analyze the relationship between the independent variables Forensic Audit and Income Tax (ISR). This research is characterized by a mixed approach, with a descriptive, correlative and explanatory approach. First, a Likert-type questionnaire with a dichotomous configuration was developed. The quantitative analysis makes a comparison between the income of the ISR and those of the CI, IT and the national collection agency. The findings show deficiencies in the management of theoretical models of FA, with little participation in judicial processes reviewed by expert reports and other fiscal evaluations. It is essential to take into account, and most importantly, the ability to have an AF model that incorporates specialized elements of the FA in order to detect evasive actions of the ISR.

Keywords: Forensi, Audit, Audit, Taxes.

Introduction

In Panama, it is clear that despite the controls established by the agencies in charge of administering the national tax (TA), tax evasion is an eventuality of non-compliance with tax laws, which has not been efficiently addressed by society with effective mechanisms. This problem has impacted both the fair distribution of the taxed burden and the collection of taxes.

As a consequence, the AF forensic audit is used as a tool to identify observable irregularities and collect solid evidence, which improves the efficiency of the tax administration. It focuses on preventing and stopping any economic and financial crime, such as corporate fraud, corruption, terrorist financing, money laundering, sabotage, embezzlement, and excessive compensation to employees and others (Rodríguez & Martínez, 2024).

Materials and Methods

The research method is encompassed within a descriptive type, in which a reality is described in all its main elements. This type has a causal relationship; Its objective is to identify the causes of a problem rather than simply describing or aggravating it (Guevara, Verdesoto, & Castro, 2020). This research details the characteristics of the audit procedures applied by the audit

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agency in the identification of Income Tax (ISR) scams in Panama, as well as the audit methods used during the audit, with tax audits, which allow determining tax evasion.

On the other hand, the study uses the correlational approach, aimed at determining the relationship or level of association between 2 or more terms, variables or categories in a specific sample or context, where there is an inclination or predisposition between the variables, which makes it crucial to examine if there is any correlation between the variables or concepts studied here. (Gómez, 2020)

That is, if the techniques of the Forensic Auditor show a negative trend with respect to the procedure used by the auditors, it would be empirically demonstrated that the evasion of the ISR is the cause. In this way, the relationship of the audit procedures applied by the General Directorate of Revenue is identified as one of the forensic audit techniques

The regression model used is based on assuming the relationship of the data with the normal distribution, with a dependent variable (response Y) and a group of independent variables (X). This study links the variables Tax Evasion (DV) with Forensic Audit Procedures and Techniques (VI). Correlational inference and descriptive analysis aim to identify the relationship of these variables in the defined hypothesis.

Two descriptive questions were developed, examining the connection between the scientific theory of the Forensic Auditor and the detection of fraud or tax evasion. Explanatory research has a causal relationship and aims to identify the causes of a problem rather than simply describe or address it (Guevara, Verdesoto, & Castro, 2020).

Results

Forensic Audit (FA) Theory in the Determination of Income Tax Fraud

The findings obtained with the instrument applied to determine the level of theoretical knowledge and the use of sources in journals or reports intrinsic to professional practice, 2 questions were answered (P.8 and P.9) were developed and graded on a Likert scale from 1 to 5. According to the survey structure (also known as the "survey structure"), these elements are part of Dimension 1, which is divided into five sections that correspond to the four dimensions.

Regarding the knowledge of Forensic Auditing (FA), it is evident that the answers obtained come from consulting articles, books, journals, laws and others. They show that (1) some are aware of PA as an element that could be present in their professional practice, (2) many do, and (3) 28 represent people who are unaware of or have little knowledge about PA. In their professional practice, the two missing (unanswered) values can be observed in the results. There are 28 people who have little or no knowledge about PA, and the values that did not have an answer are presented. Missing (unanswered) values are shown in the results.

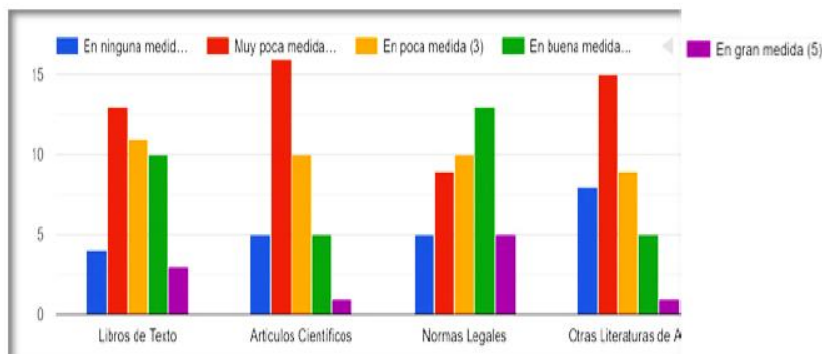


Figure 1. Knowledge of Forensic Audits (FA). In Original Spanish Language

The findings of the previous question (P. 8) are related, in particular, 38 distributed in items 1, 2 and 3 (none, very little and little measure), in relation to the tabulation of the data in the implementation of the theories in the audit reports.

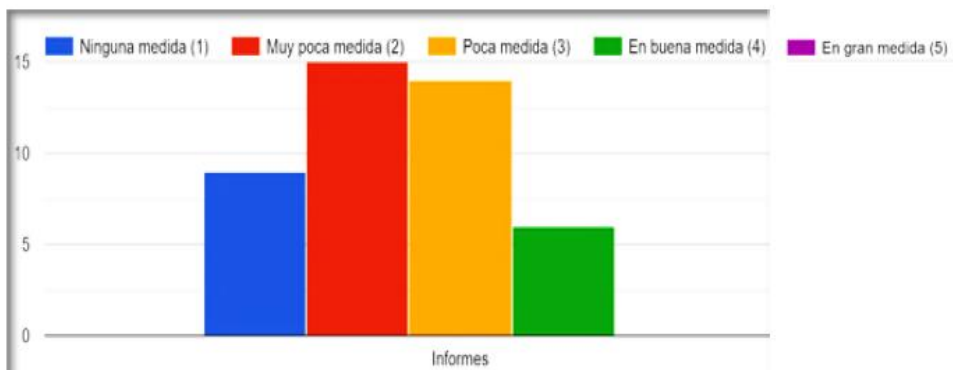


Figure 2. Use Of Quotations from the Forensic Audit (FA) Theory in Expert Reports. In Original Spanish Language

Statements and Analysis of the Audit Procedure in Relation to Income Tax (ISR) Evasion.

