

Volume 4, Issue 7 — July — December — 2020

Journal-Financial Economy

ISSN-On line: 2531-2995

RINOE®

RINOE-Spain

Editor in chief

BLANCO - GARCÍA, Susana. PhD

Executive director

RAMOS-ESCAMILLA, María. PhD

Editorial Director

PERALTA-CASTRO, Enrique. MsC

Web designer

ESCAMILLA-BOUCHAN, Imelda. PhD

Web Diagrammer

LUNA-SOTO, Vladimir. PhD

Editorial Assistants

TREJO-RAMOS, Iván. BsC

Translator

DÍAZ-OCAMPO, Javier. BsC

Philologis

RAMOS-ARANCIBIA, Alejandra. BsC

RINOE Journal- Financial Economy,

Volume 5, Issue 9, July – December 2021, is a journal edited semestral by RINOE. 38 Matacerquillas street, Postcode: 28411. Moralarzal –Madrid: www.rinoe.org, journal@rinoe.org. Editor in Chief: BLANCO-GARCÍA, Susana. PhD. ISSN- 2531-2995. Responsible for the latest update of this number RINOE Computer Unit. ESCAMILLA-BOUCHÁN, Imelda, LUNA-SOTO, Vladimir 38 Matacerquillas street, Postcode: 28411. Moralarzal –Madrid last updated December 31, 2021.

The opinions expressed by the authors do not necessarily reflect the views of the editor of the publication.

It is strictly forbidden to reproduce any part of the contents and images of the publication without permission of the National Institute for the Defense of Competition and Protection of Intellectual Property.

RINOE Journal-Financial Economy

Definition of the Journal

Scientific Objectives

Support the international scientific community in its written production Science, Technology and Innovation in the Field of Social Sciences, in Subdisciplines of General financial markets: Portfolio choice, Asset pricing, Contingent pricing, Futures pricing, Information and market efficiency, Event studies, International financial markets, Government policy and regulation; Financial institutions and services: Banks, Other depository institutions, Mortgages, Insurance, Insurance companies, Pension funds, Other private Financial Institutions, Investment banking, Venture capital, Brokerage, Government policy and regulation; Corporate finance and governance: Capital budgeting, Investment policy, Financing policy, Capital and ownership structure, Bankruptcy; Liquidation, Mergers, Acquisitions, Restructuring, Corporate governance, Payout policy, Government policy and regulation.

RINOE® is a Scientific and Technological Company in contribution to the Human Resource training focused on the continuity in the critical analysis of International Research and is attached to CONACYT-RENIICYT number 1702902, its commitment is to disseminate research and contributions of the International Scientific Community, academic institutions, agencies and entities of the public and private sectors and contribute to the linking of researchers who carry out scientific activities, technological developments and training of specialized human resources with governments, companies and social organizations.

Encourage the interlocution of the International Scientific Community with other Study Centers in Mexico and abroad and promote a wide incorporation of academics, specialists and researchers to the publication in Science Structures of Autonomous Universities - State Public Universities - Federal IES - Polytechnic Universities - Technological Universities - Federal Technological Institutes - Normal Schools - Decentralized Technological Institutes - Intercultural Universities - S & T Councils - CONACYT Research Centers.

Scope, Coverage and Audience

RINOE Journal-Financial Economy is a Journal edited by RINOE® in its Holding with repository in Spain, is a scientific publication arbitrated and indexed with semester periods. It supports a wide range of contents that are evaluated by academic peers by the Double-Blind method, around subjects related to the theory and practice of General financial markets: Portfolio choice, Asset pricing, Contingent pricing, Futures pricing, Information and market efficiency, Event studies, International financial markets, Government policy and regulation; Financial institutions and services: Banks, Other depository institutions, Mortgages, Insurance, Insurance companies, Pension funds, Other private Financial Institutions, Investment banking, Venture capital, Brokerage, Government policy and regulation; Corporate finance and governance: Capital budgeting, Investment policy, Financing policy, Capital and ownership structure, Bankruptcy; Liquidation, Mergers, Acquisitions, Restructuring, Corporate governance, Payout policy, Government policy and regulation with diverse approaches and perspectives, That contribute to the diffusion of the development of Science Technology and Innovation that allow the arguments related to the decision making and influence in the formulation of international policies in the Field of Social Sciences. The editorial horizon of RINOE® extends beyond the academy and integrates other segments of research and analysis outside the scope, as long as they meet the requirements of rigorous argumentative and scientific, as well as addressing issues of general and current interest of the International Scientific Society.

Editorial Board

BLANCO - GARCÍA, Susana. PhD
Universidad Complutense de Madrid

BANERJEE, Bidisha. PhD
Amity University

LUO, Yongli. PhD
Universidad de Chongqing

YAN - TSAI, Jeng. PhD
Tamkang University

VARGAS - HERNANDEZ, José G. PhD
Keele University

SUYO - CRUZ, Gabriel. PhD
Universidad Nacional de San Antonio Abad del Cusco

VARGAS - DELGADO, Oscar René. PhD
National Chengchi University

AZIZ - POSWAL, Bilal. PhD
University of the Punjab Lahore Pakistan

BLANCO - ENCOMIENDA, Francisco Javier. PhD
Universidad de Granada

VALDIVIA - ALTAMIRANO, William Fernando. PhD
Universidad Nacional Agraria La Molina

Arbitration Committee

DIMAS - RANGEL, María Isabel. PhD
Universidad Autónoma de Nuevo León

CAMPOS - RANGEL, Cuauhtémoc Crisanto. PhD
Universidad Autónoma de Tlaxcala

DE LA GARZA - CIENFUEGOS, Sandra Patricia. PhD
Universidad Autónoma de Coahuila

CRUZ - ARANDA, Fernando. PhD
Instituto Tecnológico y de Estudios Superiores de Monterrey. PhD

LANDAZURI - AGUILERA, Yara. PhD
Universidad Autónoma de Nuevo León

MORALES - GONZALEZ, Maria Antonia. PhD
Instituto Tecnológico de Mérida

GARCÍA - ROJAS, Jesús Alberto. PhD
Universidad de Puebla

CERVANTES - ROSAS, María de los Ángeles. PhD
Universidad de Occidente

GONZÁLEZ - HERRERA, Karina Concepción. PhD
El Colegio de Tlaxcala

ALCARAZ - SUÁREZ, Oswaldo Israel. PhD
Universidad Tecnológica Metropolitana

ELIZUNDIA - CISNEROS, María Eugenia. PhD
Universidad Nacional Autónoma de México

Assignment of Rights

The sending of an Article to RINOE Journal-Financial Economy emanates the commitment of the author not to submit it simultaneously to the consideration of other series publications for it must complement the Originality Format for its Article.

The authors sign the Format of Authorization for their Article to be disseminated by means that RINOE® In its Holding Spain considers pertinent for disclosure and diffusion of its Article its Rights of Work.

Declaration of Authorship

Indicate the Name of Author and Coauthors at most in the participation of the Article and indicate in extensive the Institutional Affiliation indicating the Department.

Identify the Name of Author and Coauthors at most with the CVU Scholarship Number-PNPC or SNI-CONACYT- Indicating the Researcher Level and their Google Scholar Profile to verify their Citation Level and H index.

Identify the Name of Author and Coauthors at most in the Science and Technology Profiles widely accepted by the International Scientific Community ORC ID - Researcher ID Thomson - arXiv Author ID - PubMed Author ID - Open ID respectively.

Indicate the contact for correspondence to the Author (Mail and Telephone) and indicate the Researcher who contributes as the first Author of the Article.

Plagiarism Detection

All Articles will be tested by plagiarism software PLAGSCAN if a plagiarism level is detected Positive will not be sent to arbitration and will be rescinded of the reception of the Article notifying the Authors responsible, claiming that academic plagiarism is criminalized in the Penal Code.

Arbitration Process

All Articles will be evaluated by academic peers by the Double Blind method, the Arbitration Approval is a requirement for the Editorial Board to make a final decision that will be final in all cases. MARVID® is a derivative brand of ECORFAN® specialized in providing the expert evaluators all of them with Doctorate degree and distinction of International Researchers in the respective Councils of Science and Technology the counterpart of CONACYT for the chapters of America-Europe-Asia- Africa and Oceania. The identification of the authorship should only appear on a first removable page, in order to ensure that the Arbitration process is anonymous and covers the following stages: Identification of the Journal with its author occupation rate - Identification of Authors and Coauthors - Detection of plagiarism PLAGSCAN - Review of Formats of Authorization and Originality-Allocation to the Editorial Board-Allocation of the pair of Expert Arbitrators-Notification of Arbitration -Declaration of observations to the Author-Verification of Article Modified for Editing-Publication.

Instructions for Scientific, Technological and Innovation Publication

Knowledge Area

The works must be unpublished and refer to topics of General financial markets: Portfolio choice, Asset pricing, Contingent pricing, Futures pricing, Information and market efficiency, Event studies, International financial markets, Government policy and regulation; Financial institutions and services: Banks, Other depository institutions, Mortgages, Insurance, Insurance companies, Pension funds, Other private Financial Institutions, Investment banking, Venture capital, Brokerage, Government policy and regulation; Corporate finance and governance: Capital budgeting, Investment policy, Financing policy, Capital and ownership structure, Bankruptcy; Liquidation, Mergers, Acquisitions, Restructuring, Corporate governance, Payout policy, Government policy and regulation and other topics related to Social Sciences.

Presentation of the Content

In the first article we present, *Factors that originate tax evasion and its impact on tax collection in Ecuador*, by CABRERA-QUEZADA, Ketty Adriana, CORREA JIMENEZ, Walter Vinicio and GUTIERREZ JARAMILLO, Néstor Daniel, with affiliation in the Universidad Técnica de Machala, as following article we present, *Repercussions of COVID-19 on the Ecuadorian tax system and its ranking compared to other countries*, by ROQUE-VALAREZO, Pamela Elizabeth, YUMBO-GUZMÁN, María de los Ángeles and ORELLANA, Milca, with ascription in the Universidad Técnica de Machala, as the third article we present, *Influence of job satisfaction and training on individual performance of microfinance advisors in Sonora and Chiapas, Mexico*, by VÁZQUEZ-JIMÉNEZ, Imelda, RUIZ-PÉREZ, Roberto, GOMEZ-HINOJOSA, Carolina and ACOSTA-MELLADO, Erika, with secondment in the Instituto Tecnológico de Sonora, as the last article we present, *Sectoral system of innovation and agricultural policy in export products. A case study of dried mango*, by PAREDES-MEDINA, Reyna Myrna, MONTES-TORRES, María de Lourdes and LOPEZ-MONDRAGÓN, Ana Cecilia, with ascription in the Universidad Autónoma de Nayarit.

Content

Article	Page
Factors that originate tax evasion and its impact on tax collection in Ecuador CABRERA-QUEZADA, Ketty Adriana, CORREA JIMENEZ, Walter Vinicio and GUTIERREZ JARAMILLO, Néstor Daniel <i>Universidad Técnica de Machala</i>	1-11
Repercussions of COVID-19 on the Ecuadorian tax system and its ranking compared to other countries ROQUE-VALAREZO, Pamela Elizabeth, YUMBO-GUZMÁN, María de los Ángeles and ORELLANA, Milca <i>Universidad Técnica de Machala</i>	12-20
Influence of job satisfaction and training on individual performance of microfinance advisors in Sonora and Chiapas, Mexico VÁZQUEZ-JIMÉNEZ, Imelda, RUIZ-PÉREZ, Roberto, GOMEZ-HINOJOSA, Carolina and ACOSTA-MELLADO, Erika <i>Instituto Tecnológico de Sonora</i>	21-27
Sectoral system of innovation and agricultural policy in export products. A case study of dried mango PAREDES-MEDINA, Reyna Myrna, MONTES-TORRES, María de Lourdes and LOPEZ-MONDRAGÓN, Ana Cecilia <i>Universidad Autónoma de Nayarit</i>	28-38

Factors that originate tax evasion and its impact on tax collection in Ecuador

Factores que originan la evasión tributaria y su incidencia en la recaudación tributaria del Ecuador

CABRERA-QUEZADA, Ketty Adriana^{†*}, CORREA JIMENEZ, Walter Vinicio and GUTIERREZ JARAMILLO, Néstor Daniel

Universidad Técnica de Machala, Ecuador.

ID 1st Author: *Ketty Adriana, Cabrera-Quezada* / ORC ID: 0000-0002-1450-2947

ID 1st Co-author: *Walter Vinicio, Correa-Jimenez* / ORC ID: 0000-0002-3011-4477

ID 2nd Co-author: *Daniel Néstor, Gutiérrez-Jaramillo* / ORC ID: 0000-0001-9487-6342

DOI: 10.35429/JFE.2021.9.5.1.11

Received July 10, 2021; Accepted December 30, 2021

Abstract

The purpose of this research is to determine the causes of tax evasion and its impact on tax collection. That is, we will proceed to analyze the most frequent mechanisms among taxpayers that would lead to the origin of the fraudulent act and with which it is considerably affecting the tax collection that is part of the non-oil revenues that make up the budget. general government, limiting the financing of works and services for the entire community. The study will apply a documentary and descriptive methodology, since the information will be obtained from secondary data recovered from indexed scientific databases and national government platforms. With which it is obtained that among the main mechanisms of evasion are from the lack of values to the discontent of the citizens.

Tax evasion, Mechanisms, Budget, Collection, Taxpayers

Resumen

La finalidad de la presente investigación está en determinar las causales de la evasión tributaria y su incidencia en la recaudación fiscal. Es decir, se procederá a analizar los mecanismos más frecuentes entre los contribuyentes que conllevarían a que se de origen el hecho fraudulento y con lo cual se esté afectando de manera considerablemente a la recaudación tributaria que forma parte de los ingresos no petroleros que conforman el presupuesto general del Estado limitando el financiamiento de obras y servicios para toda la comunidad. El estudio aplicará una metodología del tipo documental y descriptiva, dado que, la información se obtendrá a partir de datos secundarios recuperados de bases científicas indexadas y de plataformas gubernamentales nacionales. Con lo cual se obtiene que entre los principales mecanismos de evasión se encuentran desde la falta de valores hasta la inconformidad de los ciudadanos.

Evasión tributaria, Mecanismos, Presupuesto, Recaudación, Contribuyentes

Citation: CABRERA-QUEZADA, Ketty Adriana, CORREA JIMENEZ, Walter Vinicio and GUTIERREZ JARAMILLO, Néstor Daniel. Factors that originate tax evasion and its impact on tax collection in Ecuador. RINOE Journal-Financial Economy. 2021. 5-9:1-11.

* Correspondence to Author (Email: kacabreraq_est@utmachala.edu.ec)

† Researcher contributing first author.

Introduction

Throughout history, in the different productive sectors, tax evasion has been presented as a permanent problem, causing a gap between what the government should collect with what it actually collects, negatively affecting tax revenues, which they are part of the general budget of a country.

In this sense, one of the main causes that lead to the aforementioned fraudulent act is the scarce and deficient tax culture that those responsible for the administration of the different businesses have, accompanied by other situations such as: informal trade, a system that lacks transparency and inflexible tax administration, among others.

From this perspective, the presence of different factors that cause a deficient tax administration to occur is notorious, which as a consequence manages to considerably reduce tax collection, which is why many countries, including those in Latin America, have considered creating measures to prevent and reduce evasion levels since, according to the Economic Commission for Latin America and the Caribbean, this action has been constantly affecting the economies of this region (CEPAL, 2016).

By virtue of the aforementioned, the situation faced by the Ecuadorian government with regard to tax evasion is not far from what has already been described, since it has been evident during some periods that the levels of tax collection at the end of the year fiscal are below what was planned at the beginning, leading to a reduction in the levels of tax revenue that are part of the structure of the general budget of the State (PGE), producing a considerable deficit in it, with which it is intended provide services and goods to the entire community, which is why it is necessary to create methods that allow combating tax evasion and therefore reduce its impact, in such a way that they allow the equitable redistribution of income to a large part of the population (Zamora L. , 2020).

Therefore, this article raises as a fundamental objective of its investigation to determine the causes of tax evasion and its impact on tax collection. For which, secondary data retrieved from indexed scientific databases and national government platforms were analyzed. In such a way, that it is possible to know through documentary information the factors that are permanently evident for the origin of tax evasion.

Development

Tax evasion

Tax evasion is considered as a non-compliance of a voluntary nature carried out by the taxpayer in order not to cancel the values corresponding to their tax obligations (Matus, 2017). That is, it constitutes a situation in which the person omits or hides information regarding their income or when they simply refrain from making payments to the collecting body, which they are committed to complying with.

At the national level, tax evasion is considered for Arévalo et al. (2020) as a "worrying factor for the Ecuadorian State" (p.18) given that, despite the efforts made by the tax administration in proposing strategies that allow effective control of tax collection, it has not been possible to date to improve this panorama that guarantees the well-being of society.

For the limited, Franzoni (1999) which is cited by Patiño et al. (2019) mentions that tax evasion can be confronted through the prevention and application of sanctions, for which, it is necessary for the State to implement different types of policies that contribute to the fulfillment of said objective.

Tax avoidance

Tax avoidance constitutes the set of activities, conduct and behavior carried out by a taxpayer in order to avoid the origin of the generating event or the tax obligation. To Cattaneo and Burgos (2017) to speak of tax avoidance is to refer to the way of acting of the taxable person in order to "avoid the appearance of the birth of a taxed event, or to try to show that it occurred at a different time from the real one or to pretend that it was for an amount different from the effective one, carried out by lawful means"(p.234).

