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AMNISTÍA TRIBUTARIA 2018 Y SU EFICIENCIA EN EL INCREMENTO DEL PRESUPUESTO GENERAL DEL ESTADO

TAX AMNESTY 2018 AND ITS EFFICIENCY IN INCREASING THE GENERAL STATE BUDGET

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RESUMEN

La investigación sobre la Amnistía Tributaria 2018 en Ecuador analiza su eficiencia en el incremento del Presupuesto General del Estado. La problemática se centra en las deudas pendientes que el Servicio de Rentas Internas (SRI) no ha logrado recuperar, a pesar de haber implementado múltiples amnistías, con una deuda firme de aproximadamente USD 2.600 millones. El objetivo de la investigación es evaluar el impacto de la amnistía en la recaudación fiscal y su contribución a la sostenibilidad financiera del país. La metodología utilizada es de análisis documental, con un enfoque cualitativo para estudiar la Ley Orgánica de Fomento Productivo y su influencia en las finanzas pública, la investigación también incluyó una revisión exhaustiva de la literatura nacional e internacional sobre el tema, utilizando datos del SRI, decretos y leyes pertinentes para establecer conexiones lógicas entre la normativa y su efecto en el presupuesto. Los resultados indican que la amnistía tributaria de 2018 fue un éxito en términos de recaudación, superando en gran medida las expectativas iniciales al lograr un monto total de amnistía de 1.289 millones de dólares, cuando se esperaba recaudar solo 602 millones. Esta medida permitió a los contribuyentes regularizar sus deudas, con una alta participación de pagos en efectivo, lo cual evidenció la disposición de los contribuyentes a cumplir con sus obligaciones fiscales cuando se les ofrecieron beneficios atractivos. En conclusión, la amnistía tributaria fue eficaz para aumentar la recaudación fiscal y fortalecer el Estado de Derecho. Sin embargo, para asegurar su sostenibilidad a largo plazo, se recomienda acompañar estas medidas con reformas fiscales estructurales y campañas de educación tributaria que fomenten el cumplimiento voluntario.

Palabras clave

Amnistía, políticas fiscales, recaudación fiscal, Servicio de Rentas Internas (SRI), Ley Orgánica.

ABSTRACT

The research on the 2018 Tax Amnesty in Ecuador analyzes its efficiency in increasing the General State Budget. The problem focuses on the outstanding debts that the

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Internal Revenue Service (SRI) has not managed to recover, despite having implemented multiple amnesties, with a firm debt of approximately USD 2.6 billion. The objective of the research is to evaluate the impact of the amnesty on tax collection and its contribution to the financial sustainability of the country. The methodology used is documentary analysis, with a qualitative approach to study the Organic Law for Productive Development and its influence on public finances. The research also included an exhaustive review of national and international literature on the subject, using data from the SRI, decrees and relevant laws to establish logical connections between the regulations and their effect on the budget. The results indicate that the 2018 tax amnesty was a success in terms of tax collection, greatly exceeding initial expectations by achieving a total amnesty amount of 1.289 billion dollars, when only 602 million were expected to be collected. This measure allowed taxpayers to regularize their debts, with a high share of cash payments, which demonstrated the willingness of taxpayers to comply with their tax obligations when they were offered attractive benefits. In conclusion, the tax amnesty was effective in increasing tax collection and strengthening the rule of law. However, to ensure its long-term sustainability, it is recommended to accompany these measures with structural tax reforms and tax education campaigns that encourage voluntary compliance.

Keywords
Amnesty, fiscal policies, tax Collection, Internal Revenue Service (SRI), Organic Law

INTRODUCTION

Tax amnesties represent a temporary strategy adopted by governments to regularize undeclared assets and tax obligations from previous periods through the forgiveness of interest and penalties, as well as the exemption from civil and criminal sanctions. Although these measures seek to increase tax collection and strengthen public finances, their prolonged implementation may prove unsustainable, particularly in low-growth economies (1).

A tax amnesty is a legal mechanism, frequently implemented through an organic law, that enables taxpayers to regularize their tax situation with respect to overdue tax obligations, such as VAT and income tax (IR). This measure may include a tax remission—that is, the total or partial forgiveness of interest, fines, or surcharges arising from non-compliance with tax regulations—thereby facilitating the payment of debts under more favorable conditions for taxpayers (2), (3).

Tax remission consists of the forgiveness of tax interest, fines, and surcharges, provided that the taxpayer pays the full principal capital owed within the established deadline. In other words, it constitutes an opportunity for taxpayers to regularize their tax situation without having to bear the payment of accumulated interest, fines, and surcharges, thereby alleviating their financial burden and avoiding potentially more severe sanctions (4).

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Tax regulations, for their part, are documents that support the transfer of goods and/or the provision of services or any other transaction subject to taxes; these documents are authorized by the Internal Revenue Service (5).

Overdue obligations constitute a legal bond by which the necessity to pay a debt is contracted. They are also known as a lien, bond, or imposition of payment of a sum demandable from the person or entity that issued it once the established deadline and terms have been fulfilled (6).

Value-Added Tax (VAT) is an indirect tax levied on the value of local transfers or imports of goods at all stages of commercialization, on copyrights, industrial property, and related rights, as well as on the value of services rendered, according to the Internal Revenue Service (7).

The Special Consumption Tax (ICE) is a levy applied to certain goods (domestic or imported) and services listed in Article 82 of the Internal Tax Regime Law, according to the Internal Revenue Service (8).

Income tax is a levy applied directly to income from labor or capital as a manifestation of wealth, taxing the fact of receiving or generating income, which may derive from passive sources such as capital, active sources such as dependent labor, or mixed sources combining capital and labor (9).

The General State Budget is the financial instrument that establishes and regulates the allocation of public resources and government expenditures for a given period. It is composed primarily of revenues from various sources, among which tax collection—such as income tax, value-added tax, and other levies—stands out. These resources are used to finance public expenditures and ensure the functioning of the State, seeking a balance between revenues and public spending needs, according to the Ministry of Economy and Finance (4).

Tax collection is a fiscal policy instrument of vital importance for a state, as it generates the revenues necessary to achieve the goals set out in the country's economic plan. Likewise, public expenditure constitutes another fiscal policy tool that can influence the national economy by channeling obtained resources to different sectors according to established priorities. These elements must be managed technically to prevent a country from recording consecutive negative fiscal results that would lead to excessive public indebtedness (10).

Revenues are the resources obtained by the State through the collection of taxes such as income tax and VAT; through the sale of goods, such as oil and its derivatives; through transfers and donations received; and through the operating results of public enterprises, among others, according to the Ministry of Economy and Finance (11).

This study focuses on the 2018 tax amnesty in Ecuador, with the primary objective of analyzing its impact on the General State Budget. Despite the implementation of seven tax amnesties in the country, outstanding debts of approximately USD 2.6 billion persist that the Internal Revenue Service (SRI) has not yet been able to recover. The research seeks to understand how this measure has influenced taxpayers' perception of their tax obligations and the recovery of tax revenues. The findings will contribute to evaluating the efficacy of amnesties in strengthening Ecuadorian public finances (12).

MATERIALS AND METHODS

The study employs a deductive approach to examine how the 2018 Organic Law for Productive Development, Attraction of Investors, Generation of Employment, Stability and Fiscal Balance affects the General State Budget. This method enables the establishment of logical connections between the regulation and its impact on the budget, systematically addressing the influence of the tax amnesty implemented in that year.

The research design is documentary in nature, oriented toward demonstrating the relationship between the tax amnesty and the General State Budget. To this end, diverse official sources will be used, including articles, books, decrees, and relevant laws. Exhaustive analysis of these documents will yield detailed information and enrich knowledge of the impact of the tax amnesty in the fiscal context.

The approach adopted is qualitative, centered on an in-depth analysis of the Organic Law for Productive Development, Attraction of Investors, Generation of Employment, Stability and Fiscal Balance. The objective is to determine how this law influences the General State Budget, providing a detailed understanding of its effect on public finances.

The level of research is descriptive. According to Carlos Sabino in his work "The Research Process" (1992), descriptive research is dedicated to the detailed description of the fundamental characteristics of homogeneous phenomena. It employs systematic criteria to analyze the structure and behavior of the phenomena under study, providing systematic information that is comparable with other sources.

Table 1. *Documentary population*

Document	Year 2018
General State Budget	1
Organic Law for Productive Development, Attraction of Investments, Generation of Employment, Stability and Fiscal Balance	1
Budget execution	1
Economic bulletins issued by the SRI	1
TOTAL	**4**

RESULTS

Analysis of the Organic Law for Productive Development, Attraction of Investments, Generation of Employment, Stability and Fiscal Balance

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A tax amnesty implies the remission of taxes, interest on fines, late-payment charges, surcharges, and tax credits. It is therefore important because this mechanism is used by governments to recover the overdue portfolio of taxpayers so that they voluntarily pay their debts and bring their tax obligations up to date. Accordingly, during the administration of President Lenín Moreno, the Organic Law for Productive Development, Attraction of Investments, Generation of Employment, and Stability and Fiscal Balance was issued and published in the Supplement to Official Register No. 309.

Article 1. Remission of interest, fines, and surcharges. – One hundred percent (100%) remission of interest, fines, and surcharges derived from the balance of internal tax or fiscal obligations whose administration and/or collection corresponds exclusively to the Internal Revenue Service is hereby ordered, in accordance with the terms and conditions established in this Law and the resolutions issued for this purpose by the Internal Revenue Service.

Tax or fiscal obligations that became due after 2 April 2018, as well as obligations corresponding to the annual income-tax return for the 2017 fiscal year, may not benefit from the remission provided for in this article.

With respect to the remission of quotas under the Simplified Tax Regime (RISE), as well as the remission and settlement of amounts comprising vehicle registration, the provisions of Articles 9 and 11 of this Law shall apply.

All references to “taxpayers” made in this Chapter shall be understood generally as “taxable subjects” in accordance with the terms contained in the Tax Code.

Analysis. – Total exemption from interest, fines, and surcharges associated with unsettled tax and fiscal obligations before the Internal Revenue Service is ordered; however, this forgiveness is subject to certain conditions. First, it shall not apply to obligations that became due after 2 April 2018 nor to income-tax returns for 2017. Second, specific articles establish particular conditions for the Simplified Tax Regime (RISE) and vehicle taxes.

Article 2. Remission period. – Taxpayers seeking to benefit from the one-hundred-percent (100%) remission of interest, fines, and surcharges derived from tax and fiscal obligations must, in addition to complying with the terms and conditions established in this Law, pay the full capital within the deadlines detailed below:

Taxpayers whose average gross income over the three most recent fiscal years exceeds five million United States dollars (USD 5,000,000.00), members of economic groups according to the cadastre maintained by the Internal Revenue Service as of the entry into force of this legal body, and taxable subjects holding obligations corresponding to withheld or collected taxes must effect payment within a maximum period of 90 days counted from the publication of this Law in the Official Register; and

a) All other taxpayers not contemplated in the preceding paragraph may submit a request for payment facilities or pay the full balance of capital within a period of 90

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days counted from the entry into force of this Law. Payment facilities shall be granted for the fulfillment of obligations for a maximum period of two years, in accordance with Article 5 of this Law.

In all cases provided for in this Law, remission shall apply only when the taxpayer fulfills payment of one hundred percent (100%) of the capital balance within the deadlines provided in this article or within the period granted for payment facilities; if this requirement is not met, any partial payments made shall be applied in accordance with the general rules contained in the Tax Code.

Analysis. – Taxpayers who may benefit from total forgiveness must have had an average gross income exceeding USD 5,000,000.00 in the most recent fiscal years and must effect payment within a maximum period of 90 days from publication of the law in the Official Register. Those who do not meet this requirement must submit a request for payment facilities or pay the full capital amount within a period of up to two years.

Article 3. Prior payments and partial payments of the tax or fiscal obligation. – In the event that payments were made prior to the entry into force of this Law, the following rules shall apply:

a) When prior payments cover the full capital balance of the obligations, the taxpayer must notify the Tax Administration in order to benefit from the remission.

b) When prior payments do not cover the full capital balance of the obligations, the taxpayer may pay the difference within the deadlines established in this Law and must likewise notify the Tax Administration in order to benefit from the remission.

Payments made by taxpayers, whether total or partial, including those made under a payment-facility agreement, or those made prior to the entry into force of this Law or during the periods established therein, shall benefit from the remission upon request by the taxpayer, provided that one hundred percent (100%) of the capital balance of the obligations is covered, in accordance with the rule established in the final paragraph of Article 2 of this Law.

Even when payments made by taxpayers exceed one hundred percent (100%) of the capital balance of the obligations, no refunds shall be made for overpayment or undue payment.

Analysis. – If prior payments have been made, the following provisions apply: first, if those payments cover the total capital balance of the debt, the Tax Administration must be notified; second, if the prior payments do not cover the total debt, the taxpayer may pay the difference within the established deadlines and must also inform the Tax Administration.

Article 4. Declaration of obligations during the remission period. – Taxpayers who had not declared their tax or fiscal obligations due as of 2 April 2018, as well as those who

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file substitute returns in relation to such obligations that had not been previously determined, may benefit from the present remission, provided they file the respective return(s) and additionally make the payment(s) or request facilities, as applicable, by the maximum deadline provided in Article 2 of this Law.

The Internal Revenue Service shall apply the remission ex officio when it has verified the taxpayer’s fulfillment of the formal duty and confirmed that the balance of the obligation consists solely of fines or surcharges.

Analysis. – The benefit is intended for taxpayers who failed to file their overdue tax returns before 2 April 2018, regardless of whether the obligation was paid or not, as well as for those who filed substitute returns owing to errors in the original data. It is essential to clarify, however, that the forgiveness applies only to fines and surcharges and not to the total amount of the debt.

Article 5. Payment facilities for capital of up to two years. – The request for payment facilities that may be submitted by the taxpayers detailed in paragraph b) of Article 2 to the Internal Revenue Service shall be effected through the payment of equal monthly installments of the capital balance, for a maximum period of two years counted from the entry into force of this Law, by mutual agreement between the parties. It shall not be necessary to make the initial 20% installment of the obligation established under the general rules for obtaining payment facilities in the Tax Code.

In the event of non-compliance with two or more consecutive installments, the remission contemplated in this Law shall become void, and the Internal Revenue Service shall immediately proceed to collect the full amount owed, including interest, fines, and surcharges, in accordance with the final paragraph of Article 2 of this Law.

Analysis. – Payment facilities shall be offered through equal monthly installments of the capital balance, with a maximum period of two years from the entry into force of the Law. If any default in the payment of installments occurs, the forgiveness shall cease to apply.

Article 9. Remission for taxpayers belonging to the Simplified Tax Regime (RISE). – For the Simplified Tax Regime (RISE), the following shall apply on a one-time basis:

a) Taxpayers who, as of the date of publication of this Law in the Official Register, show no effective economic activity and hold no authorization for sales receipts shall be suspended from the RISE ex officio. For this purpose, the cessation date shall be considered the same as the start-of-activities date.

b) Taxpayers who show no effective economic activity and do not maintain valid sales receipts as of the date of publication of this Law in the Official Register shall be suspended from the RISE; the cessation date shall be the more recent of the expiration date of the last valid sales receipts and the date corresponding to the last paid quota.