The questionnaire collects field data in 16 questions (from P. 10 to P. 25). The discrimination criterion for the "define" and "analyze" of audit procedures that can be inferred in response to the identification and evasion of the ISR. The purpose is to determine the classification of exposure on the rates of some tax applied and processed to natural persons (PN). In this case, the collection of information on: a. Value added tax (VAT); b. RSI; c. CSS employee fee; do. employer quota for CSS; and, d. Others, as shown below:

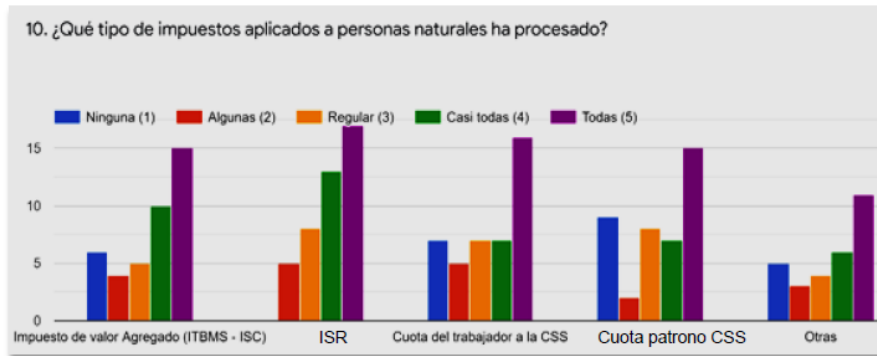


Figure 3. Types of Taxes Used and Processed for Natural Persons. in Original Spanish Language

The results in Figure 3 for all five categories show that almost all or nearly all respondents performed auditing, tax filing, and other tasks. For example, twenty-five of VAT, thirty of ISR, twenty quotas of employees of the CSS and nineteen of employer quotas of the CSS are visible. While the most common responses of the tax types applied and processed for PJ analysis include VAT (30), ISR (31), Worker CSS Rate (28), Employer CSS Rate (28), and others.

Additional procedures that relate to all tax processes include ISR, employee CSS, and employer CSS. The ISR is the one that processes most of these.

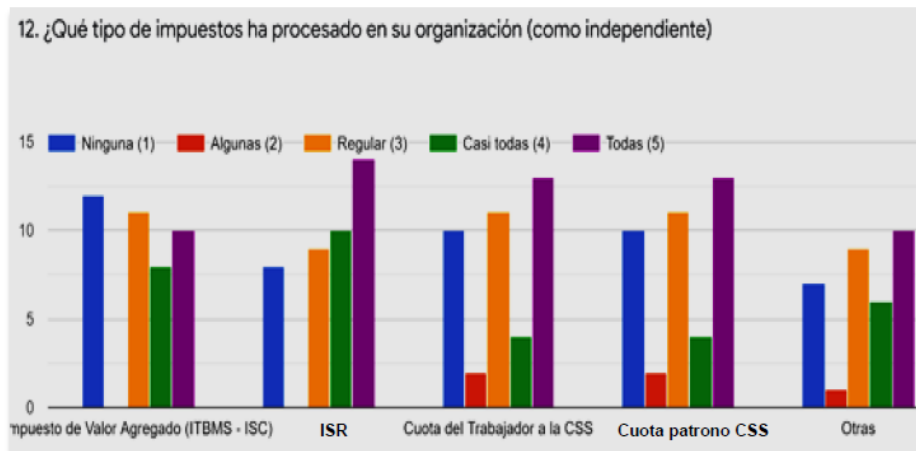


Figure 4. Tax Rates Applied and Processed Independently. in Original Spanish Language

Still, some people don't process VAT. When asked about the importance of tax refunds that have been processed, most believe they are important, and the total importance of these refund activities by the nation's TA is $23\% + 11\% = 34\%$.

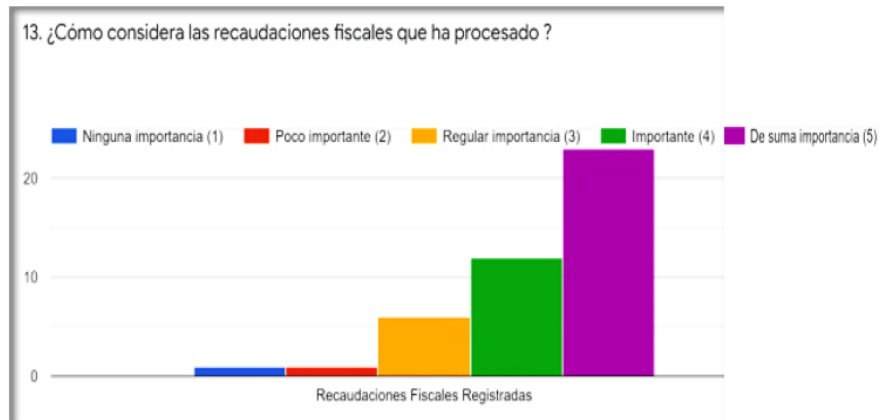


Figure 5. Relevance of the Tax Collections Processed. In Original Spanish Language

The results that were significant for the collection of PN and PJ (Figures 6 and 7) show similarities (analogies). 33 topics are considered to be very significant and important (i.e. 76.7%) for the natural person (EP). Similarly, on this same scale, 32 respondents, or 74.4%, believe that tax refunds are meaningful and essential.

Importancia de las recaudaciones fiscales en persona natural (PN)

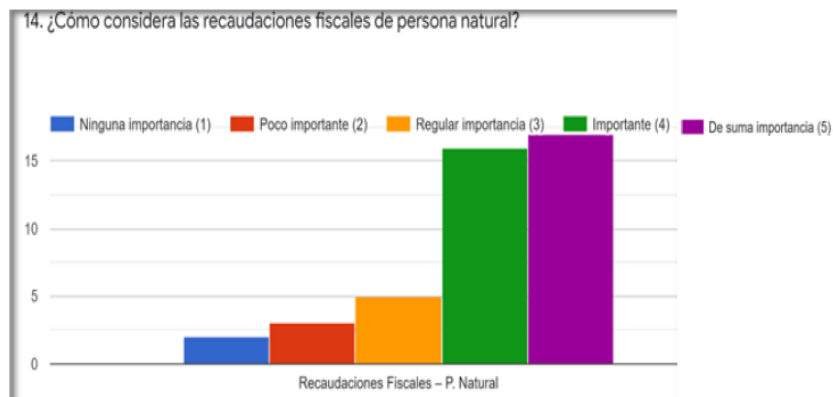


Figure 6. Relevance of Tax Collection in the Natural Persons Processed. In Original Spanish Language

Importancia de las recaudaciones fiscales en persona jurídica (PJ)

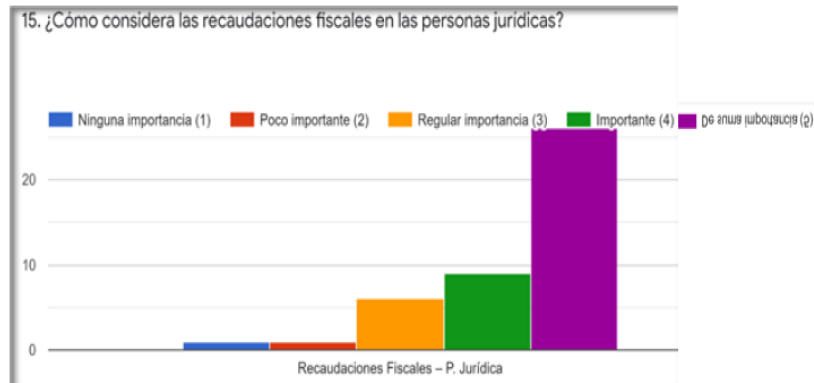


Figure 7. Relevance of Tax Collection in A Legal Person Pursued. In Original Spanish Language

When there is tax evasion, there is a certain lack of participation in the processes. These results lead to the evaluation of ineffective detection tools and low participation in processes that demonstrate tax evasion. 30.2% had not participated in audit processes when there was tax evasion, 16.3% had tried to do so at some time and 27.9% had rarely participated, according to the data (88). If there are no tools to identify tax evasion, 74.4% are in the interrogation category.