In that sense, Matus (2017) points out that, the elements that allow differentiating tax avoidance are not yet established, however, it is considered, like evasion, as a fraudulent act since it is a more elegant way to evade the corresponding tax burdens and only configure the Taxable events that satisfy the economic purposes sought by the taxpayer.

In short, tax avoidance consists of the action carried out by the taxpayer in order to prevent an obligation from being generated, taking into consideration what is established and approved within the current and corresponding regulations (Arriaga et al., 2018); in other words, the taxpayer takes for his own benefits the gaps or cracks that reflect the applied laws and that are not assumed by the legislators in the course of preparing the regulations.

Differences between tax evasion and avoidance

Although tax evasion and avoidance have been permanent problems for a state and represent fraudulent acts that when carried out generate considerable incidences in tax collection since both are strategies that seek to evade taxes. However, despite having characteristics and a similar purpose, there are factors that make it possible to differentiate these behaviors from each other, the main one of which is detailed below:

Tax evasion refers to actions contrary to the law and that, as a consequence, so-called fraud occurs that are legally sanctioned, since a tax obligation has arisen and has not been satisfied, while tax avoidance arises as a result of the absence of certain information within the regulations (Navarro, 2018).

Tax culture

Tax culture is understood to be that behavior that citizens have when complying with their tax duties and obligations, allowing the tax system of a country to be strengthened, however, that this behavior develops within the population is closely related to the level of political content reported (Onofre et al., 2017).

Due to the above, it is essential that all citizens have a tax culture with solid foundations that allows them to understand that taxes are values that the State seeks to collect as a controlling body, however, the resources obtained by such payments are the responsibility of the motive population. for which, they are returned through the provision of public goods and services (Serrano, 2017).

However, this behavior cannot be developed only with the "active participation of the taxpayer, the State is responsible through the Tax Administration for promoting and disseminating it" (Santillán et al., 2019, p.48). In short, the government will be in charge of the effective development of the tax culture in a country (Martínez, 2020).

Tax system

The tax system is considered as the conglomerate of taxes that a state raises in order to efficiently control the tax power (Zamora L. , 2020). In such a way, that the primary objective of this system according to Agostini and Jorrat (2017) that are cited by Garzón et al. (2018) It consists of collecting the income that contributes to the "State to finance the provision of public goods and services" (p.39) that help improve the quality of life of the community.

By virtue of the described, Coello et al. (2021) points out that the Ecuadorian tax system is made up of regulations and taxes that are controlled by the governing body, which in this case is the Internal Revenue Service (SRI).

Tax administration

The tax administration is considered as the entity whose main function is to ensure that the policies and guidelines related to taxes are fully complied with (Durán & Salvador, 2018). In other words, this body plays an essential role in the tax system of any country since it focuses on developing strategies that motivate taxpayers to cancel their corresponding tax obligations.

Based on what has been described, it is necessary to emphasize that in Ecuador the entity in charge of administering taxes and the one responsible for ensuring that taxpayers do not incur tax evasion, is the SRI (Almeida, 2017).

This institution will be responsible for taking the necessary actions based on current Ecuadorian legislation in order to prevent taxpayers from evading their tax duties, which are provided based on economic activities.

However, despite the control work carried out by the SRI, it has been evident during each period that new ways of evading the payment and cancellation of taxes arise (Valderrama *et al.*, 2017).

Formal duties

To Escalante and Hullet (2009) which is cited by Guallpa *et al.*, (2020) formal duties are considered as the process that has been established within the regulations to "comply with tax obligations" (p.118). In this sense, in the Tax Code (2018) in its chapter III called formal duties of taxpayers, it indicates the following:

1. Registration in the corresponding records, faithfully providing the necessary and timely information related to the taxpayer and the activity to be carried out.
2. Issuance of Sales Receipts.
3. Keep the books and accounting records of its activity taking into consideration data such as: legal tender, its operations and transactions.
4. Send tax returns and payments in the corresponding period.
5. Go to the SRI offices when said institution has requested it.

By virtue of what has been described, it is understood that the formal duties must be fully complied with by the taxpayers (natural persons or legal persons of a public or private nature) since they are the steps established in the legal regulations for the efficient development of the relationship. between the active and passive subject since, in the case of non-compliance, the sanctions and fines established in the aforementioned Code are applied (Guallpa *et al.*, 2020).

General State Budget

The General State Budget (PGE) is a management indicator used by rulers today, since it allows planning public income and expenditures that will contribute to the provision of goods and services that meet the needs of the population (Ayón *et al.*, 2019).

According to the Constitution of the Republic of Ecuador (2008) In its article 292, it is considered that the PGE is the tool through which the income and expenditures of the State are estimated, taking into consideration those of the public sector and excepting those corresponding to social security, public banking, public companies and autonomous governments. decentralized (GAD). In other words, the PGE comprises all the monetary resources that the Ecuadorian state possesses.

In short, the budget is the instrument by which the activities to be developed in the public sector will be planned, taking into account qualitative and quantitative aspects of a fiscal period (Villa *et al.*, 2018).

Tax collection

Tax collection is considered a vital element within the economy and fiscal policy of a country since it allows analyzing the effectiveness of governments in obtaining income through the collection of taxes (Vega *et al.*, 2019). For this reason, it is necessary for those responsible to apply the appropriate strategies for its increase.

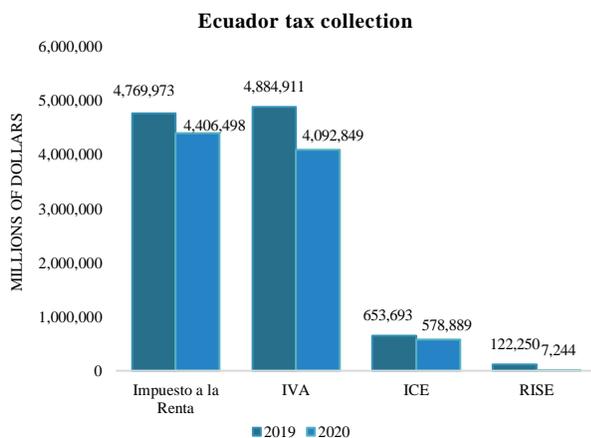
In the national context, this issue is of relevant importance because it is fundamental for the correct functioning of the current system in Ecuador, although it is developed in a unilateral and tax. This process is based on a permanent control that the State must exercise through its collecting body (Segura & Ronquillo, 2018).

In this sense, in our country there are various taxes created by the tax administration, however, Gutiérrez y Peláez (2016) which is cited by Solís *et al.* (2019) there are two taxes that generate the most collections and are considered the backbone of the national tax system, such as: Income Tax and Value Added Tax (VAT).

According to the research carried out by Mejía *et al.* (2019) these two taxes have generated a great incidence in the non-oil income of the country, being thus, during the periods 2000-2006 the VAT represented 54.27% of the real tax revenue, however, in 2007-2018 it was marked a notable decrease in its collection, reaching 43.36%.

On the other hand, the income tax in the years 2000-2006 was located at 21.6% of the real tax revenue, and for the years 2007-2018 it had a considerable increase reaching 29.44%. With which it is evidenced in this way, that both taxes have been for some decades the taxes that have mostly contributed within the fiscal income of the public budget (Mejía *et al.*, 2019).

Based on what has been described, in recent periods the tax administration has created incentives and strategies to improve tax collection, however, with the presence of the pandemic, many of the taxpayers saw their economic activities affected, which is why, when To make a comparison during the 2019-2020 periods, it is possible to show that in fiscal year 2020 due to the various events that occurred, the collection of taxes decreased by 11% compared to 2019, leading to lower perceived tax revenues.



Graphic 1 Tax collection in Ecuador with respect to the years 2019 and 2020

In this sense, Torres and Ferrel (2020) state that during recent periods the economy and national tax collection were sustained by formal economic activities despite the presence of informal businesses, however, with the pandemic a considerable tax impact originated, for which it is necessary to carry out an analysis on tax reforms due to the health emergency Vallejo (2020) which is cited by Álava and Barahona (2021).

Methodology

The investigative work to be carried out is descriptive-documentary, that is, a documentary, bibliographic and descriptive analysis will be carried out. From this perspective Arías (2004) which is cited by Alvia and Mendoza (2021) points out that this type of research is the process that is based on the “search, recovery, analysis, criticism and interpretation of secondary data, that is, those obtained and recorded by other researchers in documentary sources: printed, audiovisual or electronic” (p. 375) in such a way, for the latter, information was analyzed and compiled from a series of documents related to the subject of study, which were obtained from indexed scientific databases such as: Dialnet, Scielo, Redalyc and in turn relevant data from entity platforms will be taken into consideration. government (SRI).

Results

Mechanisms of tax evasion in Ecuador

Tax evasion from its origin has been a matter of concern for tax collecting bodies, given that, despite the actions that have been proposed to improve the cancellation of taxes, there are factors that lead to the continuation of said activity. In such a way, that after the bibliographic review, it has been obtained that the main mechanisms for the aforementioned fraudulent act to take place are: lack of a tax culture, tax pressure, ignorance of the regulations, complexity in the processes and phantom companies; these faults committed for a better understanding are detailed below:

Lack of a tax culture

In accordance with Carrera *et al.* (2020) the main cause of tax evasion is related to the absence of true tax awareness, either individually or collectively, which is "motivated by the image that the community has of the State and the perception of impartiality in their expenses and investments, not having knowledge of the government and income redistribution policies" (p.1294).

In this sense, Mendoza et al. (2016) which is cited by Quispe et al. (2020) complements what was previously described, stating that one of the essential reasons for tax evasion to occur is a consequence of the lack of a tax culture, because many of the taxpayers are unaware of the formal duties established in the regulations so that the collection of taxes is controlled.

By virtue of it, Moreira (2016) which is cited by Arévalo et al., (2020) points out that the taxpayer's tax awareness is affected by the criterion that is maintained since, if one of them cancels their tax obligations and perceives unfair treatment, it leads to deterioration of the behavior of the rest of the taxpayers who duly comply. For this reason, when analyzing taxpayers' tax awareness, it is necessary to take into consideration two important variables, such as:

Low taxpayer education

This factor is associated with the ethics and morals that the taxpayer possesses during the time of evading their taxes, since they are essential elements that the taxpayer must possess for the fulfillment of their obligations to take place (Arévalo *et al.*, 2020).

However, it is necessary that the taxpayer be instructed in the functions that the state has as a collecting body and the role it plays as a citizen and the contribution it makes through the cancellation of its taxes with public spending (Arévalo *et al.*, 2020).

Limited solidarity of taxpayers

In relation to the aforementioned, Moreira (2016) which is cited by Arévalo et al., (2020) points out that it is clear that the state needs citizens to pay their taxes since, through them, it is possible to finance works and services for the good of the community with special emphasis on the sectors that have lower income there, the sense of solidarity is established.

Tax pressure

In accordance with Pinto and Tibambre (2019) One of the factors that can also be evidenced as causes of tax evasion is the so-called tax burden, since the tax administration does not take into consideration the purchasing power of citizens and imposes high fees to be paid with respect to the taxes, leading to taxpayers refraining from showing the correct level of their income and reflecting high amounts of expenses, thus generating a tax base that as a consequence will have a lower amount of taxes to declare than what actually concerns.

From this point of view, in the research carried out by Zamora (2018) through the application of a survey, it was obtained that 36.65% of taxpayers reach the conclusion that the tax burden gives rise to tax evasion since there is not a total dissemination of the distribution of taxes collected and nor a means by which it is indicated is carried out with the collection of each one of them.

Ignorance of the regulations

For taxpayers, it is known that the tax system will be regulated by different rules and regulations, which must be fully complied with in order to avoid penalties and fines, however, due to the constant changes that take place in them, taxpayers consider that These modifications affect the collection, since, during each change carried out brings with it the updating of the instruments used to make the declarations. In such a way that, through the research developed by Zamora (2018) this factor among taxpayers reaches 47.78%, that is, they consider this cause as the most obvious one to produce tax evasion.

Sales receipts

Tax evasion from the use of sales receipts has become one of the problems detected by the SRI through its control processes (Sánchez et.,2020) although it is not the most damaging problem if it is the most studied because, it is necessary to identify the sectors in which the inappropriate use of invoices is being made in the case of the general regime, sales notes (RISE) and purchase settlements.

This type of cause is not only a factor that unilaterally affects the origin of tax evasion, it is also possible to associate it with other mechanisms used by taxpayers, such as the tax burden described above and shell companies in the which the purchase of these documents is made in order to reduce the amounts to be paid before the Treasury, being thus Zamora (2018) in their research with 53.20%, they consider it as an evasion factor in which strategies must be applied to counteract its impact.

Complexity in the filing process

The tax declaration processes are contemplated in the prevailing legislation in the state to the normative provisions related to said issue, together with certain deficiencies that they present. All of this can lead to the taxpayer making mistakes at the time of filing the respective tax return, which in turn triggers non-compliance with tax regulations (Moreira, 2016).

In other words, it can be said that it often happens that the tax declaration process becomes complex since there is no systematization of the legal bodies that regulate the declaration of taxes, which can generate certain doubts in taxpayers that make them the taxpayer does not comply with said obligation or that sometimes even leads them to incur the introduction of errors. For this reason, it is crucial that the LORTI and its application regulations are carefully analyzed in order to know the process that must be carried out by the taxpayer to make the due tax return.

Ghost companies

In accordance with the Regulations for the application of the Internal Tax Regime Law – RLORTI (2018) a shell company can be defined as those organizations that are constituted through a simulated declaration, but that in reality do not carry out the economic activities that have been declared and for which, they will be sanctioned for their acts according to the Tax Code.

In this vein, it should be borne in mind that the SRI has managed to verify the existence of certain taxpayers classified as natural and legal persons who have been registered in the Single Taxpayers Registry (RUC) declaring addresses that do not exist or in which they do not. It is possible that the economic activities for which they were constituted are carried out, that is, they use this modality to create and manage shell companies, also known as briefcase companies (Calderón *et al.*, 2017).

To counteract the incidence of these companies, the tax administration must propose new strategies to control the activities of these activities, such as:

- Carry out greater controls in the provinces where the existence rates of this modality are high.
- Know more information about the partners that make up a company.
- Increase the information associated with tax issues so that taxpayers can know the positive effects of paying them.
- Periodically review the documentation presented by the legal representatives of the companies showing any changes made, if any.
- Implement agreements with other countries in order to be able to exchange information on each of the companies domiciled in the respective country to verify that the information is true, and thereby avoid the creation of ghost companies or tax havens.

As a result of the aforementioned, during the 2016 period the SRI issued a report regarding the economic damage that the country obtains due to the existence of shell companies in Ecuador, which was made up of a number of 347 companies, where it is evidenced a great economic damage to 500 million dollars in Income Tax (IR) and Value Added Tax (VAT), also evidenced by the generation of sales receipts for a notorious figure equivalent to 1,830 million dollars from non-existent transactions. They have been issued to 18,000 thousand clients nationwide (Sánchez *et al.*, 2020).

In this way, it should be noted that currently shell companies continue to be a major problem in the control processes of the Tax Administration, highlighting that by 2020, there is a harmful growth of these organizations, since of the 347 existing in the year 2016 mentioned in the previous paragraph, accelerated growth was established, reaching a number equivalent to 512 ghost companies, however it should be noted that most are located in the province of Guayas, which is equivalent to 80% of the total of ghost companies, and of which 360 million dollars have been recovered in VAT and Income taxes so far (Sánchez *et al.*, 2020).

By virtue of all the mechanisms mentioned above, ECLAC indicates through a study that Ecuador faces an economic loss that is around \$ 7.6 billion dollars a year, which represents 7% of the Gross Domestic Product (GDP); In other words, this amount of money is the one that the State through the treasury stops collecting (Gómez & Morán, 2020).

Conclusions

Tax evasion is considered as the breach of tax obligations that originates from various factors that motivate taxpayers to refrain from paying their taxes. In this sense, from the bibliographic review of investigative works by various authors, it was obtained that among the main mechanisms that lead to this fraudulent action being carried out are the following:

- Lack of a tax culture.
- Tax pressure.
- Ignorance of regulations.
- Sales receipts.
- Complexity of the declaration processes.
- Shell companies.

These factors have been permanently impacting tax collection, which is why the tax administration has found it necessary to create and implement strategies that allow counteracting the effects of these mechanisms, thus, the collection levels until 2019 They were increasing, however, by 2020 there was an 11% decrease in said action due to the rules applied by the health emergency.

References

Á lava, J., & Barahona, S. (2021). Impacto Tributario del COVID-19 en Ecuador: Análisis y Estadísticas del Impuesto al Valor Agregado 2019-2020. *Revista Ciencia UNEMI*, 14(36), 87-95. Obtenido de <http://ojs.unemi.edu.ec/index.php/cienciaunemi/article/view/1270/1265>

Almeida, H. (2017). Control de la evasión tributaria en un país en vías de desarrollo: La visibilidad de la economía oculta y su evasión. *Universitat de Lleida. Departament d'Economia Aplicada*, 308. Obtenido de <https://dialnet.unirioja.es/servlet/tesis?codigo=154684>

Alvia, D., & Mendoza, V. (2021). Virtualización del Servicio de Rentas Internas en Ecuador. Una mirada analítica retrospectiva. *Polo del Conocimiento*, 6(4), 371-383. Obtenido de <https://polodelconocimiento.com/ojs/index.php/es/article/view/2569/5361#>

Arévalo, K., Andrade, C., & Pastrano, E. (2020). Evasión tributaria y su incidencia en la recaudación fiscal de los pequeños empresarios del cantón Babahoyo. *Sinergia Académica*, 3(4), 12-21. doi:<https://doi.org/10.51736/sa.v3i4.2>

Arriaga, G., Reyes, M., Olives, J., & Solórzano, V. (2018). Análisis de la cultura tributaria: Impuesto a la Renta para personas naturales no obligadas a llevar contabilidad, provincia de Santa Elena. *Revista Ciencias Pedagógicas e Innovación*, 5(3), 118-127.