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c) Taxable subjects who are more than six quotas in arrears as of the date of publication of this Law in the Official Register shall be excluded from the RISE ex officio; the exclusion date shall be the day of non-compliance with the sixth quota, and the corresponding pecuniary sanction shall be remitted.

The capital of RISE quotas pending payment as of the date of entry into force of the Law, once the preceding paragraphs have been applied, may be paid without interest and without the corresponding pecuniary sanctions, within a period of 90 days counted from the publication of this Law in the Official Register.

Taxable subjects excluded or suspended pursuant to this article shall not pass into the general taxpayer regime; the taxable subject may reactivate economic activity by reopening the registration at any time.

Analysis. – First, the Simplified Tax Regime (RISE) shall be suspended for taxpayers who do not demonstrate real economic activity and who lack the corresponding authorization for their receipts. Second, taxpayers who are six quotas in arrears as of the publication date shall be excluded from the regime.

Article 10. Remission of interest and surcharges on customs obligations. – One hundred percent (100%) remission of interest and surcharges derived from customs obligations established through subsequent control via tax rectifications, whose administration and/or collection corresponds exclusively to the National Customs Service of Ecuador and that were determined as of 2 April 2018, is hereby ordered, in accordance with the terms and conditions established in this Law.

For the purposes of the remission provided in the preceding paragraph, the rules applicable to taxpayers with respect to tax or fiscal obligations set forth in this Section, including those relating to payment facilities, shall apply to customs taxable subjects.

Analysis. – One hundred percent remission of interest and surcharges arising from customs obligations through subsequent control of tax rectifications collected by SENAE is applied.

Article 11. Remission of interest on vehicle taxes, as well as of surcharges and fines derived from vehicle registration and traffic infractions. – For the application of the remission of interest on vehicle taxes, as well as of surcharges and fines derived from vehicle registration and traffic infractions, the following rules shall apply on a one-time basis:

a) Remission of interest on vehicle taxes administered by the Internal Revenue Service that were due as of 2 April 2018, requiring payment of the full balance within a period of 90 days counted from the entry into force of this Law.

Additionally, remission is established for amounts derived from adjustments or reliquidations of vehicle taxes administered by the Internal Revenue Service that were

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effected by that entity up to and including the 2016 fiscal period and that remain registered in its cadastre of motor vehicles for land transport and pending payment.

b) Remission of the surcharges established by the National Transit Agency generated by failure to register a vehicle and that were due as of 2 April 2018, requiring payment of the capital within a period of 90 days counted from the entry into force of this Law.

Analysis. – The remission shall apply to debts that were due as of 2 April 2018 within a 90-day period; additionally, remission applies to amounts derived from adjustments or reliquidations for the 2016 period and to surcharges established by the ANT arising from vehicle registration.

Article 12. Interest, fines, and surcharges for employer obligations with the Ecuadorian Social Security Institute. – The provisions established in this Chapter govern the reduction of interest, fines, and surcharges arising from overdue contribution obligations generated and final as of 2 April 2018, in accordance with the parameters established in this Law. Obligations under audit notes, credit titles, partial-payment agreements, or arrears-settlement agreements whose payrolls were issued up to 2 April 2018 are included.

Likewise, interest on pending obligations originating from employer liability generated up to 2 April 2018 may be subject to the reduction. Overdue obligations corresponding to reserve funds, contributions for unpaid household work, collection of amounts, health-coverage extension, unsecured loans, pledged loans, and mortgage loans are not subject to the reduction provided in this Chapter. Additionally, interest, fines, and surcharges generated by late affiliations registered after 2 April 2018 are excluded from this reduction.

Analysis. – The law provides for the reduction of interest, fines, and surcharges derived from overdue contribution obligations accumulated up to 2 April 2018. This covers audit notes, payment agreements, arrears-regularization agreements, and credit titles. However, benefits do not apply to overdue obligations related to reserve funds, contributions for unpaid household work, collection of amounts, among others.

Article 13. Reduction of interest, fines, and surcharges. – The reduction of interest, fines, and surcharges corresponds to overdue contribution obligations originating in payrolls or established in determination acts, administrative resolutions, audit notes, and credit titles issued by the Ecuadorian Social Security Institute, whose administration and/or collection is exclusive to the Institute, provided that the full amount corresponding to the respective employer obligation is paid within the determined deadlines.

Analysis. – Reduction of interest, fines, and surcharges is granted on overdue contribution obligations arising from payrolls, determination acts, administrative resolutions, audit notes, and credit titles issued by the IESS, provided the full amount owed is paid.

Article 14. Deadlines for benefiting from the reduction. – In order to access the benefit of reduction of interest, fines, and surcharges in accordance with Article 12 of this Law, the full corresponding amounts must, in addition to fulfilling the established requirements and conditions, be paid within the following deadlines counted from the publication of this Law in the Official Register:

a) For payments made within the maximum period of ninety (90) days, a 99% reduction of interest, fines, and surcharges is established.

b) For payments made within the period of ninety-one (91) to one hundred fifty (150) days, a 75% reduction of interest, fines, and surcharges is established.

c) For payments made within the period of one hundred fifty-one (151) to one hundred eighty (180) days, a 50% reduction of interest, fines, and surcharges is established.

d) In the case of Non-Linked Debtors of the Closed Banks of 1999, a 99% reduction of interest, fines, and surcharges shall apply; for this purpose, they must request, within a period of ninety (90) days counted from the entry into force of this Law, payment facilities for a period of up to two years.

Analysis. – The regulation defines the key aspects for application of the amnesty. Taxpayers who make payment within the first 90 days will receive a 99% remission. Those who pay between day 91 and day 150 will obtain a 75% remission. For payments made between days 151 and 180, the remission will be 50%. In addition, a 99% reduction is established for non-linked debtors of the closed banks of 1999, provided the request is submitted within 90 days, with the possibility of payment over a period of up to two years.

General analysis. – The government of Lenín Moreno introduced a tax amnesty in Ecuador with the purpose of recovering the overdue portfolio of delinquent taxpayers. This measure contemplates the remission of interest, fines, and surcharges to promote voluntary payment of debts. Likewise, total forgiveness of debts is offered under certain conditions. Nevertheless, obligations that became due after 2 April 2018, as well as income-tax returns for the preceding year, remain excluded from this amnesty.

To benefit from the tax amnesty, taxpayers must demonstrate gross income of at least USD 5,000,000 in the most recent fiscal years; if this criterion is met, a request must be submitted to access payment facilities or to cancel the full capital within a maximum period of two years. Taxpayers registered under the Simplified Tax Regime (RISE) will be suspended if they show no effective economic activity or if they are six quotas in arrears.

With respect to the National Customs Service of Ecuador (SENAE), a 100% remission is granted after tax rectification. For the Internal Revenue Service and the National Transit Agency (ANT), the remission applies to debts due as of 2 April, excluding those generated by adjustments or reliquidations for 2016. For its part, the Ecuadorian Social

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Security Institute (IESS) has adopted measures to reduce the financial burden on contributors, including a significant reduction in interest, fines, and surcharges for contribution arrears up to 2 April.

Analysis of collection during 2018

The principal fiscal revenues in Ecuador considered are solely those taxes that generated the highest revenues and that were included in the tax amnesty applied in 2018. It has been determined that, during the year under evaluation, collection exceeded the planned target by 3.52%, reaching a total of USD 12,910.59 million in internal taxes. This total is composed primarily of global income tax (USD 5,319.64 million); VAT on domestic operations (USD 4,788.99 million); ICE on domestic operations (USD 714.38 million); the foreign-exchange outflow tax (USD 1,206.09 million); RISE (USD 22.84 million); and other taxes totaling USD 858.65 million. With respect to external taxes, VAT on imports totaled USD 1,947.05 million; ICE on imports USD 271.10 million; and solidarity contributions USD 14.97 million, reaching a total of USD 2,218.15 million. For 2018, gross collection was USD 14,318.80 million. After deducting credit notes of USD 713.58 million, compensations of USD 11.33 million, and refunds of USD 243.40 million, net collection amounted to USD 14,075.40 million.

Comparison of collection with previous years

The period from 2016 to 2019 in Ecuador presented a complex panorama in terms of tax collection, marked by events such as the earthquake that struck the provinces of Manabí and Esmeraldas in April 2016, which had a significant impact on the country's tax collection. Although a partial reform was implemented for the affected zones, the collection target was not achieved. The figure of USD 12,501.03 million reflects the difficulty of obtaining revenues in a context of reconstruction and humanitarian assistance. Despite post-earthquake recovery, net collection in 2017 reached only USD 12,723.98 million; low collection of internal taxes—a fundamental component of the fiscal system—was the principal cause of this result.

Faced with the persistent situation of low collection and a high overdue portfolio, the Ecuadorian government implemented two amnesties in 2018: a partial amnesty directed at those affected by the construction of the Cuenca Tramway, aimed at alleviating the economic burden and facilitating regularization of tax obligations, and a general amnesty designed to incentivize the regularization of pending tax debts throughout the country. These measures had a positive impact on collection, reaching a record figure of USD 14,075.41 million—the highest of the period analyzed.

The onset of the global pandemic in 2019 with the arrival of COVID-19 had a negative impact on the Ecuadorian economy. According to the data obtained, net collection reached USD 13,180.86 million, evidencing the influence of the global context on the country's fiscal performance, owing to the suspension of many economic activities. Nevertheless, it is important to consider that the Ecuadorian economy was already in a

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recessionary gap, and the arrival of the pandemic aggravated the country's situation, affecting its macroeconomic variables.

Analysis of the degree of increase in fiscal revenues after application of the tax amnesty by activity and province

Table 2. *2018 collection by economic activity (selected months, USD)*

Collection data by economic activity for April–December 2018 show that public administration and defense generated the highest revenues, peaking at USD 383,644,129.27 in April alone, followed by moderate fluctuations. Social and community service activities recorded their highest collection in April, declined in May–June, and recovered in July. Principal economic sectors also displayed moderate variation throughout the year.

Table 6. *Tax amnesty collection 2018*

Tax Remission 2018	Amount in dollars	% participation
Collection (cash)	1,120,047,712.00	87%
Payment facilities	169,652,837.00	13%
Total managed	**1,289,700,550.00**	**100%**
Tax Remission Target 2018	602,000,000.00	—

The tax amnesty implemented in Ecuador during 2018 proved to be a successful strategy for strengthening tax collection, regularizing the overdue portfolio, and reactivating the economy. This measure, which offered the possibility of regularizing fiscal debts with benefits such as the reduction of interest and fines, far exceeded the initial estimate, thereby evidencing its potential as a tool for fiscal management. The results obtained show a significant increase in tax collection thanks to the regularization of debts that had previously been in arrears. Moreover, the amnesty not only alleviated the financial burden of taxpayers but also enabled the State to access resources that could be used to finance social programs and development projects.

The amnesty collected a total of USD 1,289 million, representing a significant impact on the country's tax collection. The most important component of collection was the inflow of USD 1,120 million in cash, accounting for 87% of the total managed. This result demonstrates taxpayers' willingness to regularize their tax situation and take advantage of the facilities offered by the amnesty. The remaining 13%, equivalent to USD 169 million, corresponds to the use of payment facilities granted by the State, allowing a period of up to two years for the cancellation of debts.

Table 7. *Evaluation of the tax amnesty*

	Millions of dollars	Percentage
Total Amnesty	1,289	8.83%
General State Budget	14,590	100%

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The analysis of the impact of the tax amnesty implemented in Ecuador during 2018 determines a total collection of USD 1,289 million—an amount that represents 8.83% of the 2018 General State Budget. This figure constitutes a significant injection of liquidity for the State in a year marked by economic challenges. The amnesty facilitated the regularization of pending tax obligations, contributing to the reduction of the overdue portfolio and improving the State's capacity to administer fiscal resources efficiently.

Furthermore, when enterprises and individuals fulfill their tax obligations, they not only contribute to the sustainability of the State and the financing of essential public services but also generate a climate of greater confidence and legal certainty. This favorable environment attracts national and foreign investment, as investors feel more secure knowing that a transparent and reliable system exists. This, in turn, facilitates access to financing and creates an attractive environment for business.

It is important to analyze the impact of the amnesty from a broader perspective, taking into account that the amnesty sought not only to increase collection but also to promote regularization of the tax system, combat tax evasion, and strengthen the rule of law. The positive response of taxpayers—with collection significantly exceeding the initial target—and the reduction of evasion are crucial factors for the country's financial sustainability (13).

DISCUSSION

With respect to the research by (14) entitled "Tax incentives and financial performance: empirical evidence of Ecuadorian companies," the study concludes that implementing strategies for the benefit of economic sectors represents a challenge for any country. Empirical evidence shows that the topic under investigation is relevant in the economies of different regions and countries, given that it is not sufficient merely to enact a law; it is also necessary to articulate it with governmental administration. Moreover, in emerging economies the active dissemination of these benefits plays a fundamental role, as these aspects may condition the use of this strategy, consistent with what has been demonstrated in Brazil and Nigeria. Considering especially that in Ecuador the legislation possesses a regulatory body with provisions and a scope of application that favors the economic structures of the various productive factors, the present study obtained that when enterprises and individuals fulfill their tax obligations they not only contribute to the sustainability of the State and the financing of essential public services but also generate a climate of greater confidence and legal certainty; this favorable environment attracts national and foreign investment, as investors feel more secure knowing that a transparent and reliable system exists.

According to (15), in the research entitled "Short- and long-term effects of tax-credit forgiveness programs on Value-Added Tax collection," the study concludes that the two federal contribution-forgiveness programs used by the Mexican government did

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not permanently or significantly affect VAT collection, nor did they demonstrate that voluntary taxpayer compliance was affected, given that the identified effects adjusted to their normal short-term trajectory. Meanwhile, the present study demonstrates that the initial collection-target estimate by the Internal Revenue Service (SRI) was USD 602 million, whereas effective collection—particularly that obtained in cash—exceeded the initial target, reaching USD 1,120 million. This result evidences a notable success, far greater than expected by the SRI, and demonstrates the efficacy of the amnesty as a tool for boosting tax collection. The experience of the 2018 amnesty presents opportunities for future fiscal policies, enabling analysis of taxpayers' receptivity to this type of measure and the potential for its future application.

According to (16), in the research entitled "Legislative commentary on the decree that leaves without effect the tax-debt forgiveness programs," tax forgiveness represents an exceptional mode of extinguishing tax debt that releases the taxable subject from the constitutional duty to contribute to public expenditures by virtue of the pardon granted by the fiscal authority. Therefore, it is important to consider that in the short term forgiveness programs do evidence benefits such as an increase in collection indices; however, their habitual and indiscriminate implementation harms the Public Treasury. In the present study, the tax amnesty in Ecuador, based on the objective of recovering the overdue portfolio of delinquent taxpayers, established remissions of interest, fines, and surcharges to incentivize voluntary debt payment; in addition, 100% of debts is forgiven provided certain requirements are met. However, obligations that became due after 2 April 2018 and income-tax returns for the preceding year are not included in this remission (17).