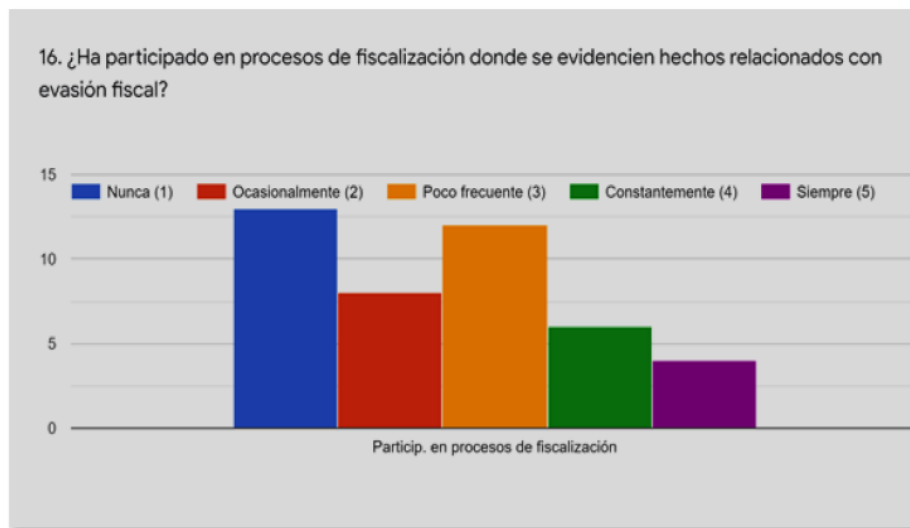


Figure 8. Participation In Processes Where Tax Evasion Is Demonstrated. In Original Spanish Language

In reference to the audit process, favorable results for TA are evidenced, without showing a logic, according to the results of the previous item (P. 16); In addition, unlike the "occasionally" answer, there is evidence of an inconsistency with the data from the previous questions.



Figure 9. Participation in the Fiscal Process With Results in Favor of the FA. In Original Spanish Language

The relationship between the level of understanding of audit instructions in the identification and evasion of ISR by an auditor, auditor and accountant in this type of activity depends on the degree of knowledge of the definitions of Equivalent Tax Burden (EFF). More than half of the respondents (53.8% to be exact) correctly identified the PFE as a representative of tax revenues. According to the other highest percentage (38.5%), indirect and direct revenues with respect to GDP. It is believed that they agree with the philosophical notion of scientific activity that he develops, although the answer was not entirely certain.

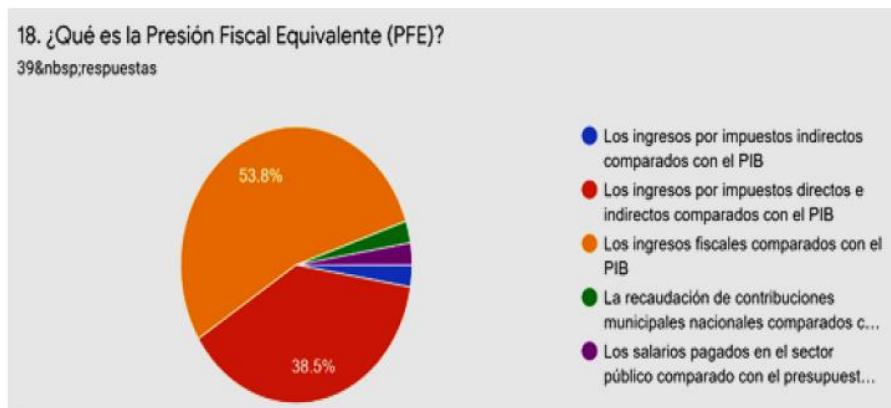


Figure 10. Knowledge of The Equivalent Tax Procedure. In Original Spanish Language

The objective was to learn more about the opinions of those who would be involved in the PFE in the country today (see graph 11). 51.2% believe that there is a "deficient fiscal policy"; The remaining "almost 90%" manages a divided criterion according to the lack of financial resources that allow the execution of the state budget and the fiscal deficit with weaknesses in the national structure.



Figure 11. Implications of VET. In Original Spanish Language

Regarding the audit procedure used by the DGI auditors and the role of experts in tax activities, it was discussed which are the tax incentives that Panama has legally sacrificed from the tax and that are still in force. This indicates that there are different opinions: 34.9% went to the tourism industry, 23.3% to multinational companies and 18.6% mainly to the agricultural sector. Surveys account for 76.8% of respondents (see Figure 12) because of these incentives. The DGI, the MEF and the Comptroller General of the Republic (CGR) with the compilation of financial resources and laws that each guarantor institution could use for its legal sustainability).

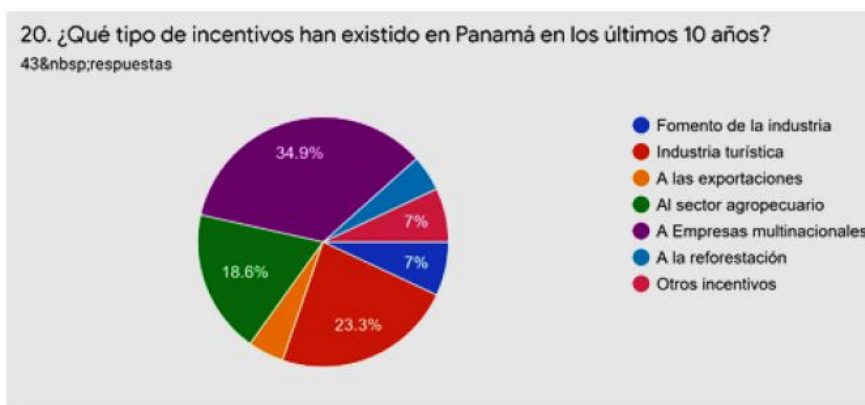


Figure 12. Knowledge Of Payment Incentives In The Last 10 Years. In Original Spanish Language

According to the graph above, the data are oriented to the use of electricity (39.5%), the use of 25 litres of gas (34.9%) and mortgage interest (20.9%) to assess whether they are aware of the existence and payments of subsidies. This criterion includes 95.3%, which experts consider to be "almost" the total amount of subsidies (see Figure 13). We can assume that the responses to the above questions about subsidies, which included the option of "other subsidies", did not discriminate against other family, social and educational subsidies.