Asamblea Nacional. (20 de Octubre de 2008). *Constitucion de la Republica del Ecuador*. Obtenido de <https://www.wipo.int/edocs/lexdocs/laws/es/ec/ec030es.pdf>

Ayón, G., Zea, X., Soledispa, X., & López, L. (2019). El Presupuesto General Del Estado Y Su Aporte a La Educación Pública En El Cantón Paján. *Polo Del Conocimiento.*, 4(7), 66-76. Obtenido de <https://dialnet.unirioja.es/servlet/articulo?codigo=7164373>

Calderón, M. G. (2017). LAS EMPRESAS FANTASMAS EN ECUADOR: CARACTERIZACIÓN, SOCIOS Y EMPRESAS RELACIONADAS. *Economía y Política*, 26, 124-148. Obtenido de <https://publicaciones.ucuenca.edu.ec/ojs/index.php/REP/article/view/1827/1429>

Carrera, J., Martínez, R., & Lozano, M. (2020). Evasión tributaria como mecanismo de alteración de los estados financieros. *Dominio de las Ciencias*, 6(3), 1284-1297. doi:<https://dominiodelasciencias.com/ojs/index.php/es/article/view/1370>

Cattaneo, I., & Burgos, J. (2017). Elusión Tributaria. *Revista de Estudios Tributarios*, 227-252. Obtenido de <https://revistahistoriaindigena.uchile.cl/index.php/RET/article/view/46988/48986>

CEPAL. (2016). *Comisión Económica para América Latina y el Caribe: Evasión fiscal en América Latina*. Obtenido de <https://www.cepal.org/es/>

Coello, J., Miranda, W., & Orellana, M. (2021). Evasión tributaria y su incidencia sobre el IVA. Caso PYMES comerciales del Cantón Machala. *593 Digital Publisher*, 6(3), 174-187. doi:<https://doi.org/10.33386/593dp.2021.3.560>

Durán, J., & Salvador, L. (2018). Análisis económico de la Administración Tributaria. *Papeles de Economía Española*, 154, 112-130. Obtenido de <http://diposit.ub.edu/dspace/handle/2445/120542>

Garzón, M., Ahmed, A., & Peñaherrera, M. (2018). El sistema tributario y su impacto en la Economía Popular y Solidaria en el Ecuador. *Revista de Ciencia, Tecnología e Innovación*, 5(1), 38-53. Obtenido de <https://dialnet.unirioja.es/servlet/articulo?codigo=6756345>

Gómez, J., & Morán, D. (2020). Estrategias para abordar la evasión tributaria en América Latina y el Caribe. *Macroeconomía del desarrollo*(215), 1-86. Obtenido de https://repositorio.cepal.org/bitstream/handle/11362/46301/1/S2000696_es.pdf

Gualpa, N., Peralta, R., Yamasqui, D., & Giler, L. (2020). Causas del incumplimiento de los deberes formales de contribuyente: Caso Azogues. *593 Digital Publisher*, 5(5), 114-130. Obtenido de <https://dialnet.unirioja.es/servlet/articulo?codigo=7898234>

Martínez, C. (2020). LA CULTURA TRIBUTARIA COMO MEDIDA PARA ELEVAR LOS NIVELES DE RECAUDACIÓN DE IMPUESTOS EN PANAMÁ. *Revista FAECO sapiens*, 3(2), En líneas. Obtenido de <http://portal.amelica.org/ameli/jatsRepo/221/2211235004/2211235004.pdf>

Matus, M. (2017). La elusión tributaria y su sanción en la Ley N° 20.780. Hacia un concepto de negocio jurídico elusivo. *Revista Ius et Praxis*, 23(1), 67 - 90. Obtenido de <https://scielo.conicyt.cl/pdf/iusetp/v23n1/art03.pdf>

Mejía, O., Pino, R., & Carlos, P. (2019). Políticas tributarias y la evasión fiscal en la República del Ecuador. Aproximación a un modelo teórico. *Revista Venezolana de Gerencia*, 24(88), 1147-1165. Obtenido de <https://www.redalyc.org/jatsRepo/290/29062051010/29062051010.pdf>

Moreira, A. (2016). Anàlisis de causas en la evasión y elusión tributaria de los contribuyentes obligados a llevar contabilidad en la parroquia Tarqui, cantón Guayaquil, periodo 2015. Instituto de altos estudios nacionales. *Instituto de altos estudios nacionales*.

Nacional, A. (2018). *Código Tributario del Ecuador*. Obtenido de <https://www.ces.gob.ec/lotaip/2018/Agosto/Anejos-literales-a2/CODIGO%20TRIBUTARIO.pdf>

Navarro, M. (2018). LA EVOLUCIÓN EN LA JURISPRUDENCIA DE LA EXCMA. CORTE SUPREMA EN LA CONCEPCIÓN DE LA ELUSIÓN FISCAL. *Revista de Estudios Tributarios*(20), 169-191. Obtenido de <https://semanariorepublicano.uchile.cl/index.php/RET/article/view/52350/55009>

- Onofre, R., Aguirre, C., & Murillo, K. (2017). La cultura tributaria y su incidencia en la recaudación de los tributos en el Cantón Babahoyo, Provincia de los Ríos. *Dominio de las Ciencias*, 3(3), 3-23. Obtenido de <https://dialnet.unirioja.es/servlet/articulo?codigo=6326643>
- Patiño, R., Mendoza, S., Quintanilla, D., & Díaz, J. (2019). Evasión tributaria, una revisión. *Revista Activos*, 17(1), 167-194. Obtenido de <https://revistas.usantotomas.edu.co/index.php/activos/article/view/5399/5179>
- Pinto, F., & Tibambre, K. (2019). Determinantes de la evasión de impuestos en Colombia 2007 - 2017. *CIENCIA UNISALLE*, 1-26. Obtenido de https://ciencia.lasalle.edu.co/cgi/viewcontent.cgi?article=1971&context=contaduria_publica
- Quispe, G., Arellano, O., Negrete, O., Rodríguez, E., & Vélez, S. (2020). La cultura tributaria y su efecto en la evasión fiscal en Ecuador. *Espacios*, 41(29), 153-171. Obtenido de <https://www.revistaespacios.com/>
- Sánchez, J., Esparza, F., Gaibor, I., & Barba, M. (2020). La evasión tributaria originada en el uso de comprobantes de venta. *Knowledge*, 5(2), 149-163. Obtenido de <https://knepublishing.com/index.php/KnE-Engineering/article/view/6231/11603>
- Santillán, M., Jaramillo, V., Torres, J., Fernández, M., & Ormazá, M. (2019). La cultura tributaria en el sector artesanal y su efecto en el cumplimiento de obligaciones. *Visión Empresarial*, 9, 41-50. Obtenido de <https://revistasdigitales.upec.edu.ec/index.php/visionempresarial/article/view/868/942>
- Segura, S., & Ronquillo, E. (2018). Las recaudaciones tributarias y el crecimiento económico. Un análisis a través del pib de Ecuador. *In Empresarial*, 11(44), 33-39. Obtenido de <https://editorial.ucsg.edu.ec/ojs-empresarial/index.php/empresarial-ucsg/article/view/109/102>
- Serrano, N. (2017). Análisis De La Cultura Tributaria Y Su Influencia En Elcumplimiento De Las Obligaciones Tributarias De Losarrendadores De Rentas De Primera Categoría-Arrendamiento De Predios Depersonas Naturales En Laprovincia De Abancay 2016. *REVISTA DE INVESTIGACIONES DE LA ESCUELA DEPOSGRADO*, 6(4), 318-328,. Obtenido de <http://revistas.unap.edu.pe/epg/index.php/investigaciones/article/view/167/108>
- Solís, L., Valverde, E., & Andrade, P. (2019). La Evasión Tributaria y su impacto en el Presupuesto General del Estado Ecuatoriano en los años 2014 – 2018. *Pro-Science*, 3(19), 21-26. Obtenido de <http://www.journalproscienc.es/index.php/ps/article/view/171/246>
- SRI. (30 de Mayo de 2021). *Servicio de Rentas Internas*. Obtenido de : <https://www.sri.gob.ec/web/guest/estadisticas-generales-derecaudacion-sri#per%C3%ADodo>
- Torres, A., & Ferrer, N. (2020). Covid 19 - ¿Por Qué No Empezamos A Tributar? *Journal of Management & Business Studies*, 2(1), 1-14. Obtenido de <https://revistas.uautonoma.cl/index.php/jmabs/article/view/525/497>
- Valderrama, G., Valderrama, E., & Palacios, I. (2017). Impacto de la aplicación de instrumentos y controles de medida para la planificación tributari. *Dominio de las ciencias*, 3(2), 605-619. Obtenido de <https://dialnet.unirioja.es/servlet/articulo?codigo=6324284>
- Vega, F., Brito, L., Apolo, N., & Sotomayor, J. (2020). Influencia de la recaudación fiscal en el valor agregado bruto de los cantones de la provincia de El Oro (Ecuador), para el periodo 2007-2017. *Revista Espacios*, 41(15), En línea. Obtenido de <https://www.revistaespacios.com/a20v41n15/a20v41n15p15.pdf>
- Villa, C., Samaniego, F., Vargas, D., & Merino, E. (2018). LA SOSTENIBILIDAD DEL PRESUPUESTO GENERAL DEL ESTADO EN EL ECUADOR. *Revista de Investigación Talentos*, 1, 45-52. Obtenido de <https://talentos.ueb.edu.ec/index.php/talentos/article/view/29/37>

Zamora, L. (2020). Impacto del sistema tributario ecuatoriano en las microempresas. *593 Digital Publisher*, 5(4-1), 208-222. Obtenido de https://www.593dp.com/index.php/593_Digital_Publisher/article/view/239/487

Zamora, Y. (2018). La Evasión Tributaria Y Su Incidencia En La Economía Del Ecuador, 2010-2014. *QUIPUKAMAYOC*, 26(50), 13-21. doi: <http://dx.doi.org/10.15381/quipu.v26i50.14721>

Repercussions of COVID-19 on the Ecuadorian tax system and its ranking compared to other countries**Repercusiones del COVID-19 en el sistema tributario del Ecuador y su ranking frente a otros países**

ROQUE-VALAREZO, Pamela Elizabeth†*, YUMBO-GUZMÁN, María de los Ángeles and ORELLANA, Milca

Universidad Técnica de Machala, Machala - El Oro - Ecuador.

ID 1st Author: *Pamela Elizabeth, Roque-Valarezo* / **ORC ID:** 0000-0001-7653-1869

ID 1st Co-author: *María de los Ángeles, Yumbo-Gúzman* / **ORC ID:** 0000-0001-5748-215X

ID 2nd Co-author: *Milca, Orellana* / **ORC ID:** 0000-0001-5952-5766

DOI: 10.35429/JFE.2021.9.5.12.20

Received July 15, 2021; Accepted December 30, 2021

Abstract

Tax systems are essential for the collection of taxes, since the economic spending of the countries depends on them; Among the items we have the Income Tax (IR) and the Value Added Tax (VAT), which are the highest income obligations that Ecuador has. This article aims to analyze the repercussions caused by the COVID-19 pandemic in the collection systems of Ecuador compared to the countries of Latin America. For this purpose, a descriptive-documentary cross-sectional methodology was carried out in order to obtain true, reliable information from indexed databases that were verified and approved by different researchers. The results show that COVID-19 had a direct impact on the economies of Latin American countries, especially in the first half of 2020, however, the policies adopted by governments, precisely in Ecuador, helped reduce the burden of the crisis, by deferring the payment of taxes, which generated momentary relief for local companies.

Tax regime, Collection system, Taxes, VAT, Ranking

Resumen

Los sistemas tributarios son fundamentales para la recaudación de los impuestos, ya que, de estos depende el gasto económico de los países; entre los rubros tenemos el Impuesto a la Renta (IR) y el Impuesto al Valor Agregado (IVA), que son las obligaciones de mayor ingreso que posee el Ecuador. El presente artículo tiene como objetivo analizar las repercusiones ocasionadas por la pandemia de COVID-19 en los sistemas de recaudación del Ecuador frente a los países de América Latina. Para el efecto, se realizó una metodología de corte transversal, de tipo descriptiva-documental con la finalidad de obtener información verídica, confiable, proveniente de bases de datos indexadas que fueron verificadas y aprobadas por distintos investigadores. Los resultados demuestran que el COVID-19 tuvo un impacto directo sobre las economías de los países de América Latina, especialmente en el primer semestre del año 2020, sin embargo, las políticas adoptadas por los gobiernos, precisamente en Ecuador ayudaron a disminuir la carga de la crisis, mediante el aplazamiento del pago de impuestos, lo que generó alivio momentáneo para las empresas locales.

Régimen tributario, Sistema de recaudación, Impuestos, IVA, Ranking

Citation: ROQUE-VALAREZO, Pamela Elizabeth, YUMBO-GUZMÁN, María de los Ángeles and ORELLANA, Milca. Repercussions of COVID-19 on the Ecuadorian tax system and its ranking compared to other countries. RINOE Journal-Financial Economy. 2021. 5-9:12-20.

* Correspondence to Author (Email: proque1@utmachala.edu.ec)

† Researcher contributing first author.

Introduction

Worldwide, the figure of collection arises mainly on companies, adopted by Western European countries, later the figure of VAT (Value Added Tax) in Latin America is configured that arises in the middle of the 20th century as a compensation measure proclaimed in the Washington consensus, with the aim of being able to recover the lost revenue from world trade taxes. The first country in South America to implement this tax system was Brazil. According to Huamán (2018), there were modifications in the economic structures of governments that implied a tax on basic necessities with the intention of redistributing income in a better way.

Jiménez and Ruelas (2018), affirm that the economies of Latin America show deficiencies in the control and management of their tax systems, since decentralization has made the autonomous governments responsible, which implied more state spending, however, the Lack of strengthening collection policies and efficiency in local administrations have caused a low capacity to generate autonomous sources of income.

In this context, the South American countries according to data from ECLAC (Economic Commission for Latin America), the autonomous governments of the countries of Bolivia, Brazil and Colombia manage to collect through their local governments 10% of the income that they contribute to GDP (Gross Domestic Product), however, in the case of Ecuador, the level of collection represents the 5% that contributes to GDP, in the case of Uruguay the collection represents 3% of GDP, this shows a low level of participation of the local economies in income for the states (Gómez and Morán, 2016).

The Ecuadorian tax apparatus is configured from the creation of the governing body called the Internal Revenue Service (SRI), with the mission of controlling the State collection system.

With the boom in raw materials, mainly bananas and oil, the level of income in the country increased, however, in the crises of the 90s, Ecuador experienced a time of strong financial crisis, with continuous reforms in tax matters, no it is until 2007 that the tax institution stabilized, maximizing its management, which generated greater income thanks to the control of fiscal policies for tax evasion (Rivera *et al.*, 2019).

For Ecuador, revenue from collection is the main source of sustainability for the general state budget, the authors Quinde *et al.* (2020), for this there are two forms of collection, the first one deals with the income taxes of the taxpayers that taxes the income and is a direct tax, the second tax of the taxpayers is VAT. According to Calle *et al.* (2017), tells us that VAT is the one that taxes a value on the part of a transfer, that is, when marketing a good, product or service, it obtains a percentage of its value.

This article seeks to make a statistical comparison of the repercussions of COVID-19 in terms of the collection of taxes for compliance with public policies of the countries. For this reason, the main objective of the research is to analyze the incidence of COVID-19 in the tax collection of Ecuador, through the statistical comparison of collection of the year 2020 in relation to the other countries of Latin America. The study of general concepts such as the tax collected by the country, the added value, and the percentages that Ecuador uses in contrast, such as the tax systems of Peru and Panama, to evaluate the importance of the collection of taxes and the position in which it is located worldwide. The structure of this study includes in its first section a documentary analysis of the main theoretical functions and research indicators. In the second section we find the methodology that is characterized by being descriptive, non-experimental, taking into account the deductive analysis of secondary information. The third section presents the research findings, finally we find the respective conclusions.

Development

Taxes that Ecuador collects

The country annually distributes the resources obtained through the General State Budget (PGE), fulfilling its main objective, which must be equitable for all the cities of the country, as stated by Egas *et al.* (2019), in Ecuador there are two taxes that are very important since it depends on them to pay for the expenses that each city needs, these so-called main taxes are classified as direct and indirect.

For Carrillo *et al.*, (2019), clarifies that taxes are divided into three parts; firstly, internal taxes, which are those that are composed or are sub-classified into income tax (IR), value added tax (VAT) and special contributions tax (ICE); followed by imports where the VAT and ICE intervene and finally the solidarity Contributions which are those made up of the 2% VAT, the solidarity contribution of profits and other various taxes.

Tax types

According to Chávez *et al.*, (2020), mentions two types of taxes based on current Ecuadorian legislation, the authors describe as direct and indirect taxes those items that are part of the responsibility of taxpayers and which cannot be assumed by third parties among the which we found.

Direct taxes

Income Tax, according to articles 1 and 2 of the law of internal tax regime in, we find that it is considered a type of global income item, which is applied directly to individuals, legal entities and local or foreign undivided inheritance, It is calculated from the income derived from commercial activities, subtracting costs, expenses, deductions.