According to (18), a tax amnesty enables governments to obtain an immediate injection of revenues, which translates into a short-term increase in the state budget. This author maintains that the collection achieved can be significantly greater than expected thanks to the incentive of reducing sanctions and surcharges for taxpayers. However, other authors, such as (19), suggest that while an amnesty may generate additional revenues, it also creates the perception that tax non-compliance does not carry severe consequences, which could discourage voluntary compliance in the future.

On the other hand, studies conducted by (20) have demonstrated that the 2018 tax amnesty in Ecuador contributed to temporarily reducing evasion levels and was used as a corrective measure to strengthen the management capacity of the tax system. This assertion concurs with the analysis of (21), who highlights that a tax amnesty is an effective resource in contexts of economic crisis, where the State needs to maximize collection without applying new tax burdens.

Nevertheless, some consider that an amnesty can be only a short-term solution and that its efficiency is limited without a comprehensive fiscal reform. (22) mention that, without complementary measures to combat tax evasion in a structural manner, an amnesty does not ensure sustainable revenues. In this sense, (23) emphasizes that an

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amnesty could compromise the country's financial sustainability if taxpayers perceive a repetitive pattern in the implementation of this type of measure, affecting tax morale.

The perspective of (24) contributes an interesting viewpoint by noting that a tax amnesty should be accompanied by awareness-raising and tax-education campaigns to promote a culture of tax compliance. Without a simultaneous effort of this kind, the benefits of the amnesty could rapidly dissipate, because taxpayers would continue to await future regularization opportunities rather than complying voluntarily (25).

CONCLUSIONS

The 2018 tax amnesty greatly exceeded the collection expectations established by the Tax Administration. Implementation of this measure demonstrated unmatched effectiveness by achieving a total amnesty amount of USD 1,289 million compared with the USD 602 million expected to be recovered from the overdue portfolio. This significant increase demonstrates the efficiency of applying an amnesty as a strategy to incentivize fulfillment of tax obligations and reduce delinquency in tax payment. In this sense, the Internal Revenue Service also succeeds in strengthening its financial resources and promoting greater tax compliance by taxpayers for the benefit of Ecuador's economy.

Collection from the 2018 amnesty represented 8.83% of the total revenues that constitute the General State Budget. Therefore, it is important to consider that, although a significant quantity in absolute terms, it still represents only a small fraction of the total tax revenues that finance Ecuador's Budget. Nevertheless, the collection of taxes and the recovery of overdue amounts from those taxpayers who disregard their tax obligations are indispensable for improving the economy, especially because the country's principal revenues derive from the sale of oil and from tax collection. Ultimately, these actions are essential to guarantee the financial stability of the State and to promote economic and social development.

On the basis of the successful results that accompany the application of tax amnesties, it is advisable to continue implementing measures of this type in the future, especially in declining economies that require prompt financing, given that it has been demonstrated that remission is highly effective in fostering fulfillment of tax obligations owed to the Tax Administration and that, consequently, it will reduce delinquency in tax payment and increase the economic development of any country. However, it is important to emphasize that this measure should not be regarded as a long-term solution, because it does not promote tax compliance; therefore, the measures that are implemented must be regular and constant in order to achieve greater collection.

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OPTIMIZANDO LA CADENA DE SUMINISTRO: EL PAPEL DE UN SUMINISTRO: EL PAPEL DE UN SISTEMA DE GESTIÓN DE INVENTARIO EFICIENTE

OPTIMIZING THE SUPPLY Y CHAIN: THE ROLE OF AN EFFICIENT INVENTORY MANAGEMENT SYSTEM

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RESUMEN

En la Escuela Superior Politécnica de Chimborazo (ESPOCH) enfrenta deficiencias en el control de inventarios, afectando su capacidad operativa, una adecuada gestión de inventarios, es importante para el correcto funcionamiento de las operaciones, pero actualmente se tiene fallas que afectan negativamente en su rendimiento. El problema de la investigación dentro de la ESPOCH se debe a la falta de procedimientos, el uso de la tecnología deficiente y la poca capacitación del personal, generando graves errores dentro de este ámbito. El objetivo es implementar un sistema de gestión de inventario eficiente que contemple la estandarización de procedimientos, la adopción de tecnología moderna y la capacitación continua del personal, con el fin de optimizar la cadena de suministro de la institución. La metodología adoptó un enfoque mixto, combinando métodos cuantitativos y cualitativos, se realizaron encuestas estructuradas y entrevistas semiestructuradas al personal de la unidad de bienes y bodegas para recopilar datos sobre los procedimientos actuales, el nivel de adopción tecnológica y las necesidades de capacitación. Los resultados, subrayan que la implementación de la metodología propuesta permitió mejorar sustancialmente los niveles de integración interna y externa de la cadena de suministro, así como fortalecer la colaboración estratégica entre los actores involucrados. Esto se reflejó en indicadores clave, como el aumento del porcentaje de entregas a tiempo, la disminución de productos defectuosos y la reducción significativa de los niveles de inventario. En conclusión, la implementación de un sistema de gestión de inventarios eficiente, que incluye la estandarización de procesos, la adopción de tecnología avanzada y la capacitación continua del personal, ha demostrado ser fundamental para optimizar la cadena de suministro de la ESPOCH, mejorando su desempeño operativo y posicionándola de manera más competitiva en un entorno empresarial en constante evolución.

Palabras clave

Inventarios, Instituciones públicas, control, procedimientos

ABSTRACT

The Escuela Superior Politécnica de Chimborazo (ESPOCH) faces deficiencies in inventory control, affecting its operational capacity. Adequate inventory management is important for the proper

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functioning of operations, but currently there are failures that negatively affect its performance. The research problem within ESPOCH is due to the lack of procedures, the use of poor technology and poor staff training, generating serious errors within this area. The objective is to implement an efficient inventory management system that contemplates the standardization of procedures, the adoption of modern technology and the continuous training of staff, in order to optimize the institution's supply chain. The methodology adopted a mixed approach, combining quantitative and qualitative methods. Structured surveys and semi-structured interviews were conducted with the staff of the goods and warehouses unit to collect data on current procedures, the level of technological adoption and training needs. The results highlight that the implementation of the proposed methodology allowed for a substantial improvement in the levels of internal and external integration of the supply chain, as well as strengthening strategic collaboration between the actors involved. This was reflected in key indicators, such as the increase in the percentage of on-time deliveries, the decrease in defective products and the significant reduction in inventory levels. In conclusion, the implementation of an efficient inventory management system, which includes the standardization of processes, the adoption of advanced technology and the continuous training of staff, has proven to be fundamental in optimizing ESPOCH's supply chain, improving its operational performance and positioning it more competitively in a constantly evolving business environment.

Keywords

Inventories, Public institutions, control, procedures

INTRODUCTION

The optimization of the supply chain has emerged as a crucial component in the effective management of any organization, and its relevance becomes even more notable in educational institutions such as the Escuela Superior Politécnica de Chimborazo (ESPOCH). Consequently, adequate inventory management becomes an essential element to ensure the smooth and efficient functioning of operations.

However, various studies indicate that the goods and warehouses unit of the institution faces serious deficiencies in inventory control, which negatively impacts its operational capacity. Multiple problems stand out, encompassing aspects such as the lack of standardized procedures, the use of obsolete technologies, and insufficient training of the personnel responsible for these functions.

The lack of rigorous control in inventory management not only leads to errors and discrepancies in records, but also considerably limits the capacity to perform adequate tracking and to implement automated processes. This scenario aligns with the assertions of Operations Management Theory (1), which underscores the imperative need for well-defined procedures to optimize operational efficacy. Likewise, Information Systems Theory (2) highlights that the use of appropriate technologies is essential to improve both accuracy and efficiency in inventory management, an aspect that is compromised in the current situation at ESPOCH. Additionally, the lack of adequate staff training, as noted by Organizational Learning Theory (3), increases the

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risk of operational errors and limits the capacity to adapt to new technologies and procedures, further aggravating the existing situation.

The consequences of these deficiencies are tangible and manifest in the frequency of errors in inventory records, which generates inefficient use of resources and causes an increase in operational costs, directly affecting the unit's capacity to effectively manage the institution's assets, compromising not only overall performance but also the long-term sustainability of operations. Faced with this reality, it becomes imperative to address inventory management from a contemporary perspective that contemplates both the evolution of organizational theories and the technological advances available today.

Over the years, inventory management has been the subject of study of various theories that seek to optimize the processes involved. Inventory Management Theory (4), with its Economic Order Quantity (EOQ) model, has been a fundamental pillar in this field, proposing a balance between ordering costs and inventory holding costs. This approach remains highly relevant, especially in institutions that manage large volumes of goods, as is the case of ESPOCH. Nevertheless, over time, theories on inventory management have evolved toward more sophisticated and automated approaches.

Subsequently, the automation of logistics processes underscores the importance of implementing advanced technological tools, such as enterprise resource planning (ERP) systems, barcode scanners, and real-time data analysis (6). These technologies not only enable more effective and efficient inventory tracking, but also improve agility and precision in resource management.

In turn, organizational training stands as a fundamental pillar to ensure the correct adoption of new procedures and technologies within the institution. According to (5), adequate training not only enhances the technical skills of personnel but also favors adaptation to new tools and processes. This vision is congruent with Organizational Learning Theory (7), which maintains that organizations must foster an environment of continuous learning to improve their adaptability and performance in a changing environment.

Finally, the hypothesis is advanced that the implementation of an efficient inventory management system—one that contemplates the standardization of procedures, the adoption of modern technology, and continuous staff training—will make it possible to optimize the supply chain at ESPOCH. This study aims not only to identify the causes of the current deficiencies but also to offer a theoretical and practical framework that drives a substantial improvement in inventory management at the institution, thereby laying the foundations for a more efficient and sustainable future in its operations.

MATERIALS AND METHODS

The present research adopts a mixed-methods approach, combining quantitative and qualitative methods. The quantitative approach is used to collect and analyze measurable data on operational efficiency and the effectiveness of inventory-control systems, while the qualitative data seek to obtain a deeper understanding of the attitudes and opinions of staff regarding the current problem in inventory management.

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Type of research

The study is characterized as descriptive and exploratory, achieving a comprehensive and in-depth analysis of the inventory-control problem in the goods and warehouses unit.

Population and sample

The study population consists of the staff of the goods and warehouses unit of ESPOCH, comprising 25 collaborators. Because it is a highly specific population, a census sampling was applied; that is, all members were surveyed and interviewed.

Data analysis

The quantitative data obtained through the surveys were analyzed using descriptive statistics such as percentage frequencies and measures of central tendency, thereby ascertaining staff perceptions of current procedures.

In the case of the analysis of the semi-structured interview data, patterns, themes, and categories that allow insight into the depth of the causes of deficiencies in inventory management were considered.

Procedure

The research was carried out in several sequential stages, each designed to address the problems identified in the inventory management of the goods and warehouses unit of ESPOCH. These stages include:

- Initial diagnosis of the current situation

In this phase, a comprehensive evaluation of the current state of inventory control was performed. This involved reviewing existing processes, the level of technological adoption, and staff training.

- Design and documentation of standardized procedures

Based on the diagnostic findings, standardized procedures for inventory control were designed and documented. These procedures ensure uniformity in the management and handling of goods, minimizing errors and increasing efficiency.

- Selection and implementation of the new technological system

In this stage, an appropriate technological system for inventory control was selected, based on criteria of efficiency, scalability, and compatibility with the unit's needs. System implementation included the integration of tools such as inventory-management software and technological devices, such as barcode scanners, that optimize the precision and speed of operations.

- Staff training

Once the standardized procedures and the technological system were implemented, staff training was carried out. This stage is vital to ensure that the team is prepared to apply the new procedures and efficiently use the technological tools.

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RESULTS

The findings obtained throughout the present study are of capital importance and forcefully underscore the need to implement an inventory-management system that is both efficient and robust, with the objective of achieving comprehensive and effective optimization of ESPOCH's supply chain. Through a meticulous and detailed analysis, it was evidenced that, prior to the adoption of the proposed methodology, the entities integrating the supply chain presented alarmingly low levels of integration: internal integration barely reached 40%, while external integration was limited to a scarce 21%, and strategic collaboration stood at a concerning minimum of 12% (8).

Table 1. Comparison of key indicators before and after implementation

Indicator	Before implementation	After implementation
Internal integration	40%	75%
External integration	21%	65%
Strategic collaboration	12%	55%
Percentage of on-time deliveries	60%	85%
Defective products	8%	3%
Storage cost reduction	—	15%
Inventory error reduction	—	40%

Table 1 shows the positive impacts after implementing the inventory-management system. The levels of internal and external integration had low values, represented between 40% and 21%; after the application they increased significantly. In the remaining aspects an improvement can also be evidenced; moreover, key indicators such as on-time delivery, the reduction of defective products, and cost reduction reflect a broad improvement.

These deficiencies are attributed, to a large extent, to the absence of clearly defined processes and to ineffective management of information flows, which results in a lack of clarity and effectiveness in communication among the various parties involved. In addition, an organizational culture that does not favor information exchange or the alignment of strategic objectives is added, which significantly limits the capacity of organizations to work jointly and collaboratively.

Therefore, the comprehensive inventory-management methodology presented below outlines a detailed plan to transform an organization's inventory management. By following this schedule, greater precision in records, greater staff satisfaction, and an overall improvement in operational efficiency are expected.

Table 2. Implementation schedule

Activity	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8
Initial diagnosis of the current situation	X							
Design of standardized procedures		X	X					

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Selection and implementation of the technological system			X	X	X			
Staff training				X	X			
Evaluation and monitoring of implementation						X	X	X

Likewise, through bibliographic studies, five fundamental steps are presented: definition of policies, collaborative planning, process integration, performance measurement, and elaboration of action plans. These have made it possible to identify areas for improvement and to establish innovative, effective, and sustainable strategies that strengthen the connections among the different links of the supply chain (9).

The results derived from their application have been conclusive and transformative, highlighting several key aspects that deserve mention. First, a notable improvement has been achieved in the levels of internal integration within each of the organizations that make up the institution. This has been accomplished through the clear definition and documentation of key processes, which has not only facilitated the flow of information and resources but has also optimized decision-making, generating synergies that have significantly increased efficiency, productivity, and organizational resilience (9).

Second, a notable strengthening of external integration has been observed thanks to the implementation of agreements and strategic collaboration policies with suppliers, manufacturers, and distributors. This action has enabled better visibility and coordination throughout the entire supply chain, thereby creating a shared-value network that is flexible, adaptable, and highly resilient to the challenges of the contemporary market (9).

Likewise, more effective strategic collaboration among the actors of the chain has been promoted through the implementation of joint demand-planning strategies, synchronized replenishment, and a more transparent and reliable exchange of information. These measures have had a significant impact on mitigating the bullwhip effect, considerably improving response capacity, flexibility, and operational agility, as well as final customer satisfaction (9).