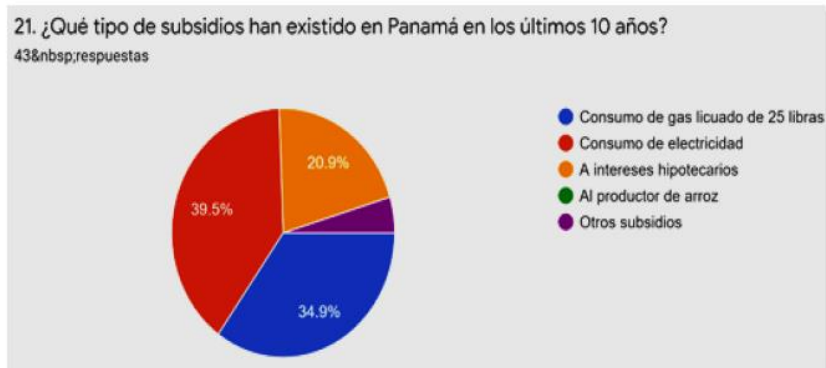


Figure 13. Types Of Knowledge of Subsidies in the Last 10 Years. in Original Spanish Language
Sixty percent of respondents know that incentives are used in other jurisdictions, while forty percent do not (see Figure 14).

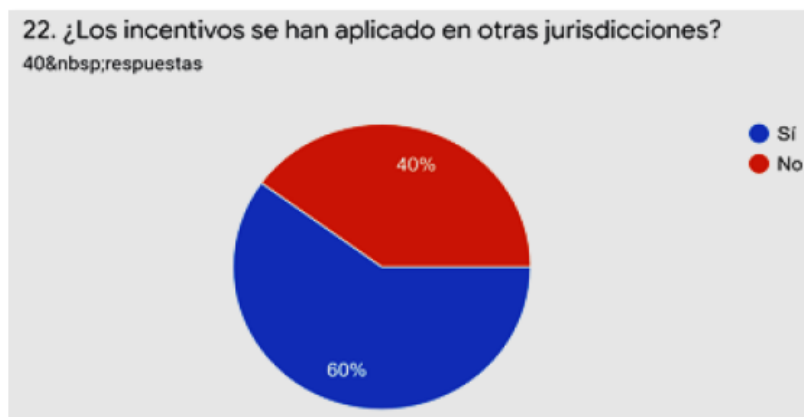


Figure 14. Knowledge of the Application of Incentives in Other Jurisdictions. In Original Spanish Language

As for the lack of income declaration received, 66.7% believe that it is the reason, while 16.7% consider that the deduction of expenses and fictitious expenses is minimal. Detecting it in the EEFF requires subject matter experts, including financial stability experts, forensic auditors, and taxpayers, as the principle of evasion is comparable to fraud.

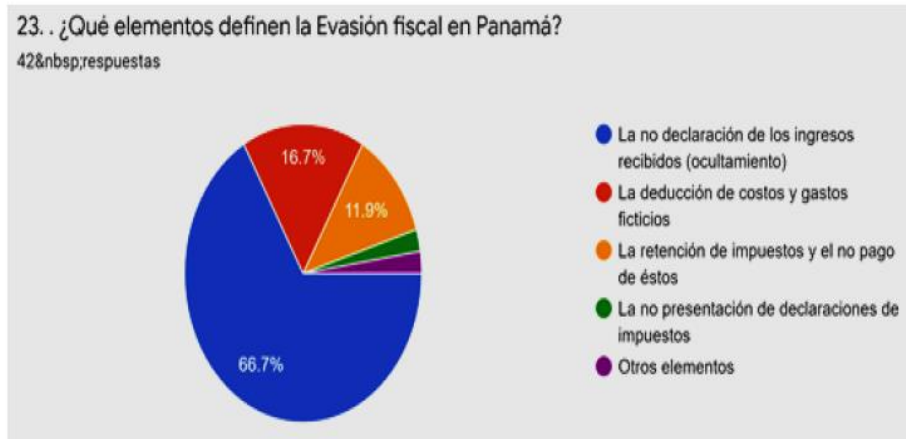


Figure 15. Criteria For Tax Evasion In Panama. In Original Spanish Language

On the other hand, despite appearing identical, deception is the result of evasion. In this sense, as requested, the findings show that the elements that determine fraud with 58.1% of tax amounts exceed 300,000 (see graph 15). Although the results clearly express the technological limitations that exist at this time. While 72.1% indicate that they do not have technological tools that allow them to face evasion; the rest, on the contrary, claim to have the availability.

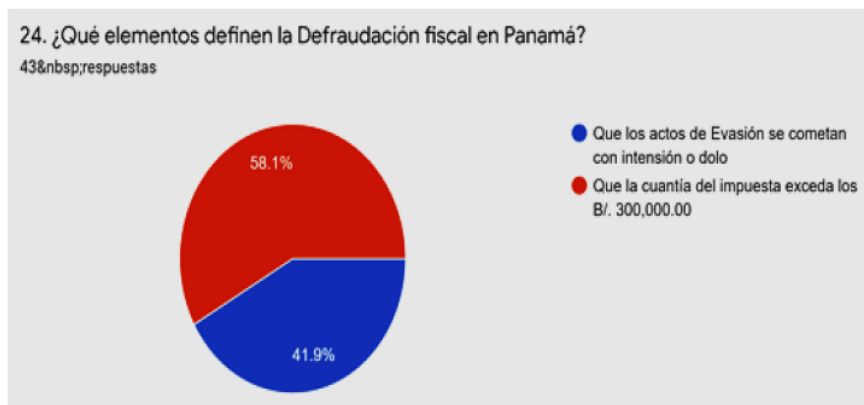


Figure 16. Elements of Tax Fraud In Panama. In Original Spanish Language

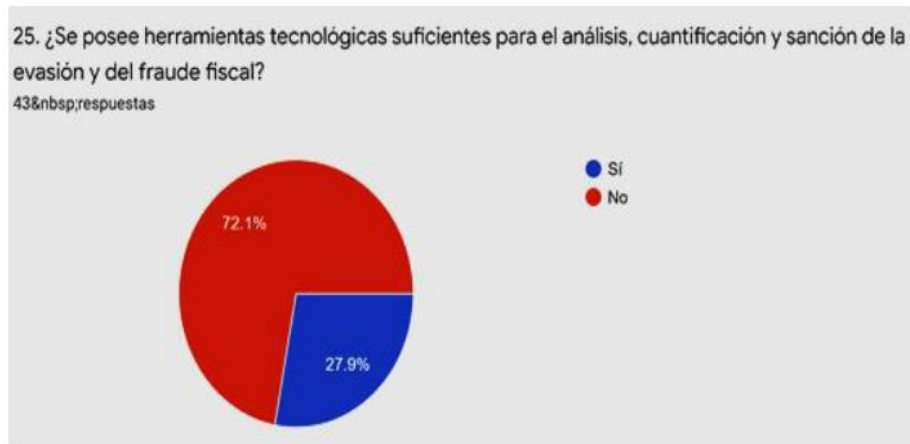


Figure 17. Criteria For The Availability of Technological Tools for the Evaluation of Tax Fraud In Panama. In Original Spanish Language

Comparison of Forensic Audit Methods According to the Audit Procedure Applied

The questionnaire posed six questions, the purpose of which is to evaluate the criteria of the auditor, accountant and others (technical sample) regarding the knowledge and application of AM techniques in the exercise of their activity (e.g., taxes, finance, financial stability, forensic auditing, among others). Capturing field value illustrates well the importance of additive manufacturing techniques as an essential component of the control process; without undermining its support for the capture of taxpayers' financial and tax data collected in the EEFF. The results are marked by the criteria of "Important" (34.9%) and "Very Important" (30.2%); which represents 65.1%, the rest remain in normal importance and little importance.