Single Income Tax, is applied to the banana sector that cultivates, produces and sells nationally or abroad, in accordance with the provisions of the Environmental Promotion and Income Optimization Law corresponding to the State, it is based on calculating 2% on total gross sales (Garzón *et al.*, 2018).

Tax on motorized vehicles, is paid annually, and consists of an appraisal of the taxable base of the vehicle as established on the SRI page as a regulatory entity and as indicated by the Tax Administration, the payment base that goes from the rate from 0.5% to 6% except for public companies. Tax on rural lands, is given for those lands that have more than 70 hectares and are in rural sectors, which implies according to the production code that one per thousand of the basic fraction not taxed for each hectare, complying with the regulations of being greater than the 70 hectares mentioned above (Mejía *et al.*, 2019).

Mining tax the contribution received to the State for this item represents 5% based on sales, in the case of gold and copper extraction activities, the contribution is 8% extra to income tax, it is contemplated a payment of 4% for mining companies that practice this activity on a medium scale, in addition, the tax laws in articles 18, 24, 40 and 92, contemplate 3% of the collection of this income for the parish governments, with the In order to redistribute income, promoting community development actions in which mining is practiced (Zanzzi *et al.*, 2016).

Indirect taxes

Value Added Tax, is characterized by being regressive, according to article 52 of the law of internal tax regime, it mentions that this item is taxed in the commercialization phase on transactions and imports, in goods of corporal domain and provision of services, currently The collection rate is 12%, in products corresponding to the basic family basket VAT represents 0%, the income derived from this tax is directed to the accounts of the General State Budget, which is redistributed to the local autonomous governments for financing of public works (Barrera, 2017). Tax on special consumptions, as stipulated in article 82 of the tax regime law, this tax is aimed at collecting on those goods, whether local or foreign, the taxpayers obliged to pay this tax are natural persons, companies that carry out import, manufacturing and franchising operations.

The Value Added Tax (VAT)

In accordance with the Organic Law of Tax Regime in its article 52, it clearly establishes the purpose of VAT, "which taxes the value of the transfer of ownership or the importation of personal property of a corporal nature, in all its stages of commercialization, as well as as well as copyright, industrial property and related rights; and the value of the services provided, in the manner and under the conditions provided by this Law".

Given its comparative advantage in the tax structure of various countries, the value added tax (VAT) is very important in any tax reform. In most Latin American countries, an important part of the policy has repeatedly proposed differential tax rates for certain goods and services that make up the basic consumption basket (Vallejo, 2017). Some distributive impact studies also support this theory, pointing out that when the welfare indicator is consumption, the value added tax will have a certain degree of progress. This is due to the positive effects of the tax exemption and the lowering of the value added tax rate. For certain consumer goods, on the contrary, for collection purposes, the IMF proposes to extend the value added tax at a single rate, abolish tax-free goods and lower the tax rate (Garriga, 2021).

VAT declaration and contribution

From the position indicated by the SRI (2021), the VAT analysis is of vital importance in terms of collection, because it has become the main source of income for the State, this tax is one of those that make their return with more established frequency (monthly or semi-annual) since it generates greater tax obligations, that is why the regulating and controlling entity in charge of collecting emphasizes the importance and concern for those processes that facilitate compliance with tax returns and payments (Izquieta and Vaca, 2015).

The tax system is structured according to the taxes, which support the indirect sources of income of the States, for this reason, the contribution has been significant at a gradual level, depending on the collection capacity and the application of tax policies, the contribution This item helps to keep the government budget stable (Ramírez, 2013).

From the point of view of Cuestas and Góngora (2014) another reason that leads us to consider the value added tax as an option is when we evaluate neutrality in its terms, because it is a choice that does not change between labor and capital. Neutral taxation, choice and consumer choice between different resource allocations. That is why the emphasis on tax neutrality will depend on its design, which reinforces the idea that broad-based taxes are superior to those that may have exceptions or reduced tax rates. The neutrality of VAT is not quite correct, if you compare it with direct taxes, you can treat it as neutral.

Type of Taxpayers

As Rivera et al. (2019) tells us that the tax administration in Ecuador for an efficient development in the collection of the Value Added Tax (VAT), classifies taxpayers into two types:

- Natural Persons (obliged and not obliged to keep accounts).
- Companies (public and private for-profit and non-profit companies).

It should be emphasized that non-profit organizations that belong to the Popular and Solidarity Economy sector and are those that receive benefits in the tax area according to the legal measures established by the State and are executed and supervised by the regulatory entity of Internal Revenue Services (SRI), which considers deductions, exemptions and rebates in order to determine the tax to be paid.

VAT in Latin America

As stated by Lustig (2017) in Latin America, it has been developing important changes in levels and structures since the early nineties, this is attributed some more educated facts that were part of this transformation, while this continuous increase of the average tax burden within the continent shows a certain regularity, but in the same way hides a certain difference between countries.

It should be emphasized that the tax structure in Latin America shows several common features that contrast vigorously with developed countries, it is essential to consider the magnitude and impact of these comparisons, since identifying those areas where the incorporation of superior tax reforms is necessary.

Methodology

This research is cross-sectional, based on the study periods 2019-2020, it is also descriptive, and at the same time documentary, due to the innumerable interpretative analyzes through the search for literary sources validated by other authors. According to what was expressed by Ruz et al. (2020), this type of research is subdivided into three aspects, which are supported by documentary sources, applying in this way to bibliographic research that consists of the consultation of books and the hemerographic that is based on the investigation of articles or journal essays.

For the bibliographic review, articles recovered from indexed scientific databases such as Redalyc, Scielo, Dialnet, Scopus, as well as data from government digital platforms such as the Internal Revenue Service, Central Bank of Ecuador, Cepal, among others; with the selection of search criteria such as taxes, collection systems, tax regime, collection in Latin America, Effects of COVID-19 in economies, to carry out the process of deductive analysis of the information recovered.

Results

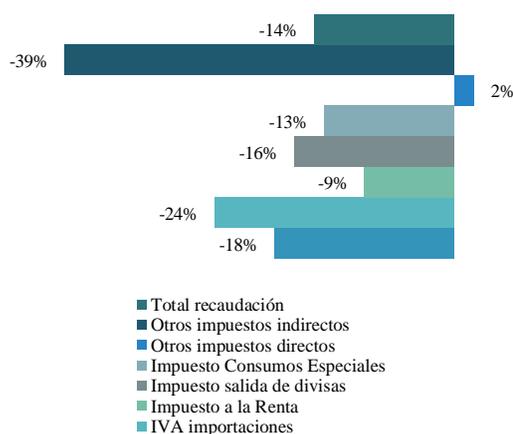
With the recovery of tax information retrieved from the portal of the Internal Revenue Services (SRI), Inter-American Development Bank (IDB), Association of Banks of Ecuador (ASOBANCA). The data analyzed correspond to the study period 2019-2020, through the presentation of statistical tables and graphics, which allow identifying the level of collection of Ecuador in times of pandemic, compared to other countries.

Direct taxes	
Income tax	4.406,761
Other direct taxes	677
Foreign currency outflow tax	964,093
Total	5,371,531
Indirect taxes	
Internal VAT	4.093,133
VAT imports	1.413,120
Special consumption tax	578,889
Other indirect taxes	169
Total	6,085,311

Table 1 Tax collection regarding direct and indirect taxes, 2020 period

Source: Asociación de bancos del Ecuador (2020)

Ecuador has two important sources of income that contribute to GDP, for the year 2020 direct collections where the Income Tax (IR) is one of the largest collectors, together with other types of taxes amounted to \$ 5,371,531 millions of dollars; In the same way, indirect items such as Value Added Tax (VAT) represented a total of 6,085.311 million dollars for the year 2020.



Graphic 1 Variation of the main taxes in Ecuador period 2020 in relation to the year 2019

Source: Asociación de bancos del Ecuador, (2020)

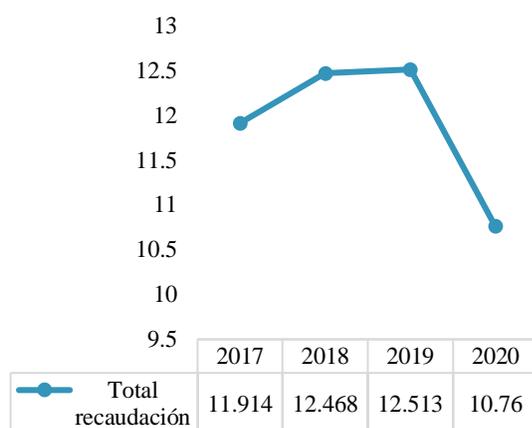
During the first semester of 2020, Ecuador showed decreasing collection figures, in total, collection was reduced by 14% compared to 2019; The values collected were on average \$ 10,761 million dollars, with a loss of around 1,752 million in income, in contrast to the 2019 period, basically the income tax reduced its taxation by 9% compared to 2019, that is, 4,106 million were collected. The value added tax also suffered a considerable impact, reaching 3.69 billion dollars, unlike in 2019, the collection decreased by 21%.

Tax	2019	2020	Variation
Collection of internal VAT	4.489	3.690,4	-17.80%
VAT collection on imports	1.668,3	1.265,5	-24.10%
Income tax collection	4.495,3	4.106,4	-8.70%

Table 2 Evolution of direct and indirect tax collection in Ecuador

Source: *Asociación de bancos del Ecuador, (2020)*

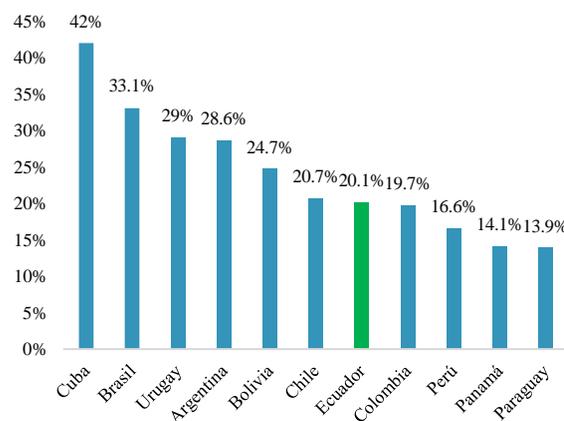
The contribution of VAT to the General State Budget is very significant, the comparison between the last two fiscal periods, expresses that for the year 2019 both the internal VAT and imports collected 4,489 and 1,668.3 million respectively, however, in the year by 2020 these items accounted for 3,690 and 1,265.5 million of the previously detailed taxes, which shows that there was a negative variation of 17% in internal VAT and 24% in VAT on imports.



Graphic 2 Variation in collection behavior in Ecuador

Source: *Asociación de bancos del Ecuador, (2020)*

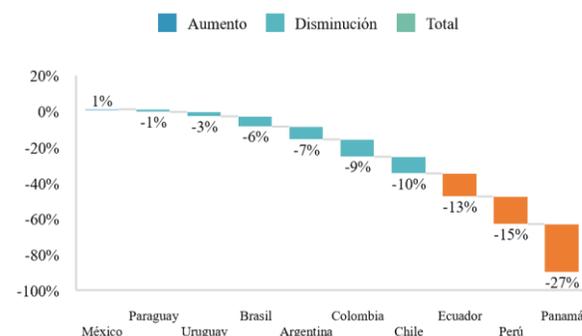
At the global collection level, Ecuador within the 2017 to 2019 periods has maintained a constant collection curve, however, for the 2020 period, as illustrated in graph 1, there is evidence of a drop in tax collection, due to different factors. market externalities, such as the declaration of the global COVID-19 pandemic, which represented significant losses in the level of collection for international economies.



Graphic 3 Ranking of tax collection in Latin America for the 2020 period

Source: *Banco Interamericano de Desarrollo, (2021)*

The ranking of the economies of South America, studied in the period 2019, based on the repercussions of the health crisis, graph 2 shows that Ecuador in level of tax collection contributing to the Gross Domestic Product (GDP), in relation to the different countries, show that Ecuador stands at 20.1% for 2019, decreasing 6 percentage points compared to 2018, and at the level of Latin American and Caribbean countries it was below the regional average, which is 23%.



Graphic 4 Percentage ranking of the level of tax collection in Latin America for the 2020 period

Source: *Banco interamericano de desarrollo, (2021)*

The collection history of the Latin American countries, according to graph 4 shows a sharp drop in the collection systems for the year 2020, based on the income tax (IR) the decrease at the regional level is around 8.2% and in the value added tax (VAT) the reduction is around 7.8%, as evidenced by a greater impact on income from income; In global calculations we see that Mexico has an increase of only 1% in relation to the year 2019, however, Ecuador presents a collection loss of 15% compared to the previous year, in the same way Panama is the country that has the most repercussions on tax revenues presents with 27%.

Effects of COVID-19 on the economies of Latin America

At the end of 2019, tax revenues increased slightly in Latin American countries, the items that contribute to GDP, presented an average of 13%, with Cuba showing the most growth of 42% due to its main source of income, which is tourism, in the case of Ecuador income bordered a 20% contribution to GDP.

However, at the beginning of 2020, the economies of around 18 Latin American countries, including Ecuador, experienced significant average losses of approximately 11.2% in tax revenues compared to the period 2019, the global declaration of the health crisis, forced to the world economy to adopt adjustment policies to give relief to the markets by cushioning the tax burden and providing momentary compensation measures to gradually recover the commercial sector.

In the middle of the 2020 period, there is a slight recovery in the collection systems, due to public policies to protect companies, social assistance programs, credit bonds, freezing of deadlines for the payment of taxes and alternative adjustment measures for the periodic payment of tax contributions. In addition, one of the main items of the countries, in the case of Ecuador, oil decreased, due to the fall in international prices, aggravating the crisis as a result of the measures adopted by the Ecuadorian government, which momentarily paralyzed the payment of the tax on income in the different business sectors and productive industries.

One of the main income items in Latin American countries is the value added tax or sales tax, this item had negative repercussions throughout the region, for the first period of 2020, specifically in the month of May. It is where the largest drop in this tax is recorded with 29.5% in relation to previous records, subsequently, a slight recovery is shown, however, the figures continue to be negative in the months of June (17.2%), July (14.4%), August (2.5%), September (3.9%) and December (9.1%), this shows that the measures adopted by the countries allowed the economy to adjust, minimizing the effect of the health crisis, however, although the negative figures have The diminished impact is still reflected in a global economic slowdown.

In total terms, the average tax decrease in the region stands at 11.7%, for the second semester of 2020, an improvement in income is perceived that is sustained, due to the lifting of certain restrictions in aspects of capacity of public spaces, mobility, reopening of certain business sectors, to reduce the implications of the pandemic. Despite the negative percentages in collection, a slight improvement is evident, even maintaining decreasing values, from this point of view, the countries that show the greatest slowdown are Panama (35%), Honduras (19.5%), Ecuador (17.3%), Jamaica (17.2%), in contrast, there were economies that showed recovery from the second semester of 2020, such as Paraguay (2.4%) and Mexico (2.3%).

Conclusions

It can be concluded through the investigative findings that the variable COVID-19 has had a significant impact on the collection systems, markets and economies of all Latin American countries, particularly in Ecuador, the effects of the pandemic caused losses in collection matters of approximately 15% for the first semester of the year 2020 in relation to the year 2019.

According to the statistical results of the study, it is concluded that the countries were affected by their local economies, due to the restrictions established by the World Health Organization (WHO); The internal policies applied in each State helped to reduce the indexes of negative collection figures, managing to present slightly better values in the subsequent months of the first semester of 2020.

It is concluded that it is necessary for Ecuador to articulate economic recovery policies from the COVID-19 crises, which still latently continues to impact business markets, public policies will be key to guarantee a reconstruction of social and productive level, through the establishment of reactivation provisions with the granting of bank credits, channeled tax policies and control of public spending that allow for sustainability and growth of the economies.

This study was aimed at analyzing the implications of COVID-19 in the tax system of Ecuador compared to the other countries of Latin America, however, for future lines of research it could be convenient to analyze the different public policies on tax matters and their recovery impact in local businesses.