The changes implemented are clearly reflected in key performance indicators. For example, a sustained increase in the percentage of on-time deliveries has been recorded, a notable decrease in the levels of defective products, and a significant reduction in maintained inventory levels. These results not only evidence the efficacy of the applied methodology but also demonstrate that integration and strategic collaboration are essential elements for optimizing the performance and sustainability of the supply chain.

A standout result of this research is the notable and substantial reduction in inventory levels, which has made it possible to precisely adjust inventory management to the concrete needs of ESPOCH. This adjustment has avoided both harmful excess and material shortages, resulting in a significant 15% savings in storage and custody costs. In addition, the improvement in the precision and reliability of the information provided by this system has led to a 20% reduction in delivery times of products and services to end users and clients, which is a clear indicator of operational efficiency (10). The 5% refers to the reduction of defective products, and the 60% refers to the increase in integration and collaboration, representing the greatest impact on the

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importance of more fluid communication and collaborative processes within the supply chain, as shown in Figure 1.

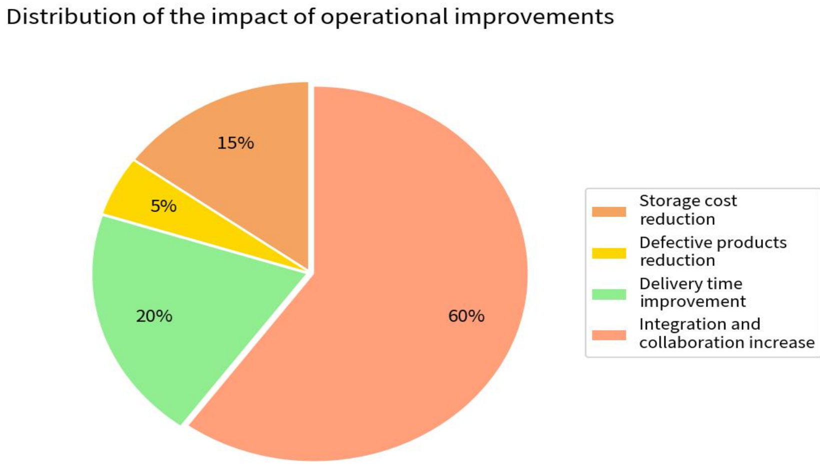

Figure 1. Distribution of the impact of operational improvements

Consequently, the research conducted has not only revealed the need for a transformation in inventory management but has also provided a clear and structured framework for carrying out such a transformation. The evidence collected and analyzed supports the idea that, by adopting a comprehensive approach, organizations can not only improve their operational performance but also establish stronger and more collaborative relationships with all actors involved in the supply chain. These advances not only translate into tangible economic benefits but also foster a more open and collaborative organizational culture, which, in turn, can facilitate innovation and adaptability in a constantly changing business environment.

DISCUSSION

The results obtained in the present research forcefully support the importance of implementing an inventory-management system. This finding aligns with the assertions of various authors who have studied the topic over the years.

For example, (11) and (12) note that effective inventory management is a determining factor in the competitiveness of organizations, since it makes it possible to reduce costs, improve product availability, and respond agilely to demand fluctuations. Similarly, (13) and (14) maintain that a well-designed and implemented inventory-control system contributes to increasing operational efficiency, which translates into tangible benefits such as a decrease in waste, better purchasing planning, and greater satisfaction of end users.

In the same vein, the results obtained in the present study corroborate the approaches of (15), who emphasizes the need to have standardized and well-defined procedures to optimize organizational processes. As evidenced, the lack of standardization in inventory-control procedures at ESPOCH generated inconsistencies in records and limited the capacity to perform adequate tracking, which negatively impacted overall efficiency.

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Likewise, the findings of this research support the premises of Information Systems Theory (16), highlighting that the incorporation of appropriate technologies is fundamental to improving precision and efficiency in inventory management. In the case of ESPOCH, the implementation of an integrated technological system, which included tools such as inventory-management software and scanning devices, made it possible to optimize registration, control, and tracking processes, which translated into a significant reduction of errors and greater reliability of information.

On the other hand, the results of this study also highlight the importance of implementing standardized procedures, modernizing the technology used in inventory management, and improving staff training in the goods and warehouses unit of ESPOCH. These interventions have proven key to increasing operational efficiency and reducing errors in inventory records.

Process standardization contributes significantly to error reduction and improves coherence in inventory management, as highlighted by (17). The implementation of uniform procedures at ESPOCH has allowed staff to adopt better practices in the handling of goods, which has reduced the execution time of tasks related to inventory control.

On the other hand, the adoption of advanced technological tools, such as ERP systems and barcode scanners, has improved precision in inventory tracking, reducing dependence on manual procedures that previously contributed to human errors. These findings are aligned with (18), who affirms that the adequate use of advanced technologies improves operational efficiency. In this case, ESPOCH has achieved a significant reduction in inventory errors, estimated at 40%, thanks to the implementation of these technologies.

Likewise, continuous staff training has proven to be a determining factor in the correct adoption of new technologies and procedures, as suggested by (19) and (20). With the training received, personnel have not only improved their technical competencies but have also shown greater disposition to adapt to technological changes. This has allowed a smoother transition toward the new systems and an improvement in operational efficiency.

It is important to note that the present study focused solely on the goods and warehouses unit of ESPOCH; therefore, its results cannot be generalized to other institutions without making contextual adjustments. Moreover, although significant advances were achieved in error reduction and efficiency improvement, the duration of the study was not sufficient to evaluate the long-term effects of the new technologies and procedures implemented. Future research could explore the sustainability of these improvements over time and analyze their impact on other operational areas of the institution (21).

The findings of this study can be applied in other institutions with similar problems in inventory management. It is recommended that institutions periodically evaluate their inventory-control processes, adopt updated technologies, and offer continuous training to their staff to guarantee constant improvement in operational efficiency. In addition, it is suggested that periodic inventory audits be carried out to identify areas for improvement and ensure the correct implementation of standardized procedures.

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It is worth noting that, although the present study focused on optimizing the supply chain of a specific educational institution, its findings and recommendations can be extrapolated to a wide range of organizations that face similar challenges in the management of their inventories. As evidenced by (22), the implementation of efficient inventory-control systems is an indispensable requirement to achieve a resilient supply chain adaptable to environmental changes.

CONCLUSIONS

The implementation of an efficient and robust inventory-management system at the Escuela Superior Politécnica de Chimborazo (ESPOCH) has proven fundamental for optimizing its supply chain. Through process standardization, the adoption of advanced technology, and continuous staff training, a substantial improvement was achieved in the levels of internal and external integration, as well as greater strategic collaboration among the different actors involved.

The changes implemented were reflected in key performance indicators, such as an increase in the percentage of on-time deliveries, a decrease in the levels of defective products, and a significant reduction in maintained inventory levels. These results evidence the efficacy of the applied methodology and demonstrate that integration and strategic collaboration are essential elements for optimizing the performance and sustainability of the supply chain.

This research has provided a clear and structured framework for carrying out an integral transformation in the inventory management of ESPOCH. The findings obtained support the idea that, by adopting a holistic approach, organizations can improve their operational performance, establish stronger and more collaborative relationships with the actors of the supply chain, and position themselves more competitively in a constantly evolving business environment.

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IMPACTO DE REFORMAS TRIBUTARIAS EN LA CONTABILIDAD EMPRESARIAL Y SUS ESTRATEGIAS DE ADAPTACIÓN

IMPACT OF TAX REFORMS ON BUSINESS ACCOUNTING AND ITS ADAPTATION STRATEGIES

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RESUMEN

La implementación de reformas tributarias se erige como una herramienta estratégica para fomentar la equidad fiscal y mejorar la eficiencia del sistema impositivo. No obstante, una aplicación inadecuada de estas reformas en el ámbito contable puede generar diversos desafíos y consecuencias adversas que impactan directamente la salud financiera y operativa de las organizaciones. El problema de investigación se da debido a la constante evolución de las reformas tributarias que resalta la importancia del cumplimiento de las nuevas normativas para evitar sanciones, multas, inexactitudes en los resultados financieros y otros problemas legales. El objetivo, es analizar el impacto que tiene la inadecuada aplicación de reformas tributarias en el área contable, identificando las principales deficiencias, evaluando sus efectos en la gestión financiera y proponiendo medidas correctivas que optimicen el cumplimiento y la eficiencia en los resultados financieros. Se empleó una metodología de investigación mixta, combinando enfoques cualitativos y cuantitativos, se realizó una revisión bibliográfica y documental, así como la aplicación de una encuesta al personal del departamento contable de la empresa COMSAFRAN. Los hallazgos revelan una preocupante falta de familiaridad del personal contable con las reformas tributarias vigentes, así como la ausencia de capacitación continua por parte de la empresa. Además, se identificaron desafíos como la falta de recursos tecnológicos y la resistencia al cambio, lo que obstaculiza la adecuada implementación de las reformas. En conclusión, la investigación evidenció la necesidad urgente de implementar programas de capacitación y actualización para el personal contable, con el fin de asegurar el cumplimiento y la correcta aplicación de las reformas tributarias, lo que a su vez contribuirá a mejorar la eficiencia y transparencia de la gestión financiera de la organización.

Palabras clave Reformas, tributación, contabilidad empresarial, capacitación

ABSTRACT

The implementation of tax reforms is a strategic tool to promote tax equity and improve the efficiency of the tax system. However, inadequate application of these reforms in the accounting field can generate several challenges and adverse consequences that directly impact the financial and operational health of organizations. The research problem arises due to the constant evolution of tax reforms that highlight the importance of compliance with new regulations to avoid penalties, fines, inaccuracies in financial results and other legal problems. The objective is to analyze the impact of the inadequate application of tax reforms in the accounting area, identifying the main deficiencies, evaluating their effects on financial management and proposing corrective measures to optimize compliance and

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efficiency in financial results. A mixed research methodology was used, combining qualitative and quantitative approaches. A bibliographic and documentary review was carried out, as well as the application of a survey to the personnel of the accounting department of the COMSAFRAN company. The findings reveal a worrying lack of familiarity with accounting personnel with the current tax reforms, as well as the absence of continuous training by the company. In addition, challenges such as lack of technological resources and resistance to change were identified, which hinder the proper implementation of the reforms. In conclusion, the research evidenced the urgent need to implement training and updating programs for accounting personnel, to ensure compliance and the correct application of the tax reforms, which in turn will contribute to improving the efficiency and transparency of the organization's financial management.

Keywords Reforms, taxation, business accounting, training

INTRODUCTION

The implementation of tax reforms stands as a highly relevant tool and an essential strategy to promote fiscal equity and improve the efficiency of the tax system in any nation. However, it is of vital importance that these reforms be adequately applied in the accounting sphere of companies, since an incorrect or deficient implementation can give rise to a series of challenges and adverse consequences that directly impact the financial and operational health of organizations.

Each year, the government introduces significant changes in the political, economic, and social fields with the purpose of improving the country's situation; therefore, within this framework, reforms to the Internal Tax Regime Law, the Tax Code, as well as the law creating the Internal Revenue Service (SRI) stand out, in addition to various repeals and assignments that seek to adjust the fiscal landscape (1).

In the accounting field, the most common reforms carried out in the last year include changes in the withholding percentages for VAT and income tax, the late issuance of vouchers, and errors in accounting records. Likewise, adjustments have been made to VAT percentages, which have increased from 12% to 15%, and deadline dates have been established for the authorization of invoices and withholding vouchers; consequently, these situations have led numerous companies to fail to comply with tax reforms, which translates into sanctions, fines, and citations from public entities, particularly the SRI, the IESS, and the Ministry of Labor. Furthermore, these infringements may result in observations during audits and in the presentation of erroneous financial information, which affects transparency and confidence in accounting management (2).

Consequently, the constant evolution of tax reforms highlights the importance of compliance with the new regulations to avoid sanctions, fines, inaccuracies in financial results, and other legal problems that can be very costly for organizations, since the lack of training and updating of accounting personnel can lead to errors in the application of the reforms, generating non-compliance that entails significant financial and legal consequences. Therefore, adequate training is crucial to ensure that accounting personnel are duly informed and prepared to correctly apply the reforms, thus minimizing the risks associated with their misinterpretation or execution (3).

Accordingly, the central question that will guide this analysis is: How does the lack of continuous training and updating on tax reforms affect the accounting area personnel in the

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veracity and accuracy of the company's financial reports? This approach will not only allow evaluation of the effectiveness of existing training programs, but will also contribute to identifying effective strategies that improve the application and interpretation of tax reforms in organizations.

Therefore, tax reforms have been promoted by various political influences and international scenarios, as well as by the need to increase contribution rates and the creation of new taxes, such as Value Added Tax (VAT), Income Tax, Capital Circulation Tax, and Special Consumption Tax, which seek to increase State revenues and constitute a necessary mechanism to adapt and reform tax collection (3).

Likewise, the design and execution of tax policies constitute a complex process that enables the country to collect the taxes necessary for its development. However, tax structures may present problems that hinder the achievement of fiscal objectives, which in turn affects taxpayers' perception of the tax system (4).

In this way, the State, for its part, has the responsibility to develop public policies that guarantee fundamental rights, such as health, education, and security, which requires revenues that come from taxes. Companies, consequently, must comply with a legal regime that includes a variety of tax obligations, encompassing income tax, value added tax, foreign exchange outflow tax, as well as local taxes, among others (5).

Additionally, tax evasion, which refers to the maneuvers used by taxpayers to elude their fiscal obligations, also has a significant impact on the Ecuadorian economy, especially in a context where tax revenues are crucial for the state budget; as a consequence of non-compliance, liquidity problems may arise and working capital of companies may be affected, which can put their financial and operational stability at risk (6).

Based on the foregoing, the objective of this research is to carry out an exhaustive analysis of the impact that the inadequate application of tax reforms has on the accounting area. This analysis will include the identification of the main deficiencies that arise, the evaluation of their effects on financial management, and the proposal of corrective measures that optimize both compliance and efficiency in financial results. In addition, it will explore how the implementation of specific training programs can directly influence the level of application and interpretation of tax reforms by accounting personnel.

MATERIALS AND METHODS

Research method:

In the present article, a mixed research methodology was employed, combining qualitative and quantitative approaches to provide a comprehensive understanding of the phenomenon under study. This methodology integrates a bibliographic and documentary review with inductive-deductive methods, as well as analysis-synthesis and documentary analysis.

The bibliographic and documentary review was fundamental for the collection of pertinent information on the impact of tax reforms on business accounting. Various sources were consulted, including books, academic articles, and previous studies, which provided a solid and reliable foundation for the development of the research.

The structuring of the methodology was based on a combination of inductive-deductive and analytical-synthetic methods.

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The inductive-deductive approach was used to identify and analyze both the particular and general aspects related to the topic in question, which made it possible to reach significant conclusions.

On the other hand, the analytical-synthetic method facilitated a detailed analysis of the study problem, allowing the synthesis of the information gathered and contributing to a deeper understanding of the consequences entailed by the inadequate application of tax reforms in the accounting area of the company COMSAFRAN.

Population:

The target population of this study was composed of the personnel of the accounting area of the company COMSAFRAN. Given that the population was very small, consisting of a total of five individuals, it was not considered necessary to establish a representative sample, since work was carried out with the total group of people available in the accounting department.