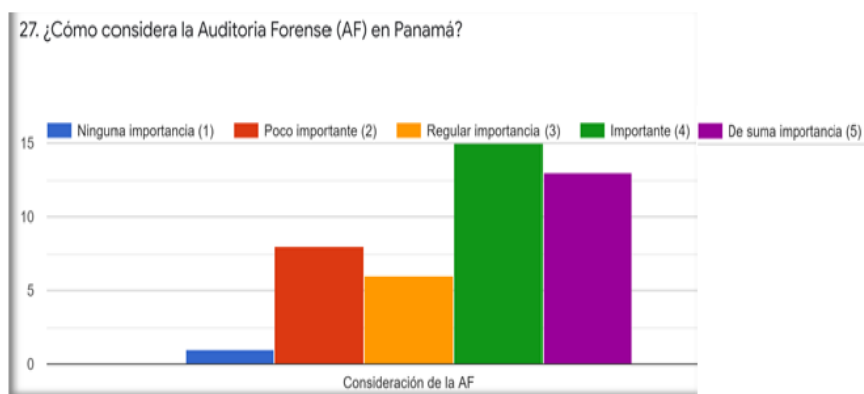


Figure 18. Level Of Importance of The PA In Panama. In Original Spanish Language

It can be evidenced, on a large scale, that the results confirm that 58.1% of those surveyed are unaware of AM techniques. However, there is an inexplicable 41.9% of respondents who said they knew these techniques.



Figure 19. Knowledge of AF Techniques. In Original Spanish Language

The systematic line of research requires that they ask themselves about the use they give (if applicable) to the elements of the FA. Their findings indicate a logical trend in their knowledge, where Figure 19 shows that 36 respondents stated "never", "occasionally" and "infrequent" (83.7%), as well as a smaller proportion of some respondents do not use it.

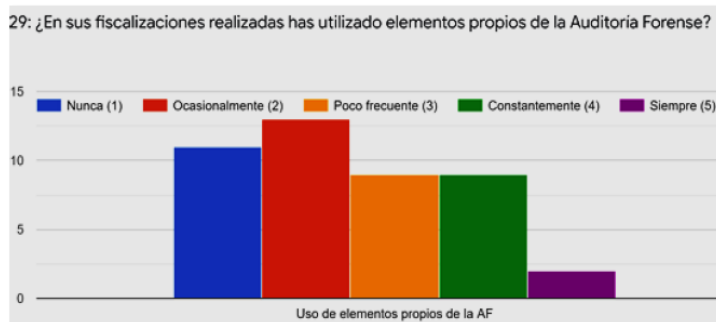


Figure 19. Use of AF elements. In original Spanish language

Based on the number of hours of training received during the year, the highest number is 12 hours. represents a value required for the required level and quality, according to the standard means. It should be noted here that the values obtained were high, since only 65.1% of the subjects (28 out of 43) answered this question. It was determined that the remaining 15 individuals (34.9%) could be eligible to receive a maximum of 12 hours of training per year.

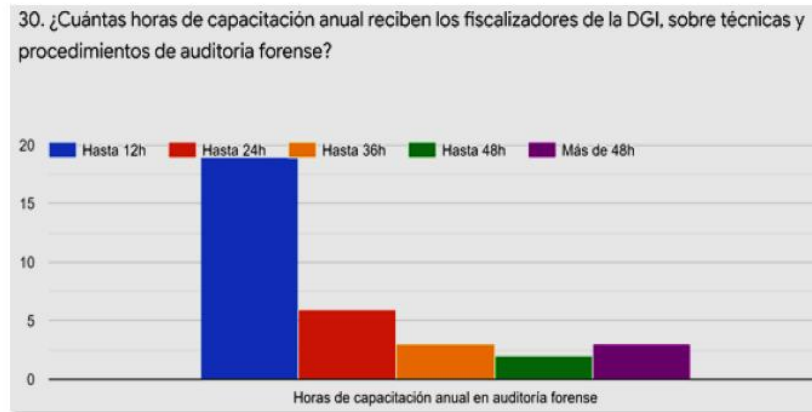


Figure 20. Training Of DGI Inspectors During Annual Hours. In Original Spanish Language

As evidence of the legal system, the lack of participation in evidence that supports tax evasion is considered a reasonable percentage. Of the 43 people surveyed, 55.8% said "never", "occasionally" or "infrequently"; 44.2% said they use it as evidence in tax evasion investigations.



Figure 21. Evaluation of Evidence In Tax Investigations. In Original Spanish Language

Finally, this section analysed the training they receive when they are identified by identifying possible crimes (such as high profile or money laundering) and the relationship with support in judicial processes. A negative prevalence of "never", "occasionally" and "rare" was evidenced in 72.1% of the subjects (31 out of 43).

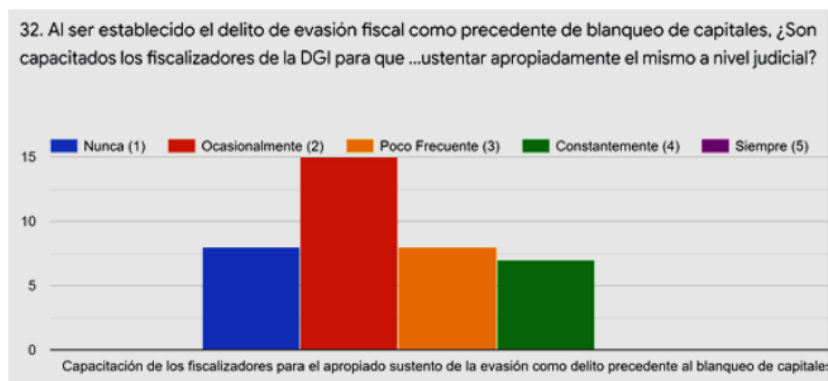


Figure 22. Tax Crime Training Opportunities. In Original Spanish Language

Aspects of the Technical-Scientific Models of Forensic Auditing in the Prevention of Income Tax Evasion

In the procedures that already exist in the DGI, the idea of alternation would need a rigorous and consensual opinion. The results mainly indicated that the legislative provisions of the tax are very clear and defined to investigate crimes (39.5%), with the alternative of complementing them with a formal technical plan of AF that contributes to the investigation and collection of evidence (31.6%).