References

- ASOBANCA. (2020). *Boletín macroeconómico*. <https://www.asobanca.org.ec/file/2972/download?token=gIKKiFeh>
- Barrera, C. B. (2017). *El IVA en el Ecuador: un impuesto acumulativo*. Imprenta Digital de la Universidad del Azuay. http://publicaciones.uazuay.edu.ec/index.php/ce_uazuay/catalog/view/46/43/470-1
- Banco Interamericano de Desarrollo. (2021). *Banco Interamericano de Desarrollo*. <https://oe.cd/RevStatsLatam>
- Calle, O. R., Malla, A. F., Lalangui, L. M., y Guamán, G. F. (2017). El impuesto al valor agregado IVA en Ecuador y su incidencia en las recaudaciones tributarias. *Revista Sur Academia*, 4(7), 87-94. <https://revistas.unl.edu.ec/index.php/suracademia/article/view/482/381>
- Carrillo, P. W., Sánchez, C. P., y Carrillo, P. G. (2019). Recaudación de impuestos por domicilio fiscal Ecuador: zona de planificación tres (Chimborazo, Cotopaxi, Tungurahua, Pastaza), 2007-2018. *Boletín de Coyuntura* (21), 22-26. doi:<http://dx.doi.org/10.31164/bcoyu.21.2019.693>
- Chávez, C. G., Chavez, C. R., y Betancourt, G. V. (2020). Análisis de la contribución del IVA, Renta, RISE e ICE en la zona 7 del Ecuador período 2013-2017. *Universidad y Sociedad*, 12(2), 330-335. http://scielo.sld.cu/scielo.php?script=sci_abstract&pid=S2218-36202020000200330&lng=es&nrm=iso
- Cuestas, C. J., y Góngora, A. S. (2014). Análisis Crítico de la Recaudación y Composición Tributaria en Ecuador 2007-2012. *Revista Politécnica*, 34(1), 1-10. https://revistapolitecnica.epn.edu.ec/ojs2/index.php/revista_politecnica2/article/view/303
- Egas, M. F., Cifuentes, L. M., Preciado, D. T., y Esther, A. P. (2019). El impuesto a los consumos especiales (ICE) aplicado a las bebidas alcohólicas incluida la cerveza. *Visionario Digital*, 3(2), 294-304. doi:<https://doi.org/10.33262/visionariodigital.v3i2.477>
- Garriga, M. (2021). Repensando el impuesto al valor agregado. *Estudios económicos*, 38(76), 197-222. <https://www.redalyc.org/articulo.oa?id=572365672007>
- Garzón, C. M., Radwan, A., y Peñaherrera, M. J. (2018). El sistema tributario y su impacto en la Economía Popular y Solidaria en el Ecuador. *Revista UNIANDES Episteme*, 5(1), 38-53. <https://dialnet.unirioja.es/servlet/articulo?codigo=6756345>
- Gómez, S. J., y Morán, D. (2016). La situación tributaria en América Latina. *Cuadernos de economía*, 35(67), 1-37. <https://dialnet.unirioja.es/servlet/articulo?codigo=5278364>
- Huamán, S. M. (2018). Sistema tributario aduanero peruano y beneficios de los acuerdos de integración comercial Perú-México. *Lex: Revista de la Facultad de Derecho y Ciencia Política de la Universidad Alas Peruanas*, 16(22), 271-300. <https://dialnet.unirioja.es/servlet/articulo?codigo=6760583>
- Izquieta, P. L., y Vaca, L. G. (2015). Impuesto al Valor Agregado (IVA): Evolución, tarifas y aportes de las principales ciudades: Caso Ecuador. *Revista FENopina*(70), 1-5. <http://www.revistas.espol.edu.ec/index.php/fenopina/article/view/62/77>
- Jiménez, J. P., y Ruelas, Á. I. (2018). Autonomía tributaria subnacional en América Latina. *Documentos de trabajo (FEDEA)*(10), 1-24. <https://dialnet.unirioja.es/servlet/articulo?codigo=6525559>
- Lustig, N. (2017). El impacto del sistema tributario y el gasto social en la distribución del ingreso y la pobreza en América Latina. *El trimestre económico*(335), 493-568. <https://dialnet.unirioja.es/servlet/articulo?codigo=6451422>
- Mejía, F. O., Pino, J. R., y Parrales, C. C. (2019). Políticas tributarias y la evasión fiscal en la República del Ecuador. Aproximación a un modelo teórico. *Revista Venezolana de Gerencia*, 24(88), 1-15. <https://www.redalyc.org/articulo.oa?id=29062051010>

Quinde, R. V., Bucaram, L. R., Saldaña, V. M., y Díaz, C. C. (2020). Relación entre los ingresos petroleros y el gasto público ecuatoriano. *Revista de ciencias sociales*, 26(3), 118-129. <https://dialnet.unirioja.es/servlet/articulo?codigo=7565471>

Ramírez, C. E. (2013). La Generalización del Impuesto al Valor Agregado: ¿Una opción para México? *Revista Mexicana de Ciencias Políticas y Sociales*, 58(219), 75-101. http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0185-19182013000300004

Rivera, K., Narváez, C., Giler, L., y Erazo, J. (2019). Evaluación tributaria de los gastos imputables para la declaración del Impuesto al Valor Agregado IVA en la Asociación de servicios de alimentación, limpieza y mensajería La unión hace la fuerza “ASOUNF”. *593 Digital Publisher CEIT*, 4(3-1), 59-75. <https://dialnet.unirioja.es/servlet/articulo?codigo=7144056>

Ruz, F., Molina, P. E., y Contreras, J. M. (2020). Evaluación de conocimientos sobre el contenido de estadística descriptiva de futuros profesores de matemáticas. *Avances de investigación en educación matemática* (18), 55-71. <https://dialnet.unirioja.es/servlet/articulo?codigo=7799250>

SRI. (2021). *Estadísticas generales de recaudación*. <https://www.sri.gob.ec/estadisticas-generales-de-recaudacion-sri>

Vallejo, Z. L. (2017). El dilema de la Reforma Tributaria: ¿estructural o fiscalista? *Revista Apuntes del CENES*, 36(63), 9-10. <http://www.redalyc.org/articulo.oa?id=479553173001>

Zanzzì, F., Cordero, L. A., y Cordero, L. M. (2016). Reformas tributarias modeladas con vectores autorregresivos: Caso Ecuador. *Economía*, 41(42), 53-75. <http://www.redalyc.org/articulo.oa?id=195650099003>

Influence of job satisfaction and training on individual performance of microfinance advisors in Sonora and Chiapas, Mexico

Influencia de la satisfacción laboral y capacitación en el desempeño individual de los asesores de las microfinancieras en Sonora y Chiapas, México

VÁZQUEZ-JIMÉNEZ, Imelda†*, RUIZ-PÉREZ, Roberto, GOMEZ-HINOJOSA, Carolina and ACOSTA-MELLADO, Erika

Instituto Tecnológico de Sonora, México, Department of Accounting and Finance, Mexico.

ID 1st Author: *Imelda, Vázquez-Jiménez* / ORC ID: 0000-0002-3716-328X, Research Gate ID: Imelda Lorena Vazquez Jimenez, CVU CONACYT ID: 287385

ID 1st Co-author: *Roberto, Ruiz-Perez* / ORC ID: 0000-0001-8884-9890, Research Gate ID: roberto-ruiz-4, CVU CONACYT ID: 625356

ID 2nd Co-author: *Carolina, Gomez-Hinojosa* / ORC ID: 0000-0003-1558-7361, Researcher ID Thomson: X-3052-2018, CVU CONACYT ID: 218451

ID 3rd Co-author: *Erika, Acosta-Mellado* / ORC ID: 0000-0003-3526-8923, Researcher ID Thomson: X-8807-2019, CVU CONACYT ID: 282641

DOI: 10.35429/JFE.2021.9.5.21.27

Received July 20, 2021; Accepted December 30, 2021

Abstract

Objective

Measure whether job satisfaction (JS) and the training of advisors (TA) influence the individual performance of advisors (IPA) of microfinance institutions to identify areas of opportunity and determine solutions so that the performance is as expected by managers.

Methodology

This research was carried out with microfinance institutions located in Tuxtla Gutierrez, Chiapas, as well as in the south of the State of Sonora, in the municipality of Ciudad Obregon. This study is quantitative, exploratory, correlation type, non-experimental, using the SPSS and Smart PLS Systems to explain the results.

Contribution

In microfinance institutions, a very important point is the training that the advisors have, so that, in turn, they can maintain a good performance in the area they work and thus meet the goals and objectives of the microfinance institution to which they work and be able to offer a good service to the borrowers who go to the offices to request a microcredit, most of them being highly vulnerable people in their economic situation; Being able to involve the borrower in decision-making with the assurance that he can understand the risks and benefits that he will have with each microcredit he requests.

Job satisfaction, Advisors, Microcredits

Citation: VÁZQUEZ-JIMÉNEZ, Imelda, RUIZ-PÉREZ, Roberto, GOMEZ-HINOJOSA, Carolina and ACOSTA-MELLADO, Erika. Influence of job satisfaction and training on individual performance of microfinance advisors in Sonora and Chiapas, Mexico. RINOE Journal-Financial Economy. 2021. 5-9:21-27.

Resumen

Objetivo

Medir si la satisfacción laboral (SL) y la capacitación de los asesores (CA) influyen en el desempeño individual de los asesores (DIA) de las microfinancieras para identificar áreas de oportunidad y determinar soluciones para que el desempeño sea el esperado por los directivos.

Metodología

Esta investigación se llevó a cabo con las microfinancieras localizadas en Tuxtla Gutierrez, Chiapas, como en el Sur del Estado de Sonora, propiamente en el municipio de ciudad Obregón. Este estudio es de tipo cuantitativo, exploratorio, tipo correlacional, no experimental, utilizando el sistema SPSS además de SMART PLS para explicar los resultados.

Contribución

En las microfinancieras, un punto muy importante es la capacitación con la que cuentan los asesores, para que, a su vez, estos puedan mantener un buen desempeño en el área que laboran y así, cumplir las metas y objetivos de la microfinanciera a la que pertenecen y poder ofrecer un buen servicio a los prestatarios que acuden a las oficinas para solicitar un microcrédito siendo en su mayoría personas altamente vulnerables en su situación económica; poder involucrar al prestatario para la toma de decisiones con la seguridad de que puede entender los riesgos y beneficios que tendrá con cada microcrédito que solicite.

Satisfacción laboral, Asesores, Microcréditos

† Researcher contributing first author.

Introduction

Yunus, M. (2018), known as the “banker of the poor”, for more than 40 years has been the leader through campaigns with the sole purpose of granting microcredits to the poorest, most vulnerable families that live in rural communities and not supported by traditional financial institutions. Likewise, González-Vega, C. (2018) professor emeritus at Ohio State University, has specialized over the years in the area of microfinance in Latin America, and supports Dr. Yunus with the idea of supporting families who most need financial resources entitled microcredits so that they can start their business or improve it.

Currently there are a large number of lenders and financial institutions that help people with limited resources, granting them loans or microcredits, but with high or inaccessible interests, or in the same way requesting some guarantee of said loan.

For the development of this research, the literature related to job satisfaction of advisers who work in microfinance institutions was reviewed to determine the factors or variables that affect precisely this issue, according to the authors, and some studies with very interesting results were found.

Gonzales Lázaro, HE, Herrera Saavedra, LG, Ramírez Díaz, SM, & Varas Velásquez, RJ (2019) carried out the study of job satisfaction and its correlation with the intention of rotation of commercial advisers of microfinance institutions, with results where they leave the evidence that there is a significant problem in the microfinance sector, which makes essential actions to reduce the rotation of microcredit advisers, using Herzberg's theory.

Also in the research published by Jiménez, ILV, Millanes, MDM, Palomares, MMG, del Carmen, M., & Torres, V. (2018) Job satisfaction by gender of the advisers within the economic activity of financial services in the Municipality de Cajeme, the objective was to determine the job satisfaction by gender that the advisers of these financial institutions present and they reviewed the difference that exists between men and women regarding the influence of sociodemographic variables.

Gonzales Carrasco, M. Á. (2020) with the study entitled stress and its influence on job satisfaction in microfinance institutions in the city of Cajamarca, confirmed that the variable of job stress does have a direct influence on job satisfaction in these institutions.

With the study presented by Guerrero Díaz, JA (2018) Commercial and financial skills training course focused on the microfinance sector, it clearly specifies the profile that the microcredit advisor must have because it is in charge of helping borrowers or accredited discover their financial needs, analyzing past, present and future situations.

Continuing with the review of the microcredit literature, approximately 12,600 documents that support studies related to microcredits and financial inclusion were found in the academic google network, the impact that microcredit has had in the lives of borrowers in countries of South America, Central and Mexico as well as in other countries of Europe and Africa; also studies referring to the sustainability of microfinance institutions among other issues.

In reality, there is a scarcity of research as the main participant to the microcredit advisers, which were found to be mentioned above, consider variables such as stress, staff turnover, gender of the advisers but not explicitly focused on individual performance, training needs and job satisfaction as intended with this research.

Based on the above, the objective of this research is to measure whether job satisfaction (SL) and the training of advisers (CA) influence the individual performance of advisers (DIA) of microfinance institutions to identify areas of opportunity and determine solutions for performance to be as expected by managers

It is important to mention that in 2018, in an academic event, results of an investigation related to the validation of the instrument for measuring individual performance of the advisers in microfinance institutions, Vazquez-Jimenez, Imelda Lorena, Aguirre-Choix, Ricardo, Gomez- Hinojosa, Carolina and Mundo-Velazquez Rodolfo (2018), was a descriptive research, a Non-experimental study according to Hernandez, Fernandez and Baptista (2016).

The measurement instrument was validated through the exploratory factor analysis test, a total explained variance of 62.58% was obtained, the cronbach's alpha that according to (Levy and Varela, 2003) this result for exploratory studies must be greater than 0.40 obtaining a reliability by variable for job satisfaction (JS) 0.829, for training advisors (TA) 0.821 and for the individual performance advisors variable (IPA) 0.893.

This same study presented a Kaiser-Meyer-Olkin (KMO) test of 0.871 and the Barlett test was significant at .000, confirming the internal validity of the measurement instrument; Due to these results, the decision is made to continue this research now with the instrument already validated for its application in microfinance institutions located in the municipality of Ciudad Obregon, Sonora and Tuxtla Gutierrez, Chiapas, to make a study of the behavior of the variables in study.

Precisely when targeting people with limited resources, it is of the utmost importance that the advisors who serve these people demonstrate good individual performance, but the problem that currently exists is that there are no documents that validate the information regarding the performance of the advisors considering the influence that job satisfaction and their training may have.

Therefore, for this research we have two hypothesis in order to explain the influence of the dependent variable individual performance through the independent variables: job satisfaction and training of the advisors.

Research Hypothesis

H1: Job satisfaction(JS) has a positive impact on the individual performance(IPA) of the advisors in the microfinance institutions of Ciudad Obregon, Sonora as well as Tuxtla Gutierrez, Chiapas.

H2: The training (TA) has a positive impact on the individual performance (IPA) of the advisors in the microfinance institutions of Ciudad Obregon, Sonora as well as Tuxtla Gutierrez, Chiapas.

(Y) Dependent Variable: Individual Performance advisors

(X1) Independent variable: Job Satisfaction

(X2) Independent variable: Training Advisors

It is expected that this document will be an important and clear input so that the directors of the different microfinance institutions not only in the participating States but also in the rest of the country and at the international level, can determine the training needs that the advisers require, as well as the satisfaction work that they have in the individual performance of their functions for the proper functioning of this type of institutions and that the advisers as indicated (Salas, 2012) can have a global performance and productivity to solve problems and establish a relationship between competence and professional training to create dimensions in the development of human capital.

This research is divided into 4 sections. In the first part Introduction, antecedents related to this research, justification, objective and hypothesis are presented; the second section presents the methodology; in the third the results and in the fourth part the conclusions and possible future research.

Methodology

This research was developed under a quantitative approach, since the data collection is used to test the hypotheses based on the numerical information obtained and the statistical analysis through the SPSS and SmartPLS 3 in order to contrast the theory with reality. The data analyzed are on quantitative data on the variables of job satisfaction, training of advisors and individual performance of advisors of microfinance institutions.

According to Anderson, DR, Sweeney, DJ, & Williams, TA, Camm, J. and Martin, K. (2011) when using the quantitative approach, the analyst will focus on the quantitative facts or data associated with the problem and will develop expressions mathematics that describe the objectives, constraints, and other relationships that exist in the problem.

It is non-experimental, since there is no control over the independent variables because the events have already occurred. It is exploratory in nature, since there is little information with the proposed study and it is desired to contribute to the knowledge through understanding the phenomenon under study. It is cross-sectional, since it only reflects a moment in time and does not consider other events; it is correlational type since it focuses on the relationships between the variables, likewise, the research sample is that of non-probability sampling for convenience according to Hernandez, et al. (2016).

The subjects that participated in this research are the advisers who attend the borrowers who go to the microfinance institutions to request a micro-credit, a population of 72 advisers, 60 advisers were identified in Ciudad Obregon Sonora, which means 86% participation, of which 43% are male and 57% are female sex, among males 38% are between 31 and 35 years old, and 26% between 26 and 30 years old, in addition 57% have a professional career and 19% only have high school studies, now well In females, 29% are between 26 and 30 years old and 20% between 18 and 25 years old, 50% have a professional career and 32% have only high school studies; In Tuxtla Gutierrez, Chiapas, a population of 47 advisers, 29 advisers participated, which means 62% participation of which 52% are male and 48% female, among males 46% are between 31-35 years old, and 33% are aged between 26 and 30 years old, and 100% have a professional career, in the percentage of women, 28% are between 26 and 30 years old and 35% are 18 to 25 years old, and 100% have a professional career.

The materials that were used in the present investigation is a questionnaire which the measurement instrument was validated through the exploratory factor analysis test, the cronbach's alpha, KMO, and Barlett test confirming the internal validity of the measurement instrument. The questionnaire was made up of 19 items distributed as follows: 6 items for the independent variable job satisfaction (JS), 6 items for the independent variable of the Training of advisers (TA) and 7 items for the dependent variable of individual performance of advisers (IPA), this questionnaire was taken from the research of Vazquez et.al., (2018).

It should be clarified that at the time of feeding the Model in Smart PLS, the decision was made that in the training variable two questions had to be eliminated, leaving only four questions because they had no significant contribution to the model.

Develop give the meaning of the variables in linear writing and important is the comparison of the used criteria.

The procedure for this research was carried out as follows:

The document that had been presented at an academic event in 2018 was consulted to follow up on the results of the design of the questionnaire, which at a through testing exploratory factor analysis, Cronbach's alpha, KMO and Barlett was validated to confirm the internal validity of the measuring instrument.

The questionnaire was applied with the visit to the microfinance institutions both in Ciudad Obregon, Sonora and Tuxtla Gutierrez, Chiapas, specifically with the advisers who wished to participate to respond to the questionnaire, this was carried out in a period of six months.

The SPSS version 21 was fed for the database as the main input for the analysis of results. The SMART PLS 3.0 system was also used to obtain the Model with the independent variables (job satisfaction and training) and the impact with the dependent variable individual performance of the microfinance advisers: in addition to the Model, BETAS R^2 was obtained, discriminant validity under the criteria of the Fornell and Larcker Criterion published in 1981, indicated by Ab Hamid, MR, Sami, W., & Sidek, MM (2017, September).