Inclusion criteria:

1. All members of the accounting department of the company COMSAFRAN were included, regardless of their level of experience or seniority in the position.

2. Participants had to be willing to respond to the survey and contribute their opinions on the tax reforms.

3. Those who had at least a basic knowledge of the tax regulations in force in the country were considered.

Exclusion criteria:

1. Those who did not belong to the accounting department of COMSAFRAN were excluded from the research, since the investigation focuses specifically on the perceptions of accounting personnel.

2. Members of the staff who could not participate in the survey due to absences or lack of time were excluded.

3. Any staff member who did not have prior experience in the accounting area was excluded, since the research focuses on the knowledge and application of tax reforms.

Data collection techniques

The main technique used for data collection was the survey, specifically designed to assess the level of knowledge of accounting personnel regarding the application and interpretation of tax reforms, which consisted of a total of five questions formulated to address key aspects related to the topic under study.

Data analysis:

Descriptive statistical tests were applied to summarize and present the data in a clear and comprehensible manner. This made it possible to identify patterns, trends, and areas for improvement in the knowledge of accounting personnel regarding tax reforms.

RESULTS

The findings obtained from the application of the survey directed to the workers of the accounting department reveal a worrying lack of familiarity with the tax reforms currently in force in the country.

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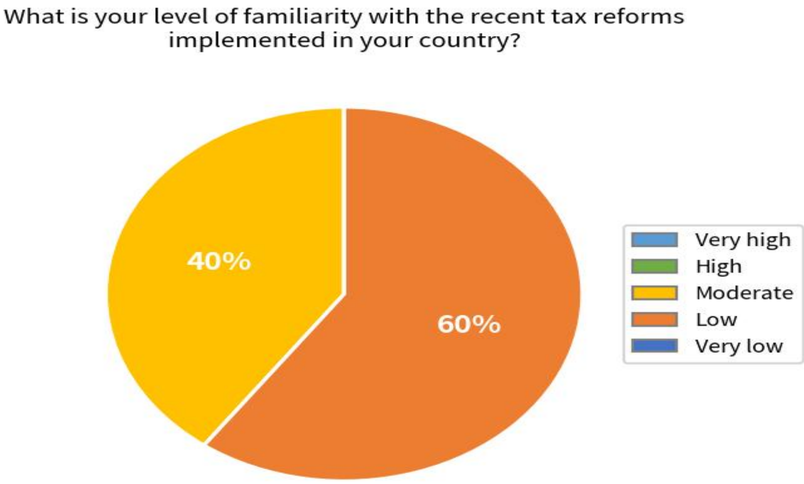

Figure 1: Tabulation of question 1

In particular, it is observed in Figure 1 that 60% of the employees present a low level of knowledge about these reforms, which demonstrates that a considerable part of the personnel does not have the necessary information to adequately implement the required changes.

On the other hand, only 40% of the workers show a moderate level of familiarity, which indicates that, although there is a group that possesses a reasonable understanding of the regulations, the disparity in knowledge levels could hinder coherence and effectiveness in the application of the reforms within the company. These findings underscore the urgent need to develop training and education programs that strengthen the understanding of accounting personnel in relation to current tax reforms, inferring the urgent need to improve education and training on tax reforms for company personnel, in order to ensure that all employees have an adequate and uniform understanding of the new regulations.

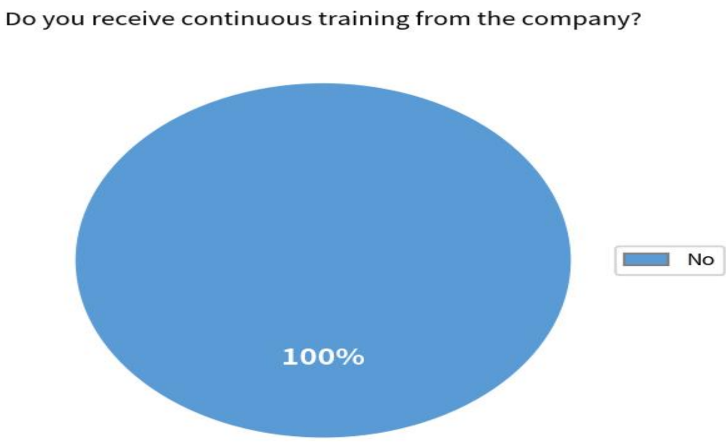

Figure 2: Tabulation of question 2

On the other hand, in Figure 2, it is observed that 100% of the workers in the accounting area state that they have not received continuous training from the company. This lack of training is identified as the main reason behind the inadequate application of tax reforms. Without a constant training process, employees of the accounting department may not be

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aware of the latest updates in accounting and tax regulations, a situation that can result in errors in the application of regulations and in compliance with normative obligations, which in turn could have negative repercussions for the company in terms of sanctions and other legal problems.

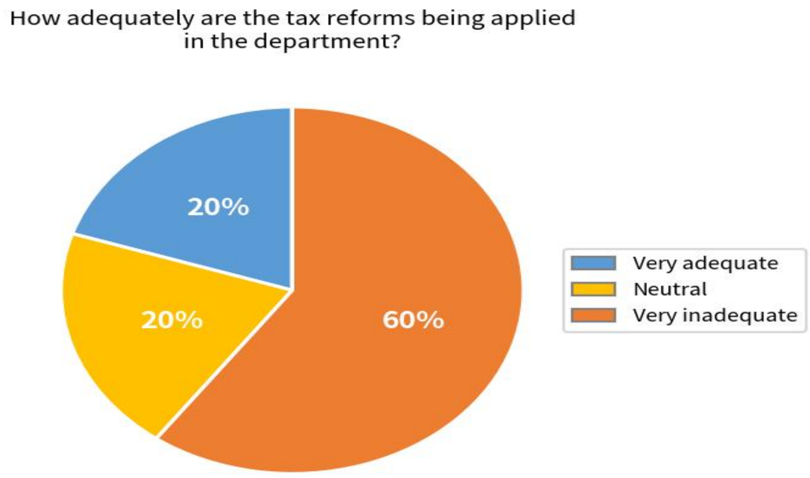

Figure 3: Tabulation of question 3

Additionally, in Figure 3 a significant percentage of 60% of employees can be observed who consider that the implementation of the reforms is highly inadequate. This demonstrates a great concern about the way in which these changes are being managed and, at the same time, the result suggests that there are considerable problems in the implementation phase, which could be negatively affecting the performance and efficiency of the accounting area.

Consequently, only 20% of employees consider that the reforms are being applied adequately. This very reduced percentage may be indicative of a lack of confidence in the current process and suggests the urgent need for a review and adjustment in the execution of the reforms. On the other hand, the remaining 20% of employees perceive the application of the reforms as neutral, which could imply that they have not noticed significant changes or that they simply do not have a formed opinion on the matter. This neutral stance could be a reflection of a lack of visible impact of the reforms or, alternatively, a certain indifference toward the process.

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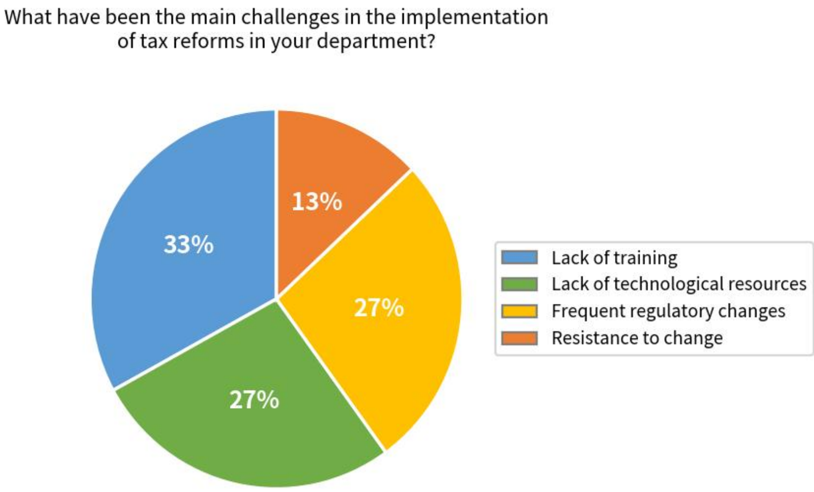

Figure 4: Tabulation of question 4

In conjunction with the foregoing, Figure 4 reveals that a considerable number of employees have identified various challenges that have arisen during the implementation of tax reforms in their department. Thirty-three percent of them attribute these obstacles to the lack of training, which means that one third of the personnel does not feel adequately prepared to address and adapt to the changes that occur annually, highlighting a significant concern about the need for continuous training and professional development within the organization.

On the other hand, 27% of respondents indicate that the difficulties are due to the lack of technological resources. This situation suggests that the company does not have updated accounting systems or software, which limits the capacity of the personnel to carry out their work efficiently and effectively; therefore, the lack of adequate tools can hinder not only individual performance but also the overall progress of the company.

Likewise, another 27% of employees consider that the constant changes in regulations constitute a significant challenge. This is an external factor that is beyond the control of managers, since it depends on the decisions taken at the governmental level in each country, which can generate uncertainty and difficulty in adapting to new regulations.

Finally, the remaining 13% of the personnel mention that resistance to change also plays an important role in this context. This is because many of the employees have a long trajectory in the organization and have been performing their functions based on their accumulated experience over the years.

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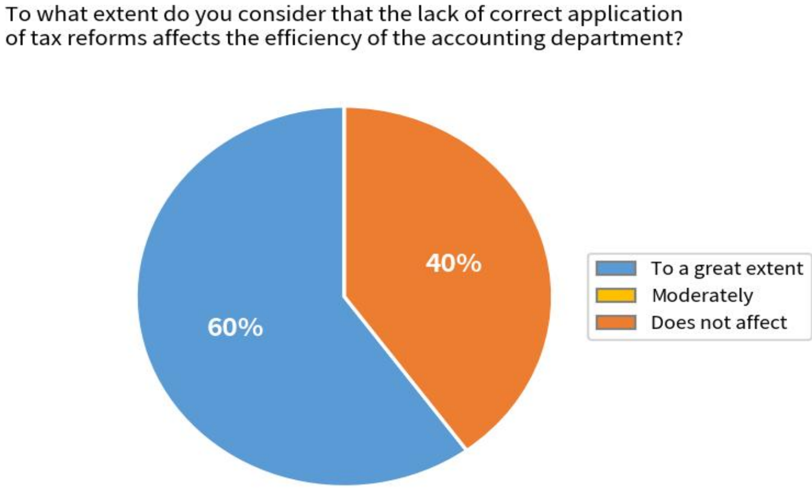

Figure 5: Tabulation of question 5

Finally, 60% of the personnel is of the opinion that the lack of correct application of tax reforms significantly impacts the efficiency of the department, while 40% does not share this opinion. This data suggests that a considerable part of the team perceives that the problems derived from the inadequate implementation of the reforms are having a notable effect on their capacity to perform efficiently. This situation highlights the need to address the deficiencies in the application of said reforms in order to improve the overall performance of the department.

DISCUSSION

The comparative analysis between the results obtained in this research and the approaches of various recognized and prominent authors in the field of tax reforms and their impact on business accounting allows the generation of a highly enriching and revealing discussion, which sheds light on the existing gaps between empirical reality and theoretical perspectives.

In the first instance, the findings reveal that a majority proportion of the accounting personnel (60%) exhibits a deficient and precarious level of familiarity and knowledge regarding the current tax reforms. This result stands in diametric and frontal contrast to what is stated by (7) and (8), who emphatically emphasize that accounting personnel must maintain a solid and robust understanding of regulatory changes to ensure the correct implementation of tax reforms. In marked contrast, the scarce knowledge of the personnel at the company COMSAFRAN could lead to application errors and non-compliance, which would place the financial and legal stability of the organization at serious risk.

On the other hand, the 40% of employees who show a moderate level of familiarity with the reforms suggests the existence of a group with a reasonable understanding, but still insufficient to guarantee coherence and uniformity in the application of regulatory changes. These results stand in forceful and frontal contrast to what is proposed by (9), (10), and (11), who affirm that continuous training of accounting personnel is fundamental and primordial to keep the required knowledge and skills up to date.

Regarding the worrying and alarming lack of continuous training, 100% of the respondents state that they have not received this type of formation from the company. These findings align fully and in total consonance with what is stated by (12) and (13), who highlight that

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the lack of training in the accounting area can lead to compliance errors and sanctions. This situation contrasts notably and distances itself significantly from what is proposed by (14), who suggests the implementation of training programs that use various technological tools and educational formats.

With respect to the perception of the application of the reforms, 60% of the employees consider that this process has been highly inadequate, while only 20% perceive it as adequate. These results enter into direct conflict and stand in forceful contrast with what is stated by (15), (16), and (17), indicating that an effective implementation of tax reforms should generate a positive perception among accounting personnel. The marked discrepancy in the opinions of COMSAFRAN employees suggests that the implementation strategy may not be aligned with the needs and expectations of the personnel.

Finally, regarding the challenges in the implementation of the reforms, the results show that the main obstacles are due to the lack of training (33%), the insufficiency of technological resources (27%), the constant changes in regulations (27%), and resistance to change (13%). These findings align fully and coherently with what is stated by (18), (19), and (20), who mark that these factors can significantly and substantially hinder the capacity of the personnel to adapt to tax reforms. Likewise, the results support and reinforce what is proposed by (22), (23), and (24) regarding the imperative and pressing need to invest in updated accounting systems and software, as well as to implement effective and efficient strategies to manage resistance to change.

This research contrasts notably and distances itself considerably from the approaches of various expert authors in the field of tax reforms and their impact on business accounting. While the specialized literature (21) emphasizes the transcendence and relevance of continuous training, technological updating, and effective management of regulatory changes, the findings of this study reveal important and worrying deficiencies in the application and interpretation of tax reforms by the accounting personnel of the company COMSAFRAN, which could lead to negative and adverse consequences for the organization. These marked discrepancies highlight the urgent and imperative need to implement corrective measures and effective strategies that make it possible to remedy the identified problems and improve the efficiency and compliance of tax reforms in the accounting department (25).

CONCLUSIONS

The study evidenced a worrying lack of familiarity and knowledge on the part of accounting personnel regarding the current tax reforms, with 60% of employees exhibiting a deficient level of understanding. This situation contrasts with the importance that specialized literature attaches to the solid knowledge of accounting personnel regarding regulatory changes to ensure correct implementation.

It was identified that 100% of employees do not receive continuous training from the company, which aligns with the approaches of various authors who emphasize the imperative need for permanent training to keep the required knowledge and skills up to date in the accounting area. This lack of training could lead to compliance errors and sanctions.

The main challenges in the implementation of the reforms include the lack of training (33%), the insufficiency of technological resources (27%), the constant changes in regulations (27%),

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and resistance to change (13%). These findings align with what is stated in the literature, which indicates that these factors can significantly hinder the capacity of the personnel to adapt to tax reforms, highlighting the urgent need for investment in updated accounting systems and for the implementation of effective strategies to manage resistance to change.