However, it can be observed that, based on the results of the surveys, they indicate that there are sufficient guidelines to initiate an investigation for tax evasion (18.4%), since they do not correspond to the need for the DGI to prepare evidence (10.5%) (see figure 23), in which it is observed that there is no response to five values presented for this item.

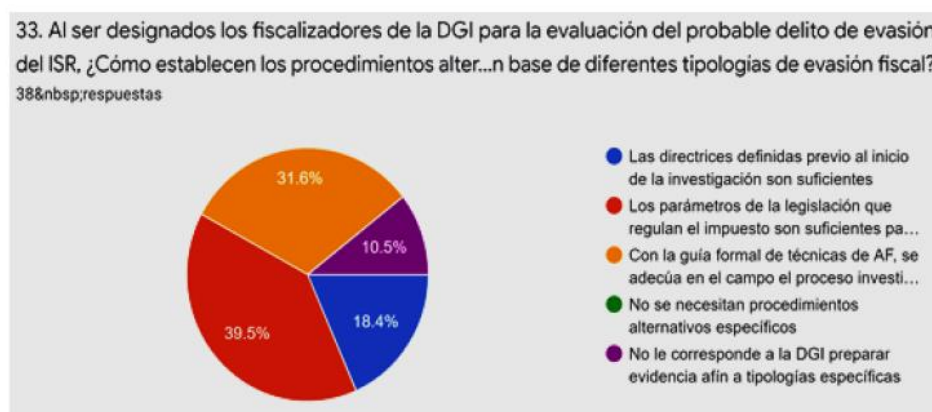


Figure 23. Definition of Alternative Procedures for the Assessment of Tax Evasion. In Original Spanish Language

Finally, with regard to the establishment of theoretical models of Forensic Auditing aimed at defining the controls to deal with the evasion of Panamanian SRI, the data obtained show a high concentration of positive responses among the attributes "agree" (25.6%), "strongly agree" (20.9%) and "strongly agree" (39.5%), which together represent 86.0% (37 out of 43 subjects in

the sample) and support the integration of an AF model as a model. countermeasure to the ISR in Panama.

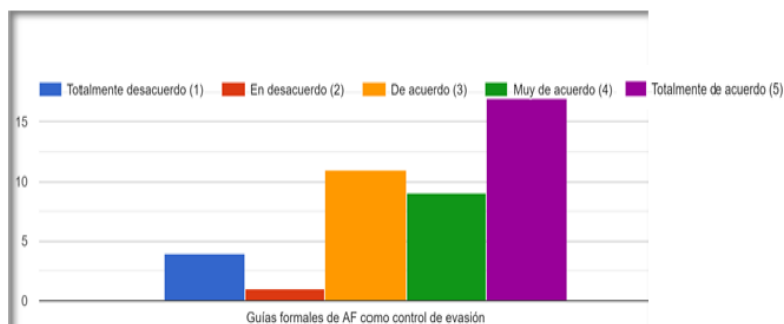


Figure 24. To Propose A Theoretical Model of FA For Tax Evasion in Panama. In Original Spanish Language

In line with the same trend as the previous item (P. 34), surveys are legitimate if they meet the requirement of having a forensic auditor who presents the technical arguments of the evidence in the reports that support the evasion of SRI, a total of 90.7% agree (39 out of 43 subjects in the sample).

The evaluation contextualizes the ISR audits (with financial documents), may have an impact on the inadequate application of some audit procedure currently used by the DGI auditors and the scientific techniques of the AF, which are currently vital in the development of innovative initiatives, by incorporating technological tools to control the crimes of ISR evasion in Panama.

The ISR, for housing loans with preferential interest, tax certificates (for export), certificate of industrial growth in the tourism sector, and other rules on incentives are the tax documents that apply to certain tax obligations. In summary, it is important to analyze the indicators incorporated in the country's economic measurements, such as: linking the dependent variable with interdependent variables such as the Gross Domestic Product (GDP), Direct and Indirect Taxes (DDT and II), Other Current Revenues (OIC), Revenues (IR and INR), and others that support the research.

For the ISR, the most important direct tax of the TA, the ISR records, together with a tax document, are compared with the IC of the most recent illustrious period (2016-2020), including natural person (PN) and legal person (PJ). This is done in the classification of the income of Corrientes. In this and the following sections, the quantitative analysis focuses mainly on the regression of the ISR (last quarter) in relation to indicators such as the CI, the IT and the national GDP.

It is known as Current Income (IC), which is the sum of Taxes (IT), Non-Taxable Income (I not T) and Current Income (OIC). Both direct and indirect taxes are included in the IIT. Among the I not T are taxes, tariffs and other benefits, as well as the opportunity to participate in the profits of the State and companies. The interests of the Panamanian Savings Fund, the Sovereign Wealth Fund, and other income are represented by ICOs.

Relación de las Recaudaciones del ISR con los IC (cifras absolutas). Años 2016-2020



Figure 25. Relationship of the Collection of ISR Vs Current Taxes. In Original Spanish Language

Between 2016 and 2020, the curvature of the ISR tended to be lower, ranging from approximately 10,000,000,000 balboas to more than 13,000,000,000 balboas. In this same period of years, a negative difference of 496,688 million balboas, or -43.10%, was recorded, which is in line with the typical parallel predisposition to the fall in ISR sales from \$1,155,334,000 to \$658,646,000. From the above, it can be deduced that the collection values of the ISR of the IC ranged between 8.7% and 6.3%, with an average of 7.4%, between 2016 and 2020.

	2016	2017	2018	2019	2020	Stocking
%ISR vs IC	8.7%	7.5%	7.4%	7.0%	6.3%	7.4%

Table 1. SRI vs IC ratio year 2016 to 2020

Own elaboration (2024).

The data related to the ISR, when compared with the Income Tax Collections (with tax documents), show a similar trend to the previous relationship with the IC throughout the five-year period 2016 to 2020. The ISR, which was around 5,621 million balboas in 2016, showed a downward trend in the following three years, reaching about 4,004 million in 2020 (a negative difference of about 1,617 million balboas = -28.8%), a low percentage trend can be evidenced. In the five-year period, they fell by 4.2%. The average percentage for the period is 18.5%. Overall, there is a noticeable decline from 2019 to 2020 due to the COVID-19 pandemic.