Finally, discussion of results and proposals for new research.

Results

With the independent variables of job satisfaction and training, the individual Performance Model (dependent variable) of the microfinance advisers is explained.

Below are the results obtained in relation to the presentation of the Model, for which according to Hair, JF, Ringle, CM, & Sarstedt, M. (2011), the R² classifies it with the following values: 0.75 substantial, 0.5 moderate and 0.25 weak, obtaining an R² of 0.586, which means that there is a moderate explanation in relation to more job satisfaction and better training improve their individual performance, that is, 0.414 is explained through other variables. This Model presents the Beta and sign between the independent variable of Job Satisfaction and the dependent variable of individual performance of the consultants at 0.407, which measures the intensity for individual performance to increase with a direct positive relationship. Likewise, the Beta and sign between the independent variable of Training and the dependent variable of individual performance of the advisors is presented at 0.403, which measures the intensity so that individual performance is increased also with a direct positive relationship. It is presented in Figure 1.

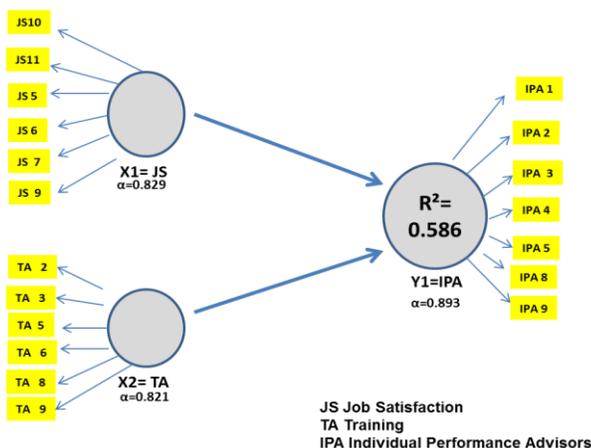


Figure 1 Graphical Model

Source: Own elaboration, 2021

According to Ab Hamid, MR, Sami, W., & Sidek, MM (2017) point out that the Fornell and Larcker criterion mentions that each one of the constructs must have greater internal correlation than with another construct, this validates those two constructs are measuring different variables.

The result in this Model was 0.771 for job satisfaction, for training 0.848 and for individual performance of the microfinance advisors it was 0.787 which indicates that the constructs are well grouped, one construct is not being measured by another. The above was obtained through the Smart PLS 3.0.

In relation to the validity and verification of the hypothesis for this research, the result was obtained using the Smart PLS 3.0.

(Y) Dependent Variable: Individual Performance advisors.

(X1) Independent variable: Job Satisfaction.

(X2) Independent variable: Training Advisors.

H1: Job satisfaction (JS) has a positive impact on the individual performance (IPA) of the advisors in the microfinance institutions of Ciudad Obregon, Sonora as well as Tuxtla Gutierrez, Chiapas; statistically significant, it has a value greater than 1.5, with a t statistic of 2.805 with reliability greater than 99% because it has a P value of 0.005.

H2: The training (TA) has a positive impact on the individual performance (IPA) of the advisors in the microfinance institutions of Ciudad Obregon, Sonora as well as Tuxtla Gutierrez, Chiapas; statistically significant, it has a value greater than 1.5, with a t statistic of 2.683 with reliability greater than 99% because it has a P value of 0.008.

The proposed statistical model is predictive, according to Hernández, Fernandez y Baptista (2006), because the R² measure of 0.586, it can be said that the model explains the 58.6% of the variation of the individual performance variable.

Conclusions

The methodological objectives were met. (Background, hypothesis, instrument, validation, methodology). Two hypotheses were raised which were validated with positive verification.

H1: Job satisfaction (JS) has a positive impact on the individual performance (IPA) of the advisors in the microfinance institutions of Ciudad Obregon, Sonora as well as Tuxtla Gutierrez, Chiapas; statistically significant, it has a value greater than 1.5, with a t statistic of 2.805 with reliability greater than 99% because it has a P value of 0.005.

H2: The training (TA) has a positive impact on the individual performance (IPA) of the advisors in the microfinance institutions of Ciudad Obregon, Sonora as well as Tuxtla Gutierrez, Chiapas; statistically significant, it has a value greater than 1.5, with a t statistic of 2.683 with reliability greater than 99% because it has a P value of 0.008.

The contribution made by this research is that not enough documents have been found with studies of the individual performance of microfinance advisors, searching in academic google found 25,000 documents related to the variables of individual performance, job satisfaction and training, as well as organizational climate, learning, working conditions, among other variables applied to different areas but not to microfinance advisors, which justifies this research because the measurement instrument was validated through the exploratory factor analysis test, a total explained variance of 62.58% was obtained, the cronbach's alpha that according to (Levy and Varela, 2003) this result for exploratory studies must be greater than 0.40 obtaining a reliability by variable for job satisfaction (JS) 0.829, for training advisors (TA) 0.821 and for the individual performance advisors variable (IPA) 0.893.

Also, with hypothesis validated and proven in a positive way, which means that this study can be replicated in other States at the national level but also in microfinance institutions at the international level to reach a standard of the behavior of the variables under study and work together with the components of the fifth helix such as the company, the government, the education sector, organizations representing the microfinance companies, and independent consultants, remembering at all times that microfinance companies arise due to their need a sector with people who have been excluded from accessing financial services such as financing, and that the responsibility of attending to these people has invariably fallen on the advisors, so it is considered that they are the ones who should be trained to attend to this type of vulnerable people, due to the economic situation they have and who require support, advice, follow-up for a good administration of the microcredits they receive.

References

- Ab Hamid, M. R., Sami, W., & Sidek, M. M. (2017, September). Discriminant validity assessment: Use of Fornell & Larcker criterion versus HTMT criterion. In *Journal of Physics: Conference Series* (Vol. 890, No. 1, p. 012163). IOP Publishing.
- Anderson, D. R., Sweeney, D. J., & Williams, T. A., Camm, J. y Martin, K. (2011). *Métodos cuantitativos para los negocios*, D.F. México, Cengage Learning.
- Gonzales Carrasco, M. Á. (2020). El estrés y su influencia en la satisfacción laboral en microfinancieras de la ciudad de Cajamarca. Retrieved from: <http://repositorio.upagu.edu.pe/bitstream/handle/UPAGU/1419/MIGUEL%20GONZALES%20CARRASCO%20%281%29.pdf?sequence=1&isAllowed=y>; Accessed September 5, 2021.
- Gonzales Lázaro, H. E., Herrera Saavedra, L. G., Ramírez Díaz, S. M., & Varas Velásquez, R. J. (2019). La satisfacción laboral y su correlación con la intención de rotación de asesores comerciales de las instituciones microfinancieras, Retrieved from: https://repositorio.esan.edu.pe/bitstream/handle/20.500.12640/1718/2019_MAODP_16-1_02_T.pdf?sequence=4&isAllowed=y; Accessed September 25, 2021.
- Guerrero Díaz, J. A. (2018) Curso formativo de habilidades comerciales y financieras enfocadas al sector de las microfinanzas. Retrieved from: https://repository.unab.edu.co/bitstream/handle/20.500.12749/14580/2018_Tesis_Guerrero_Diaz_Jesus_Alberto.pdf?sequence=1; Accessed September 5, 2021.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011), PLS-SEM: Indeed a silver bullet: *Journal of Marketing theory and practice*, 19(2), 139-152
- Hernández, Fernández y Baptista (2016) *Metodología de la investigación* (Séptima ed.) México: Mc Graw Hill.
- Hernández, Fernández y Baptista (2006) *Análisis de los datos cuantitativos. Metodología de la investigación*, 407-499.

Jiménez, I. L. V., Millanes, M. D. M., Palomares, M. M. G., del Carmen, M., & Torres, V. (2018) Satisfacción laboral por género de los asesores dentro de la actividad económica de servicios financieros en el Municipio de Cajeme. In I Congreso Internacional de Género (p. 43) Retrieved from: <https://www.itson.mx/publicaciones/pacioli/SiteAssets/Paginas/pacioli/EspecialCongresoDeGenero-105.pdf#page=43>; Accessed September 5, 2021.

Lévy J., & Varela, J. (2003). *Análisis Multivariable para Ciencias Sociales* (Primera ed.). Madrid, España: Pearson, Prentice Hall.

Salas Perea, R. S. (2012). Los procesos formativos, la competencia profesional y el desempeño laboral en el Sistema Nacional de Salud de Cuba. *Educación Médica Superior*, 26(2), 163-165. Accessed June 2018 at the source of: http://scielo.sld.cu/scielo.php?pid=S086421412012000200001&script=sci_arttext&tlng=en

Vazquez-Jimenez, Imelda Lorena, Aguirre-Choix, Ricardo, Gomez- Hinojosa, Carolina and Mundo-Velazquez Rodolfo (2018). Validation of measuring individual performance of microfinance consultants. *RINOE Journal-Macroeconomics and monetary economy*.2018.2-3:5-12.

Yunus, Muhamad, (2018) *BBC News Mundo*. Retrieved from: <https://www.bbc.com/mundo/noticias-46021869>; accessed October 4, 2021.

Sectoral system of innovation and agricultural policy in export products. A case study of dried mango

Sistema sectorial de innovación y Política Agrícola en productos de exportación. Un estudio de caso del deshidratado de mango

PAREDES-MEDINA, Reyna Myrna[†], MONTES-TORRES, María de Lourdes and LOPEZ-MONDRAGÓN, Ana Cecilia

Universidad Autónoma de Nayarit, Mexico.

ID 1st Author: *Reyna Myrna, Paredes-Medina* / ORC ID: 0000-0002-6429-6643, Researcher ID Thomson: C-5715-2019, CVU CONACYT ID: 92225

ID 1st Co-author: *María de Lourdes, Montes-Torres* / ORC ID: 0000-0003-4621-6109, Researcher ID Thomson: C-5153-2019, CVU CONACYT ID: 43270

ID 2nd Co-author: *Ana Cecilia, López-Mondragón* / ORC ID: 0000-0002-2339-6808, Researcher ID Thomson: E-1570-2019, CVU CONACYT ID: 336304

DOI: 10.35429/JFE.2021.9.5.28.38

Received July 25, 2021; Accepted December 30, 2021

Abstract

This document aims to analyze some of the challenges facing economic policy to promote and reactivate regional development in the face of an unprecedented crisis that has deepened the pre-existing problems in the agricultural sector and to reveal the fragility of neoliberal policy in the face of a contingency such as that caused by the COVID-19 pandemic. A change in current policy by promoting a strong share of public spending through programs to support producers to counteract the effects of the deterioration of private investment as a result of the pandemic becomes evident and essential. In this sense, it is pointed out the existence of a strong dependence that this sector keeps with the regional market of North America to activate the agricultural development and the Sectoral System of Innovation (SSI) in agricultural export industries from a case study in the production of dehydrated mango.

Public policy instruments, Sectoral innovation system, COVID-19 pandemic

Resumen

El presente documento tiene como objetivo analizar algunos de los retos que enfrenta la política económica para promover y reactivar el desarrollo regional ante una crisis sin precedentes que ha venido a profundizar los problemas preexistentes en el sector agrícola y a revelar la fragilidad de la política neoliberal ante una contingencia como la que ha provocado la pandemia por covid-19. Se vuelve evidente e imprescindible un cambio en la política actual promoviendo una fuerte participación del gasto público a través de programas de apoyo a los productores para contrarrestar los efectos del deterioro de la inversión privada como consecuencia de la pandemia. En este sentido, se señala la existencia de una fuerte dependencia que este sector guarda con el mercado regional de América del Norte para activar el desarrollo agrícola y del sistema sectorial de innovación en industrias agrícolas exportadoras a partir de un estudio de caso en la producción de mango deshidratado.

Sistema sectorial de innovación; política agrícola; pandemia por COVID-19

Citation: PAREDES-MEDINA, Reyna Myrna, MONTES-TORRES, María de Lourdes and LOPEZ-MONDRAGÓN, Ana Cecilia. Sectoral system of innovation and agricultural policy in export products. A case study of dried mango. RINOE Journal-Financial Economy. 2021. 5-9:28-38.

[†] Researcher contributing first author.

Introduction

We are living through an unprecedented economic crisis. Never before has a health crisis impacted so much on the economic performance of the whole world and we are still in the middle of uncertainty, without knowing what will be the economic, social and political scope that this health crisis due to covid-19 has detonated for two years now. This situation has disrupted all areas mainly due to the great interconnection that currently exists between countries and the productive sectors, in the processes of production, technological development and in other areas of life. The COVID-19 pandemic has caused a great recession in all the economies of the world; it is evident that the impact and effects have been diverse in each country and even in each sector, due to the different degrees of interconnectivity and dependencies that the productive sectors have with the macro-regions of the world and the resources that each sector, region and country has to face this situation, which undoubtedly surprised the whole world. The COVID-19 pandemic highlighted the vulnerability¹ of the global food system, controlled from the countries with greater industrialization and articulating less development regions through various agri-food chains; made up of large chains that are articulated throughout the most industrialized countries and the regions articulated through them; disruptions in these supply chains and the increase in the price of agricultural products and all commodities in general have put food security at risk, especially in the most marginalized regions of the world².

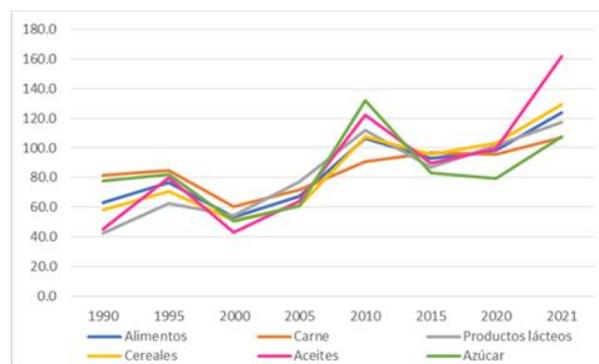


Figure 1 FAO Food Price index

Source: Food and Agriculture Organization of the United Nations. (november, 2021)

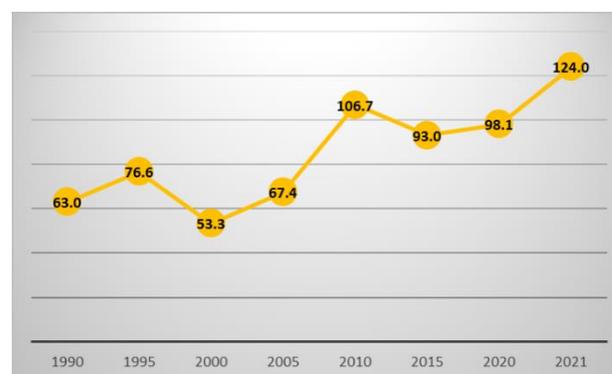


Figure 2 FAO Food Price Index

Source: Food and Agriculture Organization of the United Nations (november 2021)

While it is true that the COVID-19 pandemic revealed enormous failures of the economic system, the Mexican agricultural sector already presented serious problems such as a strong delay in its development, low productivity and a high technological and financing dependence on North America and the world, a high primary export specialization and derived from this specialization a great vulnerability with respect to food security.

¹ The vulnerability of the World Food System (WFS) refers not only to the production of food, but also to the availability of these, both processes are closely linked and conditioned by social (mainly economic and political) and environmental factors. But it also refers to the co-responsibility of organizations, institutions, and countries to carry out actions to face the risks and threats that loom with respect to the survival of humanity (González Chávez & Macías Macías, 2007).

² According to data from the Food and Agriculture Organization of the United Nations (FAO) (2021): "Conflicts, economic shocks – particularly due to COVID-19 and extreme weather – led at least 155 million people to acute food insecurity in 2020 (FAO. Mexico, 2021)"

The COVID-19 pandemic came to accentuate some of these problems in some sectors mainly due to the confinement and the closure of borders that, as sanitary measures were taken by countries at different times, interrupting the flow of inputs and products and altering the continuity of Global Value Chains (GVCs); likewise, the confinement and the closure of borders generated, among other things, the decrease in the income of families and companies due to involuntary dismissals and stoppages. However, the COVID-19 pandemic has made the local and regional acquire greater relevance to maintain and promote economic development, contrary to the dynamics imposed by the neoliberal model in which the need to globalize prevails in order to be competitive.

This new panorama opens a window of opportunity for the Nayarit agricultural sector to promote local development from a more sustainable and endogenous perspective. That is a question of taking advantage internally of existing local resources and opportunities, as well as the opportunities of exogenous dynamism, elaborating a development "from below" that is sustainable and with the participation of territorial actors (Vázquez Barquero, 2007). In the case of the system that concerns us, there is the use of the agricultural resources of the territory, mango cultivation occurs using techniques that respect the environment, agrochemicals or any other product that affects the ecosystem are not used; in addition, there is the participation of local actors who carry out the process of dehydrating the mango in an organized way and taking advantage of the capacities that each of them has as well as the implementation of innovative techniques and machinery, on the other hand the external actors that participate mainly when carrying out the commercialization of the elaborated product that is usually for export. This represents a challenge for Nayarit agriculture that is characterized by being very heterogeneous, with self-consumption production units, poorly developed MSMEs that serve the domestic market but also exist, as enclaves, MSMEs that attend the international market³ with a higher degree of technification of their productive processes, and higher degree of competitiveness contrasting with the rest of the enterprises of the region where they are allocated.