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ANÁLISIS DEL CAPITAL INTELECTUAL EN EL REPORTING FINANCIERO DE EMPRESAS EN LA BOLSA DE QUITO Y GUAYAQUIL

ANALYSIS OF INTELLECTUAL CAPITAL IN THE FINANCIAL REPORTING OF COMPANIES ON THE STOCK EXCHANGE OF QUITO AND GUAYAQUIL

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RESUMEN

En el dinámico entorno económico actual, el conocimiento y la capacidad de innovación se han instaurado como los principales impulsores de la competitividad empresarial. En este escenario, el capital intelectual (CI) ha adquirido una relevancia estratégica fundamental para las organizaciones, sin embargo, la contabilidad tradicional ha tenido dificultades para reflejar adecuadamente estos activos intangibles en los estados financieros, generando una limitada evidencia sobre la medición y divulgación del CI en las empresas ecuatorianas que cotizan en la Bolsa de Valores de Quito y Guayaquil. El objetivo es analizar la relación entre el valor oculto y la mayor divulgación de información sobre los elementos del CI en los informes de auditoría de estas empresas durante el período 2010-2016. La metodología empleada es un estudio de naturaleza cuantitativa, con análisis de contenido de los informes anuales de una muestra representativa de empresas ecuatorianas. Entre los resultados, se encontró una brecha significativa entre el valor en libros y el valor de mercado de las empresas, lo que sugiere la presencia de activos intangibles no reflejados adecuadamente. Además, se observaron variaciones importantes en la divulgación de información sobre los componentes del CI entre las diferentes organizaciones. En conclusión, la normativa contable actual no permite el reconocimiento completo de los activos intangibles, por lo que se requieren esfuerzos normativos para disminuir la diferencia entre el valor de mercado y el valor en libros. Asimismo, los patrones diversos en la evolución del CI resaltan la importancia de considerar el contexto y las características específicas de cada empresa al analizar la revelación de información sobre este tipo de activos.

Palabras clave Capital intelectual, activos intangibles, divulgación de información, informes financieros

ABSTRACT

In today's dynamic economic environment, knowledge and innovation capacity have been established as the main drivers of business competitiveness. In this scenario, intellectual capital (IC) has acquired a fundamental strategic relevance for organizations; however, traditional accounting has had difficulties in adequately reflecting these intangible assets in the financial statements, generating limited evidence on the measurement and disclosure of IC in Ecuadorian companies listed on the Quito and Guayaquil Stock Exchanges. The objective is to analyze the relationship between hidden value and the increased disclosure of information on IC elements in the audit reports of these companies during the period 2010-2016. The methodology used is a quantitative study, with content analysis of the annual reports of a representative sample of Ecuadorian companies. Among the results, a significant

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gap was found between the book value and the market value of the companies, suggesting the presence of intangible assets not adequately reflected. In addition, significant variations were observed in the disclosure of information on IC components between different organizations. In conclusion, current accounting regulations do not allow for the full recognition of intangible assets, so regulatory efforts are required to reduce the difference between market value and book value. Furthermore, the diverse patterns in the evolution of CI highlight the importance of considering the context and specific characteristics of each company when analyzing the disclosure of information on this type of assets.

Keywords Intellectual capital, intangible assets, information disclosure, financial reporting

INTRODUCTION

In today's dynamic economic environment, knowledge and the capacity for innovation have become the main drivers of business competitiveness. In this scenario, intellectual capital (IC) has acquired fundamental strategic relevance for organizations, comprising those knowledge-based intangible resources that, when combined with tangible assets, generate value and sustainable competitive advantages (1).

The various elements that make up IC, such as human, structural, and relational capital, are increasingly decisive for organizational success. However, traditional accounting has had difficulties in adequately reflecting these intangible assets in the financial statements, which has aroused growing interest among academics and professionals in developing models and tools that enable their measurement and disclosure (2).

International Accounting Standard (IAS) 38 defines an intangible asset as an identifiable non-monetary asset without physical substance that is used in the production or supply of goods and services, for rental to others, or for administrative purposes. Consequently, this definition restricts the recognition of intangibles in the financial statements, since only those that have been acquired are considered (3).

Faced with this situation, international regulatory bodies such as the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) have recommended the inclusion of additional information on intangible assets outside the financial statements, thereby avoiding the incorporation of accounting criteria that could jeopardize the quality and reliability of financial information (4).

In this context, companies have the opportunity to complement information on their intangible assets through voluntary disclosure in annual reports. A growing body of literature (5), (6) has explored the nature of these IC disclosures in different countries, including Australia, Ireland, Canada, Sri Lanka, Malaysia, the Netherlands, France, Germany, and Spain.

However, in the case of Ecuador, research related to the measurement and disclosure of IC in companies is scarce or almost non-existent. This is partly because the topic has not yet been given due importance or there is widespread lack of knowledge in the accounting and financial sector (7).

Therefore, this paper aims to replicate the analysis carried out by (8) with data applied to the case of Ecuadorian companies. The research question to be answered is: Is there a correlation between the difference between book value and market value and greater disclosure of information regarding the elements of intellectual capital?

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Human capital, as an intangible resource derived from people, refers to aspects such as their experience, talent, motivation, creativity, and problem-solving capacity (7). On the other hand, structural capital is related to the organization's intangible assets, such as technology, intellectual property, innovation capacity, and organizational culture (9). Meanwhile, relational capital is defined by the company's relationships with its environment, especially with the economic agents participating in the value chain (6).

In addition, various IC measurement models have been developed with the aim of establishing systematic tools and procedures to perform a financial estimation of intangible assets that are not adequately reflected in traditional accounting statements. Some of the most relevant models are the Balanced Business Scorecard, the Skandia Navigator, the Intelec Model, the Intellectus Model, the Nova Model, and the Strategic Management by Competencies Model (10).

In this way, these measurement models have made various attempts to provide useful information on IC in business reports. One of the most influential is Sveiby's Intangible Assets Monitor (11), which focuses on three categories of intangible assets: external structure, internal structure, and employee competence.

In the Spanish context, several studies have analyzed the disclosure of information related to IC in companies' annual reports. These works conclude that, although Spanish companies participate in the process of identifying, measuring, and reporting on their knowledge-based resources, the disclosure of this information remains limited, despite a certain improvement over the years (12).

In the case of Ecuador, research on the measurement and disclosure of IC in companies is scarce. However, some recent studies have explored the relationship between IC and the financial profitability of Ecuadorian companies, finding a positive and significant relationship (13).

Given the limited evidence on this topic in the Ecuadorian context, the present work seeks to contribute to the analysis of the disclosure of information related to IC in companies listed on the Quito and Guayaquil Stock Exchanges. Specifically, it aims to study the relationship between hidden value and greater disclosure of information on IC elements in the audit reports of these companies during the period 2010-2016.

MATERIALS AND METHODS

Research method:

The research presented in this article is classified as a quantitative study. This approach was selected due to its effectiveness in the collection and analysis of numerical data closely related to the disclosure of intellectual capital in various business organizations.

Population or sample:

The sample used in this study is composed of a representative set of companies that disclose relevant information about their intellectual capital. The selection of these organizations was carried out through a systematic review of previous research, covering those works that relied on academically recognized databases such as SCOPUS and LATINDEX. This meticulous process guarantees the inclusion of studies that are both pertinent and significant within the field of intellectual capital.

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Inclusion criteria:

• Companies that publish information on their intellectual capital in annual reports, sustainability reports, or similar documents reflecting their disclosure practices were considered.

• Organizations from different sectors and sizes were included, provided they had at least one year of operation in the market, which ensures a sufficiently robust sample.

Exclusion criteria:

• Companies that do not provide information on their intellectual capital or that do so inconsistently were excluded, as this could compromise the validity and reliability of the data collected.

• Documents that were not found in the selected databases or that did not meet the established academic quality standards were also discarded, thereby ensuring the integrity of the research.

Setting:

The research was conducted in a generic environment encompassing companies from different sectors and sizes located in an Ecuadorian region. This methodological choice allows the findings obtained to be generalizable and applicable to a variety of industries, thereby enriching the relevance and applicability of the results in diverse contexts.

Measurements:

For data collection, research instruments such as structured surveys were used, directed at the persons responsible for information disclosure in the companies. These surveys included detailed questions on intellectual capital disclosure practices and the variables associated with the categories proposed by (14). These categories cover internal capital, external capital, and employee competence, thus allowing an exhaustive and in-depth analysis of each component of intellectual capital.

Variable: information disclosure

Among the approaches analyzed, the one proposed by (15) was selected as the most appropriate for the present study, given that it forms the basis of a considerable number of investigations on intellectual capital. This empirical approach focuses on identifying the frequency with which the different IC attributes appear in the annual audit reports of Ecuadorian companies belonging to various industrial sectors. To carry out this analysis, manual coding was performed over six accounting periods, covering the years 2010 to 2016.

Variable: economic valuation of IC

Regarding the economic valuation of intellectual capital, the antecedents provided by (16) are taken as a reference, who used the difference between book value and market capitalization as an indicator to measure IC. That study was carried out with a sample of 11 Irish companies, employing content analysis of their annual reports. To obtain the market value, data from the Irish Stock Exchange (17) were used, while the book value was extracted directly from the companies' annual reports.

Statistical analysis:

Descriptive and multivariate statistical tests were carried out with the aim of identifying significant relationships between the variables related to intellectual capital disclosure and

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the characteristics of the companies analyzed, providing a solid and reliable framework for the analysis of the information obtained and thereby contributing to the advancement of knowledge in the field.

RESULTS

The findings presented below set out the results derived from the review of the existing literature on the disclosure of intellectual capital (IC) in various business organizations. This disclosure shows significant variations across different nations and is influenced by specific contextual and organizational factors.

As shown in Table 1, the intellectual capital of an organization can be divided into three main categories:

1. Internal structure (structural): These assets are fundamental for daily operations and long-term value generation.

2. External structure (relational): These relationships are crucial for value creation and business sustainability.

3. Human capital: It is the most valuable and difficult-to-imitate asset of any company.

Table 1. Intellectual Capital Reference Framework

1. Internal structure (structural)	2. External structure (relational)	3. Human capital
Intellectual Property	Brands	Know-how
Patents	Customers	Education
Copyrights	Customer loyalty	Employees
Trademarks	Distribution channels	Knowledge-related work
Infrastructure assets	Business collaboration	Competence-related work
Corporate culture	Research collaboration	
Management processes	Financial contacts	

When evaluating the relationship between intellectual capital and business performance, a sample of 20 companies was selected, as shown in Table 2. These companies were chosen for their relevance in the market and their representativeness across different economic sectors. The selection of this sample made it possible to analyze how intellectual capital is manifested and contributes to organizational value in diverse contexts.

Table 2. Companies analyzed

COMPANY	SECTOR	SUBSECTOR
BANCO DE GUAYAQUIL	Financial	BANKS
BANCO DEL PICHINCHA	Financial	BANKS
INVERSANCARLOS	Financial	CORPORATE HOLDING
PRODUBANCO	Financial	BANKS
CIALCO	Construction	BASIC MATERIALS – INDUSTRY & CONSTRUCTION
UNACEM	Construction	BASIC MATERIALS – INDUSTRY & CONSTRUCTION
HOLCIM	Construction	BASIC MATERIALS – INDUSTRY & CONSTRUCTION
EL REFUGIO FORESTAL / LA ESTANCIA FORESTAL	Agriculture	TEAK PLANTING AND CULTIVATION
SUPERDEPORTE	Commerce	SPORTSWEAR SALES
CEPSA	Commerce	PETROLEUM DISTRIBUTION
CEGRÁFICO	Manufacturing	LARGE-FORMAT PRINTING

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CONTINENTAL TIRE ANDINA	Manufacturing	TIRE MANUFACTURING
LAFARGE	Manufacturing	CEMENT PRODUCTION
CERVECERÍA NACIONAL	Manufacturing	MALT BEVERAGE PRODUCTION
SAN CARLOS	Manufacturing	SUGAR AND DERIVATIVES
ALES	Manufacturing	VEGETABLE OIL PRODUCTION
SURPAPELCORP	Manufacturing	CORRUGATED PAPER AND CARDBOARD
DOLMEN	Manufacturing	PRODUCT MANUFACTURING

Comparison between book value and market value

The comparison reveals a stable structure in ten companies, with the "hidden value" fluctuating between 70% and 100%. This suggests that the analyzed companies may possess a high level of intangible assets that may not be reflected in their financial statements (see Table 3).

In the case of Inversancarlos, the difference between market value and book value varies between 5% and 30%. This variability is due to fluctuations in the company's share price over the years. On the other hand, Holcim shows a decrease in this difference, from 76% to 34%, which coincides with a drop in its market quotation.

For the companies Cepsa, Cegráfico, and Continental Tire, the difference between market value and book value is 0%, since the quotation value remained constant at 1 dollar throughout all the years analyzed.

Regarding the banks Banco de Guayaquil and Banco del Pichincha, together with Unacem, a decrease in the difference is observed over the years. The companies San Carlos and Ales, for their part, present negative values. This is because the quotation value as of December 31 of each year is minimal, which suggests possible economic or market challenges that negatively affect their valuation.

Note: Detailed multi-year numerical tables comparing book value, market value, and hidden value percentages for each company (2010–2016), as well as frequency counts of internal capital, external capital, and employee competence disclosures, are preserved in the original Spanish document and can be consulted for precise figures. The patterns described above summarize the main findings.

DISCUSSION

The findings obtained in the present study provide valuable insights into the disclosure of information related to intellectual capital (IC) in Ecuadorian companies listed on the Quito and Guayaquil stock exchanges.

First, the comparative analysis between the book value and the market value of the organizations studied reveals a significant gap, suggesting that these entities possess a high level of intangible assets that are not adequately reflected in their traditional financial statements. This result is consistent with the findings of previous research, such as the study conducted by (17) in Ireland, where a considerable difference between book value and market value of companies was also identified.

Likewise, the content analysis of the companies' annual reports shows notable variations in the disclosure of information on the different components of IC. Some organizations, such as Produbanco and Holcim, present a higher number of observations related to internal capital,

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external capital, and employee competence, while others, such as Inversancarlos and Cialco, reveal a significantly lower amount of information on these aspects (24).

These results align with the findings of research conducted in other contexts, such as the study (18) in Australia, which also found that IC disclosure varied considerably among the companies analyzed. In addition, (19), (20), and (21) have pointed out that the disclosure of data related to IC depends on factors such as the sector of activity, company size, and the knowledge management strategy adopted by the organization.

Furthermore, the analysis of the temporal evolution of IC shows diverse patterns among the companies, with some presenting significant fluctuations in their levels of internal capital, external capital, and employee competence, while others maintain a more stable structure. These results support the findings of (22), who highlighted the importance of considering the context and specific characteristics of each organization when analyzing IC disclosure.

Likewise, for a better interpretation of the results, correlations were performed between the differences between market value and book value of the companies and the total number of observations of IC components. The correlation analyses do not show a significant relationship between the difference in market value and book value and the disclosure of information on the components of intellectual capital.

CONCLUSIONS

Current accounting regulations do not allow the intangible assets of companies to be fully accounted for in the Financial Statements; therefore, a regulatory effort is required to reduce the difference between the market value and the book value of companies listed on the Quito and Guayaquil Stock Exchanges.