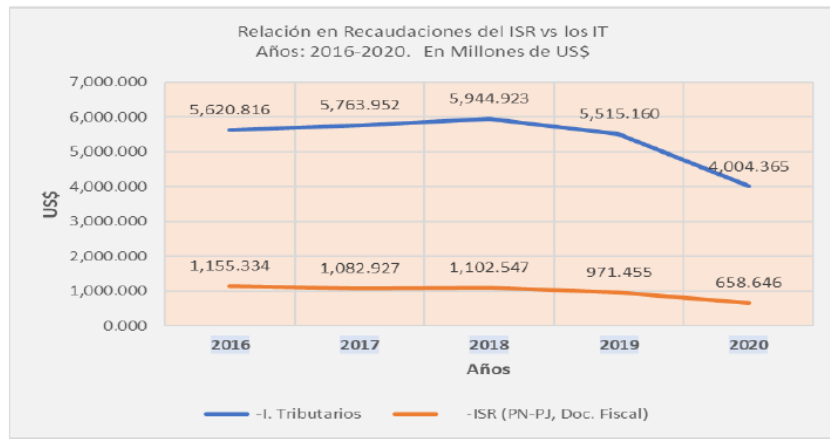


Figure 25. SRI Vs IT Ratio (Absolute Figures). In Original Spanish Language

The Gross Domestic Product (GDP) is considered as an indicator of the national accounts, which measures total production and corresponds to the sum of the gross values of all resident and institutional services (higher taxes and lower subsidies for production units and production units, excluding products whose values are not included in their producer prices (OCCE, 2020).

The ISR is one of the main taxes included in the general state budget under the category of IT. TA is supposed to be a component of IT and they are components of IQ. For context, in Panama it represented 14.1% of GDP in 2019, as well as ISR (income and capital gains) represented 3.7% of the country's GDP (OECD, 2021).

First, the relationship between IQ and national GDP during the years 2016-2020 is shown to illustrate the connection. It is observed that during 2018 and 2019, the trends in IQ and GDP were not correlated; on the contrary, IQ decreased while GDP increased. Therefore, for 2020 both indicators showed a downward trend.



Figure 26. CI vs GDP ratio. In original Spanish language

The two most recent years (2019 and 2020) are addressed as a second element in relation to subsidies. The government withdrew 4,422.7 million balboas to grant subsidies, which translates to 1,589.9 million balboas in 2019 and 2,832.8 million balboas in 2020. There is a difference of 78.2% between the increases of 2019 and 2020. The 120 program for people 65 years of age and older and the solidarity subsidies of Panama, which supported 63.5% of the Households category, have a great responsibility in this significant increase.

In contrast, the State allocates most of it to funds for hydroelectric generation (B/.119,827,123) and to loans with preferential interest (B/. 421,872,643). With the exception of the tax incentive program for private schools and hospitals, all of them can apply for the ISR, this allows us to observe that the issue of evasion must have an important weight because of the sacrifice that the State makes with them.

Discussion

Tax collection for the country was the center of attention due to its great importance. It was possible to note the seriousness with which the professional activities related to this subject were carried out, although few of them participated in any judicial process based on their statements or reports. It can be assumed that reasonable information is presented or that certain tools are needed for tax-oriented investigation (Taxes vs. Forensic Audit). This raises the possibility that the legal process may ultimately benefit the TA.

In general, it is observed that the incidences of tax evasion in the country originate as a result of the failure to declare the income received. Confidence in the selection of the tests was approved due to knowledge of the technical aspects of the PFE, such as control questions, which were discussed in this section. Based on the knowledge and theoretical management of the subsidies and incentives included in the Panamanian budget, the information is based on statistics on the country's most valuable financial resources, which is the same.

To test the hypothesis, the Chi-square test (X^2) or independence test was applied. Some people accept or reject it using the null hypothesis (H_0). By rejecting the null hypothesis (H_0), one would accept, to some extent, the null hypothesis (H_1). Within this study, the Chi-square (X^2) has as its main characteristic a confidence level of 95% and a significance of 0.05 (significance level of 5%). The null hypothesis for this value, which is lower than the significance level of 0.05, was rejected as the result was 0.0024 (X^2). Therefore, the research hypothesis is accepted.

The percentage values of the Forensic Audit Techniques (TAF) in relation to the Audit Procedures (PA) were adjusted according to the data evaluated in each section of the instrument. It can be inferred that there is a prevalence of SRI evasion at the time when the audit techniques differ from the procedures applied by the auditors.

From 2016 to 2020, there is a direct relationship between ISR collections (with tax documents) and IC. In other words, when the CI increases, the ISR also increases; On the contrary, when the opposite effect occurs, both indicators show the same thing. During that time, the average relative proportion of regressions from RIS to HF was 7.4%.

There is a difference between 2016 and 2017, when ISR increased and ISR collection decreased, even though ISR collection is within the ISR element. However, during the remaining years, the behavior is the same as that of the CI. During that period, the ISR collected an average percentage of 18.5% of the TI, which was 11.1% more than the CI.

Because ISR and IT contributed significantly to national GDP (14.1% and 3.7%, respectively), these indices tended to be low. From 2016 to 2020, GDP decreased by 0.8% in the ISR, 2.1% in the CI and 3.1% in the constant CI. It is impossible to validate subsidies and incentives, since the numbers collapsed in the first year of the pandemic were already having a negative effect.

In addition, tax incentives are linked to the collection of ISR. Incentive packages often include a list of the resources needed to support them. The Fiscal Presidency was raised only in 2019 when B/. 603,481,998 as incentives that allow the relaxation or repeal of laws. However, in order to balance the state budget, macroeconomic analyses ultimately require borrowing. However, other taxes (direct and indirect) sometimes compensate for the lack of fiscal incentives and subsidies (Palma and Castrellón, 2021).

Forensic auditing by implementing it in the main areas mentioned by Maldonado et al., (2022):

With the help of a forensic auditor, it is possible to see beyond the effects and expenses related to financial crimes and fraud. In addition to preventing future fraud, it can help companies identify problems or blind spots in their internal controls and processes.

With the help of forensic auditing to develop and strengthen a culture of compliance, companies can prevent future financial crimes such as fraud. A forensic audit can increase the confidence of the general public and investors, by improving the accuracy and reliability of a company's activities.

Risk related to financial crime and fraud can be detected and diminished through forensic auditing, increasing the chances that it will not occur and decreasing its impact if it does occur. (p. 608).

According to Toro et al. (2021), other contributions from the previous audit are as follows: "In a forensic audit, evidence is collected and examined both during and after the investigation of a possible financial crime." In the legal process, findings can support decisions made. In addition, it helps identify people who may be responsible for a crime or financial fraud. Judicial and disciplinary measures can be taken to ensure transparency and honesty in business management in this regard (p.21).

In addition, the study also compared intermediate quantitative indicators with the dependent variable, which are closely related to the State's current accounts (CI), tax revenues (TI) and GDP. Tax collection in recent years has been the main objective of subsidies and incentives paid by the State.

Most countries in the region, which measure their tax revenues in absolute terms, will recover quickly in 2021. In response to economic activity and the removal of temporary tax measures, the average tax growth rate accelerated to 0.8% pps to return to pre-COVID-19 levels (21.7% of GDP).