It is also a primary export economy which specialization pattern focuses on tropical fruits, vegetables and organic crops (Sandoval, 2010); strongly linked to the economic dynamics of the United States of America (USA) and its demand, its marketing channels and financing through Foreign Direct Investment (FDI) that represents greater accessibility to financing institutions within the country.

Although the companies that produce for export have a higher degree of technification and productivity than the rest of the production units in the region, they also face the same problems derived from the lack of institutional support that can integrate a system that is not only capable of articulating them to the region but also promotes sustained innovation processes that serve as an engine for that allows the agro-industrial sector to become self-sufficient, sustainable and diverse.

With this goal, the SSI approach makes it possible to analyze the structure of the sector and identify the main shortcomings that impair its development, as well as to elaborate sectoral policies that aim at the self-sufficiency of Mexican agriculture.

The present research was developed under the qualitative approach, with a descriptive and exploratory methodology, due to the fact that the processes for mango dehydration and the relationships that exist between the dehydrator and the different actors involved are described. It is addressed through the analysis of case study, based on what is cited by Simons (2011) which states that this type of studies aims to investigate the particularity of the singular case. In this sense, a dehydrator located in Las Varas, municipality of Compostela, Nayarit and its relationship with agricultural policy and the SSI are addressed in a particular way.

The collection of information was obtained from primary and secondary sources. Interviews were conducted with those in charge of the dehydrator, different bibliographic sources were reviewed and information from government and private institutions that are related to the subject of study was consulted.

³ Basically, the US and Canada markets, been followed by European countries like Germany and Japan in Asia.

The analysis of the research was carried out under the theory of sectoral innovation system, aimed at dehydrated mango in Nayarit, describing the different actors (business, government, research, market and finance) and the networks that are established among them to promote innovation in the region where the indicated dehydrator is located.

The tropical fruit dehydrator emerged as a necessity to try to solve not only individual problems but common problems in the region. This was done through the SSI, because finally the trajectory and development of the company presented here is conditioned by the processes that this model emphasizes, such as the basic knowledge of the industry, the technological capabilities, the interactions between the actors and the institutional framework that make up the specific SSI of this industry. Finally, these interactions are not only determined by the macro and microeconomic environment of the country and the sectoral policies implemented by government institutions in the face of the COVID-19 situation, but also with the international context determining and affecting both the competitiveness of companies of this type, and in the local environments where they are located.

Sectorial System of Innovation and Agricultural Policies in the face of the pandemic

In the mid-90's, with support from the federal government, the first dehydrators were established on the south coast of the state of Nayarit, dedicated to dehydrating mangoes for the export market, which led to the establishment of two more in Jalcocotán, where innovative elements that a migrant returning from the United States successfully applied. Thus, by 2010 the town had two of the five dehydrators it currently had. In this way, in just nine years, the number of facilities of this type went from 6 to 28 in the state, making presence in the municipality of San Blas with 18, 3 in Tepic and in Santiago Ixcuintla, 2 in Compostela, and Tecuala as much as Ruiz, with one of them each (Becerra y Montes, 2019).

The notorious growth process of this activity has only been possible from the sufficient supply of tropical fruits offered by the region, among the varieties that are grown and used for the dehydration process are Haden, Kent, Tommy Atkins, Keitt and Hardy, which characteristics are described below in Table 1.

Variety	Season	Features
ATAULFO	February-July	Yellow, Elongated Type, Length 12.5-14 cm., Width 5.5-6 cm., Weight 180-260gr. Fruit of excellent quality, resistant to handling and has no fibers.
HADEN	February-August	Red/Yellow, Round type, Length 10.5-14cm., Width 9-10.5cm., Weight 510-680gr. Its pulp is juicy with a little of fiber, it has good taste.
KENT	July-August	Red/Yellow, Round type, Length 12-14cm., Width 9.5-11cm., Weight 450-700gr. It contains very little fiber. It has the disadvantage of being very susceptible to anthracnose, because the harvest season coincides with the rainy season.
TOMMY ATKINS	February-August	Yellow/red color, Round type, Length 12-14.5cm., Width 10-13cm., Weight 450-700gr. The pulp is juicy with a little fiber content. It has the disadvantage that if it is not cut at its optimum maturity it presents problems in post-harvest management.
KEITT	April-September	Color Pink/Yellow, Round type, Length 13-15.5 cm., Width 9-11cm., Weight 510-2000gr. It has a very sweet pulp with a little fiber content.

Table 1 Mango varieties grown in the state of Nayarit, México

Surce: Adaptation from the Plan Rector del Sistema Nacional Mango (marzo, 2005)

The dehydrator, object of study, is located in the town of Las Varas in the municipality of Compostela Nayarit, is a Rural Production Company of Limited Liability (S.P.R. DE R.L.) self-managed and integrated by 10 partners, of which nine are men and one is a woman.

This company aims to raise the standard of living of its associates and the inhabitants of the region from the production and marketing of dehydrated fruits among which the mango stands out, which is the fruit that by vocation is produced in the area of the south coast of the state of Nayarit more specifically of Las Varas, municipality of Compostela. Most of the partners are from the locality and are mango producers.

The company was founded in 2017, derived from the need to continue with the commercialization of mango adding value by introducing the dehydration process, this has allowed the association to have a greater possibility of obtaining better prices for the product, exporting it mainly to the United States. The Procesafрут San Vicente dehydrator has structured a production chain for the mango that is produced in the surroundings of the establishment because it integrates key links: the agroecological cultivation of the mango, cleaning, selection, transformation, packaging and marketing. These links are articulated from the cultivation of mango because part of the partners is also responsible for the cultivation and purchase and sale of it.

It should be noted that the mango that is dehydrated is already previously marketed since contracts are previously established with companies that are responsible for exporting it mainly to the United States. Belik (2021) state that the integration of global value chains is presented as a solution for the low income and marginality of small producers. The axis of coordination and command of the value chain of these products has been moving downstream, with greater power being exercised by traders and distributors.

This export process is carried out through a marketing company located in the state of Michoacán. 90% of its production is marketed through these large collection companies that are responsible for concentrating the dehydrated mango of several dehydrators in the state of Nayarit, and they are the ones who are responsible for marketing it with US companies. This implies a great dependence on these companies those that mediate negotiations between the dehydrated producer and the international market, which represents a disadvantage for this industry.

As can be seen, the dehydrator of Las Varas, Nayarit is set in an agri-food chain directed by US marketing companies and that also integrates national marketing companies, the dehydrator integrates primary links and has achieved an Up Grading in the chain and has now incorporated dehydration, thus adding value to its primary product. This company has orchards owned by some partners, but its general supply is covered by the advance purchase of orchards in the region.

Sectoral innovation system of dehydrated mango

From this approach, the dynamics of economic development are strongly linked to technological development and this to the innovation processes within the sectors, product of their own development dynamics. The concept of a sectoral innovation system (SSI) privileges the creation, use and dissemination of knowledge as a key factor in the processes of innovation and economic development. This concept is particularly useful when analyzing the dynamics of development of an industry as explained by Malerba and Nelson (2009) companies operate in a broader context of innovation systems to the national; in another sense, they also point out that innovation systems differ much more from one sector to another than the differences that can exist in the same sector anywhere in the world. Malerba (1999) (cited in Navarro, 2001) emphasizes that "the borders of sectoral innovation systems are endogenous, emerge from the specific conditions of each sector and are not necessarily national, even determining that in some cases the three dimensions coexist in a sector. Starting from the assumption that the borders of a nation or a region are not always adequate to examine the innovation dynamics of a sector, Malerba and Nelson (2009) coined and defined the concept of SSI as:

A flexible tool that allows a broad or deep analysis of the sector, due to three qualities: first, the borders of a sector are not rigidly defined, these can be circumscribed in a local, national and / or globalized scope, in addition, the three levels coexist in these sectors that are export depending on what is intended to analyze. Second, an SSI can be examined extensively or closely, in the first case it allows us to identify all the interdependencies and links in the transformation of the sector and the second allows us to identify more deeply specific relationships.

Finally, an SSI perspective is a broad and flexible framework capable of covering different elements and variables according to the approach of the analysis. However, the elements that guide the analysis will always be knowledge, capabilities, actors, interactions and institutions.

In this regard, Kuramoto (2007) points out that:

This vision highlights the role of companies in the processes of technological innovation and even scientific advancement. [...] it is an interactive process between the different research institutions, companies and clients, in which each agent contributes its knowledge and needs, which constitute necessary inputs to define the final characteristics of innovation and in which the foundations can be laid to make scientific advances. At the same time, this constant interaction allows scientific and technological advances to spread, thus ensuring that less innovative companies have access to technological advances.

With this, the agro-industrial sector of mango dehydrated combines the three levels of participation that Malerba points out, the local, the national and the international; on the other hand, as will be explained later, the preponderant role of companies in innovation processes is also recognized, as Kuramoto (2007) points out and Solleiro and Castañón (2003) are the active actors that shape their technological and market environments, but they point out that the innovation process requires the existence of adequate macroeconomic conditions (a favorable environment) for the creation of a set of favorable externalities, given the regional specificity where they are inserted, and in accordance with the specific socio-economic needs and conditions of the place. Therefore, although companies play a determining role, they cannot do so alone, even less so in an environment where globalization conditions push companies to compete globally, that is, with the same sector but from other nations. It is clear that these companies need an institutional scaffolding that provides these conditions and that finally this institutional framework is not limited to the national level but also to the international one, which in this case are basically those of the US.

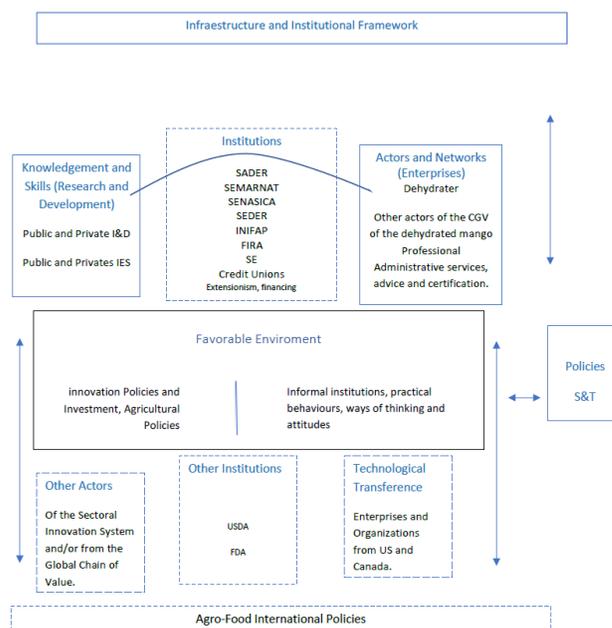


Figure 3 Sectoral Innovation System of the Mango in Nayarit

Source: adaptation from the Conceptual Diagram of an Innovation Agricultural System (SIA), Tropical Agriculture Platform

a) Technological Knowledge and Skills

Knowledge is a key factor with which it competes in any productive sector and this and the innovation processes that emerge from it are the engine of economic development. Following the proposal of Malerba (2009) under the approach of innovation systems, every productive sector has a knowledge base that is the Know How that it shares with the actors of the sector and that is capitalized in the innovation processes. Thus, the importance of the knowledge that the actors share in the dehydration process as a fundamental element for the creation of innovations is highlighted, in this sense, the capacities to learn and the processes that facilitate them become crucial in the search for the economic reactivation of the agricultural sector and the economic development of the region.

Technological capabilities can be defined as:

"The provisions acquired through technological learning in a favourable social and cultural context. Technological capabilities imply the opportunity to enhance the opportunities and possibilities of the development of technological innovation, with the intention of strengthening individual and collective capacities to foster what people and societies want and can be" (Carvajal Villaplana, 2010).

These capabilities when they refer to the development of technological innovations account for the possibilities that the mango dehydrating company has to absorb both knowledge and skills of use of new technologies, generally from abroad (mainly from the USA) and the ability to innovate given the knowledge acquired from Know-how and Learning by doing.

Continuing with Malerba (2009), the learning of companies is of great importance for this sector, although it is true that knowledge and technological skills are acquired through formal and informal channels; the emphasis is only on the latter. Learning by doing plays a decisive role in innovation processes, tacit knowledge is the characteristic of each sector, it is its human capital because it is acquired through experience and is characterized by being personal and contextual and requires interaction with other actors to be able to acquire, use and disseminate it. In the dehydrator of Las Varas Nayarit "the knowledge and techniques that have managed to evolve to the level of innovating in aspects such as the mechanization of the processes of peeling the fruits and other processes that have been mechanized such as the severing of the pulp have been installed." In this sense, the dehydrator has valuable capital, as can be seen by the innovations implemented in the short time of its existence (Becerra and Montes, 2019).

It is important to note that since its inception the dehydrator has promoted the training of its staff through a scheme based on sharing learning among themselves especially in the way in which to make the work easier in such a way that it has a higher productivity that benefits both the company and the workers, having higher returns and therefore better income. Similarly, at the beginning of each season, staff are trained in hygiene issues because it is one of the fundamental elements to be able to count on the certification of the company, courses granted by the Ministry of Agriculture and Rural Development (SADER), mainly in its safety programs and good agricultural practices, or other public and private institutions.

It is worth mentioning that, among other innovations, it has been possible to reduce the loss of the product since to produce a kilogram of dehydrated mango initially required 15 kg of fresh fruit, currently only 11 kg are required, which shows the improvement in the processes making the use of the raw material more efficient.

b) Actors and Networks

Closely linked to the knowledge factor are the interactions that the various actors carry out in the innovation processes. These interactions can be observed as networks that make up the various actors with the national or international institutional framework. During the period that society has been working, the link with private companies has been constant, it has worked with a private company for pest control, a private laboratory has carried out the study of soil and water bacteriology. The safety of the whole process has been very important, so training courses have been held for all the personnel working in the dehydrator, in the same way the administrative processes are very important and it has been trying to improve each of them, all the previous activities have been implemented in the framework to achieve the certification of the company, so it has been linking up with a private institution for that purpose.

Actors en the SSI	Characteristics	Function in the SSI
Mango growers	Local and national growers	Suppliers play an important role in process fluidity but have minimal or no participation in innovation processes.
Stuff suppliers	Suppliers (pesticides, fertilizers, tools, machinery, packing supplies).	
Colaborators	Transport, technical advice, certifiers, pest control, technicians.	These agents have an important participation in innovation processes, specially certifiers and technical advisors.
Workers	Peelers, cutters, sorters, packers, loaders.	They are important in the innovation process by having specialized knowledge and skills (know how).

Other dehydrators	Other dehydrators.	They are the most important actors of the system, they are the ones that dynamize the system and therefore promote the development of the region where they are inserted.
Brokers	Economic agents who are intermediaries between dehydrators and companies Zamora, Michoacan Escuinapa, Sinaloa Capomal, Nayarit.	They are among the most important players in this system since both the sales levels of the dehydrating company and the distribution channels with the US market depend on them.
Financial institutions	FIRA, Commercial banking, Second floor banking, credit unions.	At the national level, these institutions do not have the capacity to meet the needs of the agro-industrial sector in question.
Support institutions	SADER, SENASICA, SE, SEDER, SEMARNAT, INIFAP.	These institutions fulfill in part their function of supporting the development of capacity in the sector, through extensionism.
Customers	Distributors	They are actors who set the rules of marketing and provide strategies to maintain the quality of the product.

Table 2 Actors in the sectoral system of innovation of the dehydrated mango

Source: Own elaboration according to the model of the SSI.

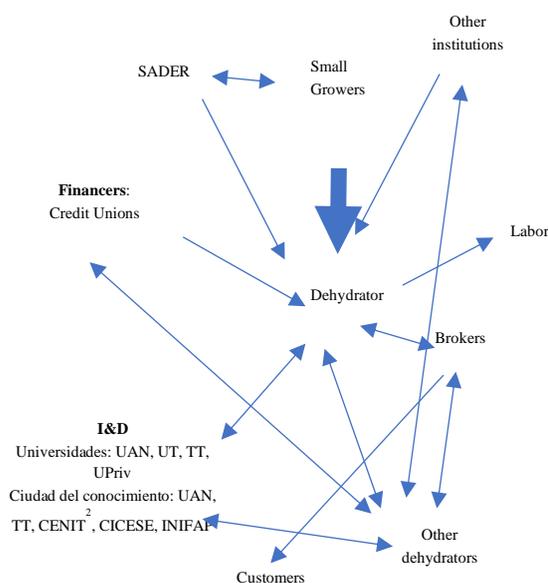


Figure 4 Actors and networks
Source: Own elaboration

c) Institutions and Institutional Framework

Finally, another important element within the SSI is the institutions and the legal or institutional framework that can build the necessary networks to support both production processes and innovation processes. To understand the role of these within the SSI it is necessary to know what we are talking about, North (1990, 1991) cited by Peraza Castañeda (2019), defines them from their main characteristics highlighting that: "-They are rules of the game in society that limit and model human interaction at the political, economic or social levels; they are both formal (constitutions, laws, property rights) and informal (sanctions, taboos, customs, traditions) and generate incentives influencing the evolution of societies over time and, therefore, are a conditioning factor of historical change".

The Mexican government has made some efforts to boost the systems approach to agricultural development; among the strategies that have had a certain scope can be mentioned the system-product program, implemented since the reform of the Law for Sustainable Rural Development in 2001, whose objective was to integrate and give impetus to the strategic productive chains of the Mexican countryside. According to the definition set out in the working document entitled Structuring the Strategic Program for Research and Technology Transfer in the Federal District, the product system is defined as:

"The integration of the agents and economic activities that intervene in a production process, from the primary activity to the offer to the final consumer, incorporating packaging, industrialization or transformation processes that are necessary, for its commercialization in internal and external markets. It also includes the supply of relevant supplies and equipment, as well as all services that significantly affect these activities, such as research, training and technical assistance, among others" (Master Plan of the National Mango System, 2005).