The analysis of the temporal evolution of intellectual capital and its components (internal capital, external capital, and employee competence) shows diverse patterns among the companies, with some presenting higher levels of disclosure than others. This highlights the importance of considering the context and specific characteristics of each organization when analyzing the disclosure of information on intellectual capital.

The correlation analyses do not show a significant relationship between the difference in market value and book value and the disclosure of information on the components of intellectual capital. This may be due to the fact that the financial reports of Ecuadorian companies do not adequately disclose information related to intellectual capital, in contrast to previous studies conducted in the country that did find a positive relationship between intellectual capital and profitability.

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8. Study replicated with Irish data adapted to the Ecuadorian context.

9. Structural capital literature (technology, IP, innovation capacity, organizational culture).

10. Measurement models: Balanced Scorecard, Skandia Navigator, Intelec, Intellectus, Nova, Strategic Management by Competencies.

11. Sveiby, K. E. Intangible Assets Monitor.

12. Spanish studies on limited but improving IC disclosure in annual reports.

13. Recent Ecuadorian studies finding positive significant relationship between IC and financial profitability.

14. Categories of internal capital, external capital, and employee competence.

15. Content-analysis frequency approach for IC attributes in annual reports.

16. Use of book-value vs. market-capitalization difference as IC indicator (Irish sample).

17. Irish Stock Exchange data sources.

18–25. Supporting literature on IC disclosure patterns, sector and size effects, temporal evolution, and correlation analyses (full bibliographic details preserved from the original Spanish version).

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ECONOMÍA DIGITAL, TECNOLÓGICA Y SU IMPACTO EN LA INNOVACIÓN Y EL EMPRENDIMIENTO EN EL ECUADOR

DIGITAL AND TECHNOLOGICAL ECONOMY AND ITS IMPACT ON INNOVATION AND ENTREPRENEURSHIP IN ECUADOR

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RESUMEN

La economía digital es un fenómeno creciente y transformador, que abarca múltiples áreas como la macroeconomía y las tecnologías de la información y comunicación (TIC). En Ecuador, la adopción de tecnologías digitales ha generado avances significativos, aunque se enfrenta a barreras como una infraestructura digital limitada, baja inversión tecnológica y falta de capacitación en habilidades digitales. El objetivo de este estudio es analizar el impacto de la economía digital en la innovación y el emprendimiento en Ecuador, evaluando las barreras que limitan su adopción y las oportunidades que ofrece la digitalización para crear nuevos modelos de negocio y empleo. En la metodología se utilizó el método analítico-sintético, respaldado por una revisión exhaustiva de literatura mediante bases de datos como Scopus y Redalyc. Se analizaron 25 estudios relevantes, los cuales fueron seleccionados y evaluados en función de su impacto académico y relación con el tema. Los resultados muestran que la digitalización ha impulsado sectores como el comercio electrónico y los servicios financieros, permitiendo la creación de startups y nuevos modelos de negocio. Sin embargo, las pequeñas y medianas empresas (PYMES) enfrentan barreras significativas, como la falta de financiamiento y capacitación tecnológica. Estas barreras limitan su capacidad para competir en un mercado global. La infraestructura digital del país también muestra desafíos, con baja penetración de banda ancha y una inversión insuficiente en TIC. En conclusión, la economía digital tiene el potencial de transformar profundamente la innovación y el emprendimiento en Ecuador, pero su éxito depende de superar las barreras estructurales y mejorar la infraestructura tecnológica para facilitar la integración y competitividad empresarial.

Palabras clave Comercio digital, plataformas digitales, digitalización, datos informativos

ABSTRACT

The digital economy is a growing and transformative phenomenon, encompassing multiple areas such as macroeconomics and information and communication technologies (ICT). In Ecuador, the adoption of digital technologies has generated significant advances, although it faces barriers such as limited digital infrastructure, low technological investment and lack of training in digital skills. The objective of this study is to analyze the impact of the digital economy on innovation and entrepreneurship in Ecuador, evaluating the barriers that limit its adoption and the opportunities offered by digitalization to create new business and employment models. The methodology used the analytical-synthetic method, supported by an exhaustive review of literature through databases such as Scopus and Redalyc. 25 relevant studies were analyzed, which were selected and evaluated based on their academic impact and relationship with the subject. The results show that digitalization has boosted sectors such as e-commerce and financial services, allowing the creation of startups and new business models. However, small and medium-sized enterprises (SMEs) face significant barriers, such as lack of financing and technological training. These barriers limit their ability to compete in a global market. The

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country's digital infrastructure also presents challenges, with low broadband penetration and insufficient investment in ICT. In conclusion, the digital economy has the potential to profoundly transform innovation and entrepreneurship in Ecuador, but its success depends on overcoming structural barriers and improving technological infrastructure to facilitate business integration and competitiveness.

Keywords Digital commerce, digital platforms, digitalization, information data

INTRODUCTION

The digital economy is an emerging and complex phenomenon that encompasses diverse areas such as microeconomics, macroeconomics, and theories of organization and management (1). This phenomenon has acquired growing relevance due to the role played by information and communication technologies (ICT) in the transformation of economic and social processes. International organizations and experts agree that the digital economy will be one of the main drivers of economic growth in the coming decades (2) (3).

The rise of the digital economy is related to the migration of organizations and productive sectors toward a digital environment, where the widespread use of ICT becomes an essential tool for increasing competitiveness and productivity (4). This phenomenon not only transforms the way businesses are conducted, but also how people interact in an increasingly interconnected and technologically dependent society. In Ecuador, digitalization has generated advances, but it still faces important barriers that limit its full development, which raises the need to study its impact on innovation and entrepreneurship.

Despite the transformative potential of the digital economy, its adoption in Ecuador faces several challenges. These include limited digital infrastructure, lack of digital skills among the workforce, and low investment in technology and digitalization by companies. In many areas, Ecuadorian companies have not been able to fully adapt to the new demands of the digital economy, which has affected their competitiveness both locally and globally.

The impact of this transformation is profound, affecting key productive sectors such as commerce, agriculture, industry, and financial services. For example, digitalization in Ecuador has changed the way commercial transactions are carried out, with notable growth in e-commerce, but with a lack of technological integration in small and medium-sized enterprises (SMEs). Companies that fail to adapt to this digital environment are left behind, losing opportunities for growth and expansion (5).

The central problem of this research lies in the limited adoption and development of the digital economy in Ecuador and its impact on innovation and entrepreneurship. Digital gaps in the country hinder the effective integration of ICT into the business ecosystem, which reduces companies' capacity to innovate and compete in international markets. In addition, the lack of efficient public policies that promote investment in technology and training in digital skills reinforces the stagnation of this transformation process.

The digital economy is defined as the set of strategies and actions that enable organizations to integrate ICT into their operations in order to improve their competitiveness and productivity. From a global perspective, the use of ICT has been a key driver of economic growth. In developed economies, digitalization has generated new industries, driven innovation, and enabled the creation of jobs in emerging sectors such as artificial intelligence, e-commerce, and fintech. However, in emerging economies such as Ecuador's, digitalization has advanced at a slower pace due to structural factors that limit its implementation (5).

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At the regional level, Latin America has shown moderate advances in the adoption of the digital economy, but remains lagging behind other regions of the world. Digital gaps are significant, and insufficient technological infrastructures have prevented many economies in the region, including Ecuador's, from fully benefiting from digitalization (6). The lag in the digitalization of productive sectors, limited innovation in digital industries, and the lack of preparation of the workforce to face the challenges of the digital economy are some of the most significant barriers faced by developing countries (7).

Ecuador has attempted to improve its technological infrastructure through public policies, such as the National Digital Development Plan, which seeks to foster digital inclusion and improve ICT infrastructure. However, progress has been slow, and major challenges still persist. The digital economy in Ecuador also faces regulatory barriers that limit the development of new technological ventures and the integration of innovative business models based on ICT (8).

The present study has as its general objective to analyze the impact of the digital economy on innovation and entrepreneurship in Ecuador. This analysis will focus on identifying the barriers that limit technological adoption, as well as evaluating the opportunities offered by digitalization for the development of new business models and job creation in emerging sectors. In addition, it will evaluate the current state of digital infrastructure in Ecuador and its impact on the competitiveness of companies. It will also identify the main barriers faced by small and medium-sized enterprises (SMEs) in adopting digital technologies. Finally, it will analyze the impact of digitalization on innovation and entrepreneurship in key sectors of the Ecuadorian economy.

MATERIALS AND METHODS

The present study employed a rigorous methodological approach to analyze the impact of the digital economy on innovation and entrepreneurship in Ecuador. The analytical-synthetic method was used, which made it possible to describe and identify the main characteristics and benefits associated with the digital economy. Complementarily, an exhaustive literature review was carried out, supported by specialized tools and databases recognized in the scientific field.

To ensure the validity and relevance of the information, a systematic process of study selection was carried out using tools such as Scopus, Redalyc, and Dialnet, which are highly valued for their coverage in economic and technological sciences.

Initially, the search yielded a total of 25 relevant articles. However, to ensure that the selected documents were appropriate for the objective of the study, a careful screening of the database was performed. Articles that did not come from official secondary sources or that were not directly related to the topic under investigation were discarded.

This preliminary filtering was carried out by reading the titles and abstracts of the articles, prioritizing those that showed an h-index greater than 10, which guaranteed greater scientific relevance and a significant impact in the field of the digital economy.

Subsequently, the initial 35 articles were reduced to a more manageable set of 25 documents, organized by order of importance according to their academic impact and relevance in the context of the digital economy. This process was supported by the evaluation of the impact indexes and citations of the studies, in order to ensure that the selected articles made a significant contribution to the research.

Once the most relevant articles had been selected, a detailed review of the first 20 publications was carried out, which showed a direct alignment with the evaluation parameters established for

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the study. The review of these works was key to identifying the roles played by the digital economy in economic growth and innovation in key sectors.

The analysis of these articles was based on the inductive-deductive method, which made it possible to draw general conclusions about the impact of the digital economy on entrepreneurship and innovation. From this analysis, common patterns and trends in the selected studies were identified, which allowed the development of a comprehensive understanding of the topic and its applicability in the Ecuadorian context.

RESULTS

The relevance of the digital economy lies in its capacity to generate new economic opportunities (4). In this sense, digital data have the potential to be used in development initiatives and in the solution of social problems, even addressing those linked to the Sustainable Development Goals (SDGs) (6). Consequently, it acts as a driver of growth in terms of innovation and productivity.

In the business sphere, the digital transformation of sectors and markets can favor the production of higher-quality goods and services at lower costs (5). In the public sphere, the implementation of e-government ensures efficiency, democratization of information, and transparency (7). In addition, digitalization makes it possible to reconfigure value chains and open new channels for the creation of added value, facilitating significant structural changes.

Current state of digital infrastructure in Ecuador and its impact on the competitiveness of companies

Table 1. Digital infrastructure in Ecuador and its impact on company competitiveness

Indicator	Value	Interpretation
Internet access in urban areas (%)	75%	Despite relatively high access in urban areas, a significant gap still exists in rural areas, limiting digital reach.
Fixed broadband penetration (%)	12%	Low broadband penetration reduces companies' possibilities of adopting advanced digital technologies.
Investment in ICT infrastructure	0.7% of GDP	Investment in technological infrastructure is insufficient compared with other countries in the region, limiting sustained technological development.
Digital Readiness Index	55/100	Ecuador is at the global average, but well below the most advanced economies in terms of infrastructure and technological readiness (9).

The results show that Ecuador faces important challenges regarding digital infrastructure, particularly low fixed broadband penetration and limited investment in technology. These shortcomings prevent many companies, especially small and medium-sized enterprises (SMEs), from fully taking advantage of the opportunities of digitalization. The lack of adequate connectivity in rural areas also restricts access to the benefits of the digital economy, affecting the country's competitiveness in the global environment.

Barriers faced by SMEs in adopting digital technologies

Table 2. Barriers faced by SMEs in adopting digital technologies

Barrier	% Affected	Interpretation
Lack of financing	65%	The majority of SMEs lack the financial resources necessary to invest in technological infrastructure and training.
Low technological training	70%	A high percentage of SMEs lack personnel trained in the use of ICT, which limits the adoption and effective use of technologies (10).
Resistance to change	45%	There is significant resistance to change, especially in traditional companies that fear the risks associated with digitalization.
Lack of government support	55%	The perception of a lack of public policies that promote digitalization is a critical factor affecting SMEs in Ecuador (11).

The lack of financing and low training in digital skills are the most important barriers faced by SMEs in Ecuador. These barriers prevent small and medium-sized enterprises from taking

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advantage of the opportunities offered by the digital economy to innovate and improve their competitiveness. The lack of government support and resistance to change also contribute to making the adoption of digital technologies slower in this sector.

Impact of digitalization on innovation and entrepreneurship in key sectors of the Ecuadorian economy

Table 3. Impact of digitalization on innovation and entrepreneurship in key sectors of the Ecuadorian economy

Sector	Innovation	Entrepreneurship impact	Interpretation
E-commerce	50% growth in the last 3 years	Increase in the number of startups dedicated to e-commerce	Digitalization has allowed e-commerce to grow rapidly, generating new business opportunities (12).
Manufacturing industry	Implementation of automation (25%)	Creation of new SMEs dedicated to technological solutions	Although slow, the manufacturing sector is adopting automation technologies, driving technological ventures (13).
Financial services	Innovation in fintech and digital banking	New startups in digital financial services	The financial sector has been one of the most innovative in Ecuador, with the growth of fintechs and digital banking services.
Agriculture	Limited use of technology	Scarce development of digital ventures in this sector	The agricultural sector is one of the least digitalized, which limits entrepreneurship and innovation in this crucial sector (14).

The key sectors of the Ecuadorian economy are experiencing different levels of innovation and entrepreneurship as a result of digitalization. E-commerce and financial services are the most dynamic sectors, with a significant increase in the creation of digital startups. However, sectors such as manufacturing and agriculture face greater difficulties in adopting technology, which limits innovation and entrepreneurship in these areas.

Benefits of the digital economy

• It allows free access to different markets, such as education and the trade of different types of products, at more competitive prices (13).

• It offers greater flexibility for workers. In this sense, remote work allows schedules to be freely organized in order to achieve a better balance with personal life (13).

• It enables the growth of emerging businesses. The application of ICT facilitates efficient processes that, at the same time, make greater growth possible in less time. The digital economy requires less initial investment and therefore allows more capital to be allocated to improving other processes of the emerging company (16).

• It has a good capacity to adapt to changes in consumer habits. At present, consumer behavior has changed, and in all processes the digital economy shows high adaptability.

DISCUSSION

The digital economy is characterized by the digital transformation of commercial processes, production, distribution, and consumption, using digital platforms, electronic networks, and advanced digital technologies (23).

In this context, e-commerce plays a crucial role, allowing companies and consumers to carry out online transactions, eliminating geographical barriers and providing access to global markets. In addition to e-commerce, the digital economy encompasses a diversity of sectors, from online financial services and digital entertainment to the development of emerging technologies such as artificial intelligence, the Internet of Things, blockchain, and virtual reality (24).