For certain situations, such as Belize's GDP (+5.0 points), it almost fully compensates for the fall recorded in 2020. On the other hand, Peru, Chile, Brazil and the Dominican Republic presented improvements in this indicator, increasing their growth and recovery from the losses experienced in 2020 and closing the 2019-2021 financial year with a tax administration with positive results.

However, this behavior has not been permanent over time, since in some cases, such as Trinidad and Tobago, Jamaica, Bolivia, the deficit ended up being lower than in 2019 because, due to a

more severe fiscal recovery or, more specifically, a higher degree of activity, the year-on-year increase in tax revenues in 2021 was not enough to compensate for the falls experienced in 2020. Caution should be exercised when making regional comparisons between nations in countries such as Barbados, Guyana and Panama, where the 2020 drop was reduced by taxes, resulting in evidently lower levels compared to the pre-pandemic situation.

Extreme vigilance should be exercised when conducting regional analyses due to the significant diversity of prosecutorial cases. According to an analysis carried out in the region, all countries increased their incomes through the production of products during the period considered relatively higher for Latin American countries.

In particular, between 1991 and 2021, taxable charges as a percentage of GDP increased to 62%, to reach an average of 21.1% of GDP. Three countries experienced the largest increases: Ecuador (+171%), Nicaragua (+202%) and Bolivia (+230%). There was a 26% decline in revenue in Panama, at the other end of the spectrum. On the other hand, Caribbean tax revenues increased by an average of 26% in the period analyzed and reached 22.8% of GDP in 2021. Trinidad and Tobago showed a small decrease (-14%) in the aforementioned years, while Jamaica (+56%) and Bahamas (+98%) recorded the largest increases.

There is a difference between Latin American countries in terms of the overall tax burden. As an example, in the Latin American case of Brazil and Argentina, and in the Caribbean case of Barbados and Jamaica, it can be seen that they will contribute around 30% of their GDP in 2021, which is more than calculated for OECD countries. thirty-four percent.

By contrast, in comparable terms, tax revenues in Cuba, Panama, Paraguay, and Guatemala do not exceed 15% of GDP. Despite this, it should be remembered that the public finances of many countries in the region depend on large amounts of non-tax revenues, especially those that come from the extraction of non-renewable natural resources such as hydrocarbons and minerals (ECLAC, 2023).

However, most countries have increased both the income tax collected from sales and the percentage of their products as a whole, some situations present differences in their behavior. There are charges in which the collector's loads do not show noticeable changes in relation to their products, but their overall relevance decreases when the burdens of other collectors increase (Guatemala, Antigua and Barbuda, Saint Lucia, and Jamaica) (Rodríguez, 2020).

In two countries, Colombia (where this tax collection increased in a similar way to what happened in others) and Panama (in this country the total collection, including the ISR), decreased), there was no variation in the overall participation. Last but not least, Trinidad and Tobago was the location of both tax share and revenue in the most recent years (Centrallogo et al., 2023).

Carga tributaria y estructura relativa del impuesto sobre la renta en países de América Latina y el Caribe (23 países), 2021
(En porcentajes del PIB)

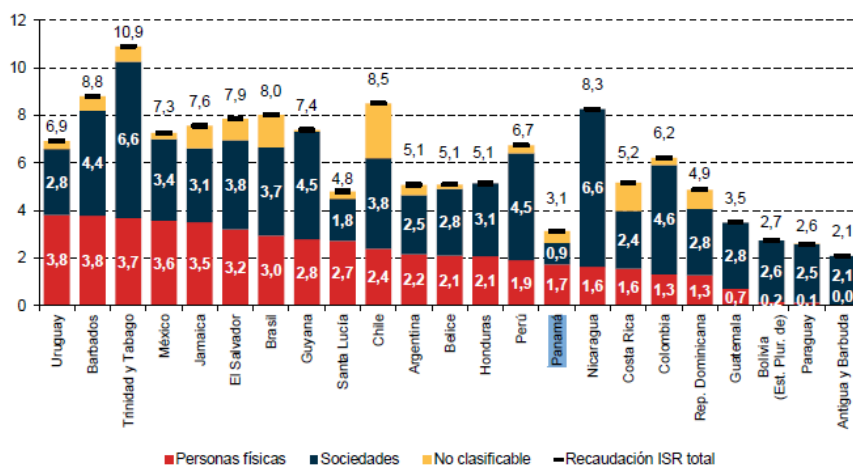


Figure 27. Level of tax burdens and relative distribution of ISR in Latin American and Caribbean countries in 2021. In original Spanish language

Niveles de exención y de ingreso de aplicación de la tasa marginal máxima del impuesto sobre la renta de personas físicas en América Latina (19 países) y el Caribe (10 países), 2021
(En múltiplos del PIB per cápita)

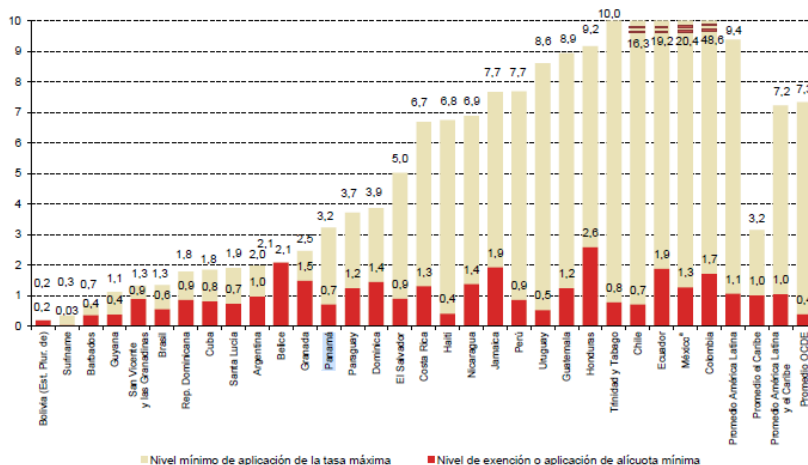


Figure 28. Level of exemption and income from the application of the maximum marginal rates of the ISR natural person in Latin America and the Caribbean year 2021. In original Spanish language

On the contrary, group C includes countries where the contribution of legal entities does not exceed the regional average, with the exception of Panama, it does not exceed its overall participation. The resources of this contribution are more widely distributed in Panama as a whole, as a result of achieving a very low overall collection. Ecuador is also included, since it is difficult to distinguish at source a significant part of the tax revenues collected through monthly withholdings (Avellaneda, 2021).

Conclusion

In accordance with the constitutional provisions, the process could begin with the implementation of the technical-scientific instrumentation of the Forensic Audit (AF) in the audit, using a methodology adapted to modern technological requirements.

The study posits the theory of AM as an expansive approach determined by the country's policies, procedures, processes, controls, and outcomes that require TA, with the premise that SRI is largely avoided due to discrepancies between the audit procedures used and forensic audit techniques. Auditing firms.

It can be said that the conditions are suitable for the evaluation of the proposal made here with the national organization, taking into account that the Chi-square square (X²) in the hypothesis test presents a value 0.0024 below the alpha (0.05) having a confidence level of 95%.

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