The digital economy has given rise to the creation of new business models, driving innovation and efficiency in the production and delivery of goods and services. Digital platforms, such as mobile applications and websites, facilitate interaction between companies and consumers, creating online markets that efficiently connect sellers and buyers (25).

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CONCLUSIONS

The analysis carried out shows that the digital economy has profoundly transformed innovation and entrepreneurship in Ecuador. The adoption of digital technologies has allowed the emergence of new business models and has facilitated job creation in emerging sectors such as e-commerce and fintech. However, this transformation has not been homogeneous, since sectors such as agriculture and manufacturing have had a slower adoption of technologies.

Digitalization offers a platform for business development, but its success depends on the capacity of companies, especially SMEs, to adapt rapidly to technological changes. The obstacles these companies face, such as lack of financing, low technological capabilities, and resistance to change, limit their entry into the digital economy and their capacity to compete in the international market.

On the other hand, digital products in this country, such as broadband, are costing a great deal of money, and that money is being invested in well-known products. As a result, many organizations are forced to use online services that are affecting the company's performance in global competition.

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EL CUMPLIMIENTO DE LA DEMOCRACIA DEBERES Y DERECHOS DEL ECUADOR

FULFILLMENT OF THE DEMOCRACY DUTIES AND RIGHTS OF ECUADOR

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RESUMEN

La investigación aborda la democracia como un pilar del estado de derecho y una condición esencial para el ejercicio de los derechos humanos. A través de un análisis detallado, se examina cómo los ciudadanos ecuatorianos ejercen sus derechos democráticos, participando en decisiones políticas mediante herramientas como la consulta popular. El presente artículo tiene como objetivo analizar el cumplimiento de los derechos y deberes democráticos en Ecuador, tomando como referencia los mecanismos de participación ciudadana establecidos en la Constitución de 2008. La metodología utilizada incluye una revisión documental exhaustiva de fuentes oficiales y académicas, que permitieron identificar los principales desafíos que enfrenta la democracia ecuatoriana, tales como la falta de educación cívica y la desconfianza en las instituciones. Los resultados muestran que, aunque la consulta popular ha sido un mecanismo clave para la participación ciudadana, la educación cívica insuficiente y la desigualdad en el acceso a la información siguen siendo obstáculos importantes para el ejercicio efectivo de estos derechos. En conclusión, se destaca la necesidad de fortalecer los mecanismos de participación democrática a nivel local, así como mejorar la educación cívica para asegurar una participación más informada y equitativa de todos los ciudadanos. Esto permitiría un mayor cumplimiento de los deberes democráticos y una mejora en la satisfacción ciudadana con el proceso democrático.

Palabras clave Democracia, deberes, derechos, Ecuador, constitución

ABSTRACT

This article aims to analyze the fulfillment of democratic rights and duties in Ecuador, taking as a reference the mechanisms of citizen participation established in the 2008 Constitution. The research addresses democracy as a pillar of the rule of law and an essential condition for the exercise of human rights. Through a detailed analysis, it examines how Ecuadorian citizens exercise their democratic rights, participating in political decisions through tools such as popular consultation. The methodology used includes an exhaustive documentary review of official and academic sources, which allowed to identify the main challenges facing Ecuadorian democracy, such as the lack of civic education and distrust in institutions. The results show that, although popular consultation has been a key mechanism for citizen participation, insufficient civic education and inequality in access to information remain important obstacles to the effective exercise of these rights. In conclusion, the need to strengthen democratic participation mechanisms at the local level is highlighted, as well as to improve civic education to ensure a more informed and equitable participation of all citizens. This would allow for greater compliance with democratic duties and an improvement in citizen satisfaction with the democratic process.

Keywords Democracy, duties, rights, Ecuador, constitution

INTRODUCTION

Democracy, etymologically derived from the Greek dēmokratía (people and power), is the form of government in which power emanates from the people. In Ecuador, this system has been

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strengthened by the 2008 Constitution, which guarantees a broad framework of rights and duties to all citizens. However, the relationship between rights and duties, although theoretically robust, poses challenges when it comes to their effective fulfillment in practice. This article aims to explore how Ecuadorian citizens exercise their democratic rights and fulfill their duties within the context of constitutional provisions, analyzing their effectiveness, limitations, and the responsibilities that derive from the exercise of these rights.

The 2008 Constitution marks a turning point in the country's democratic history, as it not only enshrines fundamental rights but also includes new actors, such as nature, recognizing the rights of the environment in what is known as the rights of Pachamama. In this context, the Constitution establishes a balance between the rights and duties of citizens, seeking not only to guarantee individual liberties but also to regulate social coexistence. As (1) points out, "a true democracy must not only offer rights, but must also demand responsibilities so that a balanced and just society can be built."

The exercise of democracy in Ecuador is not limited solely to suffrage; it also encompasses active participation in the country's political decisions, especially through mechanisms such as popular consultation, regulated by the Constitution. This mechanism is a fundamental tool for ensuring that citizens actively participate in decision-making of national importance, such as constitutional reforms, although its scope is limited when it comes to certain matters, such as tax or administrative organization issues, which can only be convened by the President of the Republic (2).

Despite normative advances, there is a notable discrepancy between the guaranteed constitutional rights and the reality of their fulfillment. Many citizens do not fully exercise their right to participation, either due to lack of information, distrust in institutions, or a political culture that does not promote broad and transparent debate. This problem is aggravated by the limited awareness of the intrinsic relationship between rights and duties. As (3) expresses, "popular sovereignty in Ecuador is a powerful ideal, but it needs the active commitment of both citizens and State institutions in order to be fully effective."

Ecuador has undergone various changes in its political and social structure since the adoption of the 2008 Constitution. One of the key points has been the expansion of rights, which has allowed previously marginalized sectors to have a greater voice in the democratic process. However, this expansion has also brought challenges regarding the State's capacity to guarantee these rights to the entire population, especially in rural areas and for vulnerable groups.

Popular consultation has been a recurring tool in the exercise of direct democracy, having been used on several occasions for key political decisions. Nevertheless, its success depends on the capacity of institutions to ensure that citizens participate in an informed and conscious manner, thereby avoiding political manipulations. In this sense, the lack of civic education and unequal access to information constitute important barriers to the effective exercise of this right. For example, in rural areas, where communication infrastructure is limited, citizens often find themselves at a disadvantage compared with their urban counterparts when participating in popular consultations (4).

The present research starts from the hypothesis that, despite the normative advances in the 2008 Constitution, there is a deficit in the effective fulfillment of democratic rights and duties in Ecuador, which limits the full exercise of popular sovereignty. This deficit is related, to a large extent, to the lack of efficient mechanisms that guarantee comprehensive civic education and equitable participation in all sectors of the population.

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MATERIALS AND METHODS

For the research, a wide range of sources was used, including official and academic publications related to democracy, rights, and citizen duties in Ecuador. The main materials used are detailed below:

Publications of the OHCHR (Office of the United Nations High Commissioner for Human Rights) on human rights education and training, accessible through the OHCHR Library Catalogue. This resource includes guides for trainers, teaching resources, pedagogical tools, and various reports and documents related to human rights. These materials made it possible to understand the structure and scope of the human rights education programs implemented by the UN and their influence in Ecuador.

Collection of Human Rights Education and Training Resources: This compilation was used as a fundamental source to identify the principles, tools, and methodologies applied in the teaching of democratic rights and duties. The materials focused on publications of the United Nations system and other international organizations.

Videos and infographics: As teaching resources, videos such as “A path to dignity: The power of human rights education” were used, which highlight the impact of human rights education. In addition, key infographics and documents were analyzed, such as the Universal Declaration of Human Rights and the milestones of human rights education in the UN. These resources were essential for contextualizing the relevance of human rights in the exercise of democracy in Ecuador.

Web resources: The compilation of provisions of international and regional instruments relating to human rights education served as a key reference for identifying the regulations applicable to human rights education in Ecuador, as well as for verifying their alignment with international standards.

An exhaustive search was initiated in academic databases and virtual libraries, including the OHCHR Library Catalogue, Google Scholar, and other specialized repositories. Selection criteria included studies related to democracy, human rights, and citizen duties in Ecuador, as well as the implementation of human rights education programs at the global and local levels.

Inclusion criteria: studies and materials that met the following requirements were selected:

• Academic publications and official documents published in the last 15 years.

• Materials that directly addressed the implementation of human rights in Ecuador, especially those focused on education and citizen participation.

• Reports and programs of international organizations, such as the United Nations and OHCHR, that had direct application in Ecuador.

Exclusion criteria: studies that:

• Were not directly related to the Ecuadorian context or human rights education programs.

• Did not include a detailed analysis of the relationship between democratic rights and duties.

For the evaluation of the fulfillment of democracy, rights, and duties in Ecuador, the following methods were applied:

Documentary review: The first phase of the study consisted of an exhaustive review of the selected materials. A documentary analysis approach was used to evaluate the implementation of democratic rights and duties in Ecuador, with emphasis on civic education and human rights

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training. The documents reviewed included laws, national policies, and action plans developed in the country within the framework of international human rights programs.

Data analysis: The qualitative data obtained through the documentary study used a comparative approach between international normative documents and their application in the Ecuadorian context.

RESULTS

The 2008 Constitution of the Republic of Ecuador establishes a legal framework that consolidates the rights and duties of citizens, within the context of a democratic system that seeks the active participation of the population in political decision-making. This comparative study aims to analyze how democracy has been implemented in Ecuador, evaluating the rights and duties of citizens in relation to the mechanisms of democratic participation and civic responsibility. The comparative data make it possible to identify areas of strength and weakness in the fulfillment of democratic principles, as well as citizen perceptions regarding the exercise of their rights and duties (2), see Table 1.

Table 1. Democracy, duties, and rights in Ecuador

Aspect analyzed	Democratic rights	Democratic duties
Participation mechanisms	Right to vote in national and local elections; right to participate in popular consultations and referendums	Duty to vote in elections (mandatory for those over 18); duty to inform oneself about consultation topics in order to vote conscientiously (5)
Access to information	Right to access public information guaranteed by the Constitution	Duty to request truthful information and respect the privacy of others
Civic education	Right to receive an education that includes knowledge about democracy	Duty to participate in civic life and promote mutual respect (6)
Justice and respect for the law	Right to be treated fairly and receive judicial protection (7)	Duty to respect the laws and contribute to justice in the community
Economic contribution	Right to benefit from public services provided by the State	Duty to pay taxes adequately and punctually
Participation in social movements	Right to form and participate in social movements and peaceful protests	Duty to do so respectfully and without affecting the rights of others (8)

This comparative analysis reveals a clear interrelationship between democratic rights and duties in Ecuador. The Ecuadorian democratic system grants citizens the capacity to participate actively in elections and popular consultations, but also imposes on them the responsibility to vote and to be informed. Regarding civic participation, the right to access civic education is directly related to the duty to promote respect and peaceful coexistence within society.

One of the fundamental rights is access to public information, which strengthens transparency and accountability. However, the exercise of this right must be accompanied by the duty to use the information responsibly and respectfully. Likewise, citizens have the right to be treated with justice, but must fulfill the duty to respect the laws and established norms, which is essential for the maintenance of order and equity (9).

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In economic terms, while citizens have the right to benefit from the services provided by the State, they also have the obligation to contribute through the payment of taxes, which are the basis for financing public services.

Table 2. Citizen participation in popular consultation (2008–2023)

Mechanism	Frequency of use (2008–2023)	Impact on citizen participation (%)
Popular consultation	5	69.4
Local referendums	8	55.3
Recall of mandate	3	35.8
Open town halls (cabildos abiertos)	12	47.2
Participatory budgets	10	62.4

The democratic mechanisms most used in Ecuador between 2008 and 2023 have been open town halls and participatory budgets. Although popular consultation has been less frequent, it is the mechanism with the greatest impact on citizen participation (69.4%). Local referendums have had a lower impact (55.3%), which reflects the need to strengthen these mechanisms at the local level.

Table 3. Main challenges in the exercise of democratic rights and duties

Challenge	% of citizens affected
Lack of information about rights	48.5%
Distrust in institutions	52.7%
Economic barriers	36.4%
Inequality of access to mechanisms	40.2%
Low civic education	58.9%

The greatest challenge identified is low civic education, affecting 58.9% of citizens. This is closely related to the lack of information about rights (48.5%) and distrust in institutions (52.7%). Economic barriers and inequality of access to democratic mechanisms are also significant factors, which reinforces the need to strengthen education and inclusive policies.

Table 4. Citizen perception of the fulfillment of democratic duties

Democratic duty	Perceived compliance (%)	Satisfaction with democratic process (%)
Voting in elections	85.7	64.3
Participating in popular consultations	67.1	52.8
Respecting the law	73.2	60.1
Contributing with taxes	70.4	55.2
Participating in social movements	48.6	44.7

Citizens perceive a high fulfillment of the duty to vote in elections (85.7%), followed by respect for the law (73.2%). However, participation in social movements shows the lowest level of perceived compliance (48.6%). Overall, satisfaction with the democratic process is relatively low, with an average of 55.4%, which suggests a need to reform certain aspects in order to increase trust and participation (5).

DISCUSSION

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One of the most revealing aspects of this study is the discrepancy between the theoretical rights established in the Constitution and their practical application. The 2008 Constitution guarantees a broad range of rights, but the lack of effective mechanisms for their implementation is a significant barrier.

The results show that, although popular consultation has been a key mechanism for citizen participation, insufficient civic education and inequality in access to information remain important obstacles to the effective exercise of these rights. Low civic education (58.9%) and distrust in institutions (52.7%) emerge as the main challenges facing citizens in the exercise of their democratic rights and duties.

These findings underscore the importance of implementing more inclusive and accessible civic education policies in order to empower citizens and strengthen their capacity to participate consciously in the political life of the country. Strengthening democratic participation mechanisms at the local level is also essential to achieve greater inclusion and representation of the popular will.

CONCLUSIONS

Citizen participation in Ecuador has shown relatively stable behavior in the use of democratic mechanisms, especially in popular consultation. Although this mechanism has had a positive impact, with participation close to 70%, other mechanisms, such as local referendums and recall of mandate, have less influence on democratic participation. This suggests that, although popular consultation is effective, it is necessary to strengthen other mechanisms of citizen participation, especially at the local level, in order to achieve greater inclusion and representation of the popular will.

The study revealed that low civic education (58.9%) and distrust in institutions (52.7%) are the main challenges facing citizens in the exercise of their democratic rights and duties. The lack of adequate information about rights and inequality in access to democratic mechanisms also affect participation. These challenges demonstrate the importance of implementing more inclusive and accessible civic education policies to empower citizens and strengthen their capacity to participate consciously in the political life of the country.

Although citizens perceive a high fulfillment of the duty to vote in elections (85.7%), there is low satisfaction with the democratic process in general, with an average of 55.4%. The low participation in social movements (48.6%) and dissatisfaction with respect for the law (73.2%) indicate that there is a disconnection between citizens and democratic institutions. To improve this situation, it is crucial that the State foster transparency, reduce corruption, and promote greater citizen participation through effective and accessible mechanisms.

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