The case of mango is one of the agricultural products that has been tried to promote under the implementation of this system-product policy through SADER, in order to integrate the processes that are required from production to supply to the final consumer, as well as facilitate the interaction of the actors involved in these processes and / or links in the chain, creating even institutions that facilitate these processes and here fits the process of dehydration, however, it has not had the result that was expected, at least for this system-product. The dehydrator of Las Varas, Nayarit confirms it as follows:

"To start with this company, we initially tried to approach some public entities in order to seek financing, a whole project was made and the process to achieve financing with Trusts Instituted in Relation to Agriculture (FIRA) however, unfortunately, although the project was approved the institution did not have an assigned budget for that year, so the support never came."

It is clear that, despite the efforts made, there are not the necessary resources to provide effective institutional support even when the institutions and programmes aimed at this purpose are in place.

"It is important to comment that during the time that the dehydration plant has been in operation, approaches have been made to public institutions such as SADER among others, however, there has been no financial or any other type of support" (Montes, 2021).

Consequently, the partners, in addition to contributing cash and assets for the creation of this company, have had to request loans in other institutions, mainly with the Sierra de San Juan credit union, established in Xalisco, Nayarit; who, with the same project presented to FIRA, have been subject to the required financing, being their main source during the four years they have been operating.

Economic Policy and Pandemic

In recent decades, it has been seen that the paradigm of innovation systems has acquired importance in the orientation of economic development policies in our country. In this case, a National Plan for Science, Technology and Innovation has been developed and institutions have been created whose purpose is to strengthen this system and generate greater interaction between the participating agents, mainly the organizations and institutions that must support innovation processes in a sector. However, in Mexico, it has not been possible to consolidate an innovation system that is capable of generating a virtuous circle that allows science and technology to be put at the service of economic development (Arocena and Sutz, 2002).

As with any complex problem, so is the solution; it requires the participation of several actors and the combination of actions of various kinds, in addition to the coordination of the three levels of government to be able to give an exit to the situation that prevails in the world and that each nation has to face in the best way. In this globalized world, the answer will necessarily have to be in this area, so national efforts will have to be combined. However, the differences that arise in the dynamics of each sector require differentiated policies for each stratum of the agricultural sector, since they have different profiles and therefore different needs.

Agricultural policies must be in place to promote and strengthen these processes so that companies can consolidate an SSI and have an institutional framework that serves as a basis for being more competitive, causing economic development to be reactivated in the agricultural sector of the state of Nayarit and especially in the region where these systems are articulated, also impacting on the general economic reactivation of the country.

Conclusions and proposals

The high dependence of the Nayarit agribusiness and in general, the national one, with the US economy in terms of financing and concentration of marketing channels represents an opportunity, but also an obstacle that conditions the development potential of the agricultural sector.

One of the greatest challenges in the current situation is to reduce the gaps in economic and technological development that characterize Mexican agriculture and that make it a mosaic of social inequalities with enormous asymmetries in economic and social development.

Correcting these inequalities generated by the neoliberal model of capitalist development requires a program of strong social significance that implies the development of specific sectoral and innovation policies for the strengthening of the sector.

Given the above, it can be seen that one of the main problems facing the agricultural sector in our country is the low capacity to offer financing for agro-industrial development, however, and despite this important lack, development in the productive sectors linked to the foreign market have sufficient incentives to independently pursue their development. It is not that this situation is bad, private investment is a source that has to be exploited in the development of a nation, however, we can't leave the entire organization to the market because it generates the great asymmetries that we are experiencing; it is necessary to evaluate the development of the policies implemented for the achievement of a more homogeneous development model in the agro-industrial sector of Mexico.

Specifically, public and private investment is required to generate a favorable environment in which innovation processes are promoted and facilitated, that not only are the programs on paper, but that the agro-industrial sector can really count on them for the development of infrastructure, implement support programs for innovation and research and development for the Mexican countryside, promoting the interaction of the necessary actors for this achievement. Also, to resume strategies such as extensionism, which is a way of linking science with the productive sector based on institutional support.

References

- Belik, W. (2021). En *The Phantom of Upgrading in Agricultural Supply Chains: A Cross-Country, Cross-Crop Comparison of Smallholders*. Rainer Hampp in der Nomos Verlagsgesellschaft.
- Becerra Pérez, R., & Montes Torres, M. (2019). Innovación en el campo nayarita: De la tradición del panicle a las frutas. *Proceedings Ciencias Agropecuarias y Biotecnología TI*, 9, 76-82.
- Carvajal Villaplana, Á. (30 de abril de 2010). Las Capacidades Tecnológica Como Base Para el Desarrollo. (U. d. Rica, Ed.) *Actualidades Investigativas en Educación*, 10(1), 1-19.
- González Chavéz, H., & Macías Macías, A. (sep-dic de 2007). Vulnerabilidad alimentaria y política agroalimentaria en México. (C. d. Social, Ed.) *Redalyc*(25), 33.
- Heher, U., & Steenbergen, V. (2021). Kenya—Supplying to multinationals exposed local firms to international horticulture markets. An Investment Perspective on Global Value Chains.
- Kuramoto, J. (2007). Sistema de Innovación Tecnológica. En GRADE, *Investigación, políticas y desarrollo en el Perú* (págs. 103-133). Lima, Lima, Perú: GRADE.
- Kuramoto, J. (s.f.). Sistemas de innovación tecnológica. En CLACSO. Lima, Lima, Perú: GRANDE.
- Malerba, F., & Nelson, R. (2009). Sistemas sectoriales, alcance y desarrollo económico. *Economía: Teoría y Práctica* (spe 1), 1-22.
- Navarro, M. (octubre de 2001). Sistemas Nacionales de Innovación. Una revisión de la literatura. (26).
- Paredes Medina, R. M. (27 de febrero de 2016). Competitividad en las Hortalizas Exóticas del Estado de Nayarit. de México, Cd. de México, México: UNAM.
- Peraza Castaneda, E. H. (28 de febrero de 2019). La dinámica del sistema sectorial de innovación de la industria agroalimentaria en El Salvador desde una perspectiva evolucionista . *TESIS DOCTORAL*, 353. Valladolid, Valladolid, España: Universidad de Valladolid.

Sandoval, S. (Noviembre de 2010). Las contradicciones del campo mexicano: El modelo exportador a debate. *Ponencia. Congreso Latinoamericano de sociología rural*. Porto Galinhas, PE, Brazil.

Simons, H. (2011). *El estudio de caso. Teoría y práctica*. Madrid, Madrid, España: Morata S.L.

Vázquez Barquero, A. (2007). Desarrollo endógeno. Teorías y políticas de desarrollo territorial. *Investigaciones Regionales = Journal of Regional Research* (11), 183-210.

Instructions for Scientific, Technological and Innovation Publication

[Title in Times New Roman and Bold No. 14 in English and Spanish]

Surname (IN UPPERCASE), Name 1st Author†*, Surname (IN UPPERCASE), Name 1st Coauthor, Surname (IN UPPERCASE), Name 2nd Coauthor and Surname (IN UPPERCASE), Name 3rd Coauthor

Institutional Affiliation of Author including Dependency (No.10 Times New Roman and Italic)

International Identification of Science - Technology and Innovation

ID 1st author: (ORC ID - Researcher ID Thomson, arXiv Author ID - PubMed Author ID - Open ID) and CVU 1st author: (Scholar-PNPC or SNI-CONACYT) (No.10 Times New Roman)

ID 1st coauthor: (ORC ID - Researcher ID Thomson, arXiv Author ID - PubMed Author ID - Open ID) and CVU 1st coauthor: (Scholar or SNI) (No.10 Times New Roman)

ID 2nd coauthor: (ORC ID - Researcher ID Thomson, arXiv Author ID - PubMed Author ID - Open ID) and CVU 2nd coauthor: (Scholar or SNI) (No.10 Times New Roman)

ID 3rd coauthor: (ORC ID - Researcher ID Thomson, arXiv Author ID - PubMed Author ID - Open ID) and CVU 3rd coauthor: (Scholar or SNI) (No.10 Times New Roman)

(Report Submission Date: Month, Day, and Year); Accepted (Insert date of Acceptance: Use Only RINOE)

Abstract (In English, 150-200 words)

Objectives
Methodology
Contribution

Keywords (In English)

Indicate 3 keywords in Times New Roman and Bold No. 10

Abstract (In Spanish, 150-200 words)

Objectives
Methodology
Contribution

Keywords (In Spanish)

Indicate 3 keywords in Times New Roman and Bold No. 10

Citation: Surname (IN UPPERCASE), Name 1st Author†*, Surname (IN UPPERCASE), Name 1st Coauthor, Surname (IN UPPERCASE), Name 2nd Coauthor and Surname (IN UPPERCASE), Name 3rd Coauthor. Paper Title. Journal- Financial Economy. Year 1-1: 1-11 [Times New Roman No.10]

* Correspondence to Author (example@example.org)

† Researcher contributing as first author.

Instructions for Scientific, Technological and Innovation Publication

Introduction

Text in Times New Roman No.12, single space.

General explanation of the subject and explain why it is important.

What is your added value with respect to other techniques?

Clearly focus each of its features

Clearly explain the problem to be solved and the central hypothesis.

Explanation of sections Article.

Development of headings and subheadings of the article with subsequent numbers

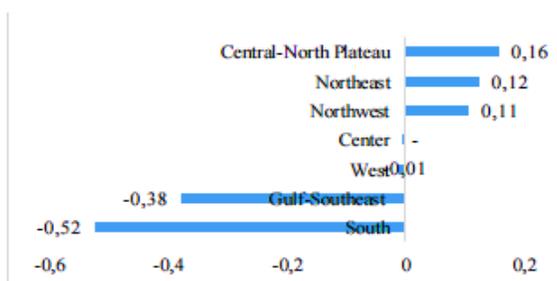
[Title No.12 in Times New Roman, single spaced and Bold]

Products in development No.12 Times New Roman, single spaced.

Including graphs, figures and tables-Editable

In the article content any graphic, table and figure should be editable formats that can change size, type and number of letter, for the purposes of edition, these must be high quality, not pixelated and should be noticeable even reducing image scale.

[Indicating the title at the bottom with No.10 and Times New Roman Bold]



Graphic 1 Title and Source (in italics).

Should not be images-everything must be editable.

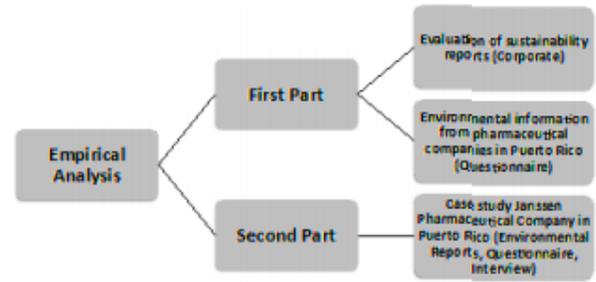


Figure 1 Title and Source (in italics).

Should not be images-everything must be editable.

Modality	Activities of the Value Chain
Financial cooperation	The need for financial resources and the difficulty in finding financing
Technological cooperation	The rapidity in the development of the technology and its complexity
Cooperation in production	The fundamental search for acquiring scale and within-reach economies that permit the reduction of production-associated costs and risks
Commercial cooperation	Seek the following objectives: reduce costs and risks in the commercialization process, penetrate new markets, complete the gamma of products offered, procure access to distribution channels, etc.

Table 1 Title and Source (in italics)

Should not be images-everything must be editable.

Each article shall present separately in **3 folders**: a) Figures, b) Charts and c) Tables in .JPG format, indicating the number and sequential Bold Title.

For the use of equations, noted as follows:

$$Y_{ij} = \alpha + \sum_{h=1}^r \beta_h X_{hij} + u_j + e_{ij} \quad (1)$$

They must be editable and number aligned on the right side.

Methodology

Develop give the meaning of the variables in linear writing and important is the comparison of the used criteria.

Results

The results shall be by section of the article.

Annexes

Tables and adequate sources thanks to indicate if they were funded by any institution, University or company.

Instructions for Scientific, Technological and Innovation Publication

Conclusions

Explain clearly the results and possibilities of improvement.

References

Use APA system. Should not be numbered, nor with bullets, however if necessary numbering will be because reference or mention is made somewhere in the Article.

Use Roman Alphabet, all references you have used must be in the Roman Alphabet, even if you have quoted an Article, book in any of the official languages of the United Nations (English, French, German, Chinese, Russian, Portuguese, Italian, Spanish, Arabic), you must write the reference in Roman script and not in any of the official languages.

Technical Specifications

Each Article must submit your dates into a Word document (.docx):

Journal Name

Article title

Abstract

Keywords

Article sections, for example:

1. *Introduction*
2. *Description of the method*
3. *Analysis from the regression demand curve*
4. *Results*
5. *Thanks*
6. *Conclusions*
7. *References*

Author Name (s)

Email Correspondence to Author

References

Intellectual Property Requirements for editing:

-Authentic Signature in Color of Originality
Format Author and Coauthors

-Authentic Signature in Color of the Acceptance
Format of Author and Coauthors

Reservation to Editorial Policy

RINOE Journal-Financial Economy reserves the right to make editorial changes required to adapt the Articles to the Editorial Policy of the Journal. Once the Article is accepted in its final version, the Journal will send the author the proofs for review. RINOE® will only accept the correction of errata and errors or omissions arising from the editing process of the Journal, reserving in full the copyrights and content dissemination. No deletions, substitutions or additions that alter the formation of the Article will be accepted.

Code of Ethics - Good Practices and Declaration of Solution to Editorial Conflicts

Declaration of Originality and unpublished character of the Article, of Authors, on the obtaining of data and interpretation of results, Acknowledgments, Conflict of interests, Assignment of rights and Distribution.

The RINOE® Management claims to Authors of Articles that its content must be original, unpublished and of Scientific, Technological and Innovation content to be submitted for evaluation.

The Authors signing the Article must be the same that have contributed to its conception, realization and development, as well as obtaining the data, interpreting the results, drafting and reviewing it. The Corresponding Author of the proposed Article will request the form that follows.

Article title:

- The sending of an Article to RINOE Journal-Financial Economy emanates the commitment of the author not to submit it simultaneously to the consideration of other series publications for it must complement the Format of Originality for its Article, unless it is rejected by the Arbitration Committee, it may be withdrawn.
- None of the data presented in this article has been plagiarized or invented. The original data are clearly distinguished from those already published. And it is known of the test in PLAGSCAN if a level of plagiarism is detected Positive will not proceed to arbitrate.
- References are cited on which the information contained in the Article is based, as well as theories and data from other previously published Articles.
- The authors sign the Format of Authorization for their Article to be disseminated by means that RINOE® in its Holding Spain considers pertinent for disclosure and diffusion of its Article its Rights of Work.
- Consent has been obtained from those who have contributed unpublished data obtained through verbal or written communication, and such communication and Authorship are adequately identified.
- The Author and Co-Authors who sign this work have participated in its planning, design and execution, as well as in the interpretation of the results. They also critically reviewed the paper, approved its final version and agreed with its publication.
- No signature responsible for the work has been omitted and the criteria of Scientific Authorization are satisfied.
- The results of this Article have been interpreted objectively. Any results contrary to the point of view of those who sign are exposed and discussed in the Article.

Copyright and Access

The publication of this Article supposes the transfer of the copyright to RINOE® in its Holding Spain for its RINOE Journal-Financial Economy, which reserves the right to distribute on the Web the published version of the Article and the making available of the Article in This format supposes for its Authors the fulfilment of what is established in the Law of Science and Technology of the United Mexican States, regarding the obligation to allow access to the results of Scientific Research.

Article Title:

Name and Surnames of the Contact Author and the Coauthors	Signature
1.	
2.	
3.	
4.	

Principles of Ethics and Declaration of Solution to Editorial Conflicts

Editor Responsibilities

The Publisher undertakes to guarantee the confidentiality of the evaluation process, it may not disclose to the Arbitrators the identity of the Authors, nor may it reveal the identity of the Arbitrators at any time.

The Editor assumes the responsibility to properly inform the Author of the stage of the editorial process in which the text is sent, as well as the resolutions of Double-Blind Review.

The Editor should evaluate manuscripts and their intellectual content without distinction of race, gender, sexual orientation, religious beliefs, ethnicity, nationality, or the political philosophy of the Authors.

The Editor and his editing team of RINOE® Holdings will not disclose any information about Articles submitted to anyone other than the corresponding Author.

The Editor should make fair and impartial decisions and ensure a fair Double-Blind Review.

Responsibilities of the Editorial Board

The description of the peer review processes is made known by the Editorial Board in order that the Authors know what the evaluation criteria are and will always be willing to justify any controversy in the evaluation process. In case of Plagiarism Detection to the Article the Committee notifies the Authors for Violation to the Right of Scientific, Technological and Innovation Authorization.

Responsibilities of the Arbitration Committee

The Arbitrators undertake to notify about any unethical conduct by the Authors and to indicate all the information that may be reason to reject the publication of the Articles. In addition, they must undertake to keep confidential information related to the Articles they evaluate.

Any manuscript received for your arbitration must be treated as confidential, should not be displayed or discussed with other experts, except with the permission of the Editor.

The Arbitrators must be conducted objectively, any personal criticism of the Author is inappropriate.

The Arbitrators must express their points of view with clarity and with valid arguments that contribute to the Scientific, Technological and Innovation of the Author.

The Arbitrators should not evaluate manuscripts in which they have conflicts of interest and have been notified to the Editor before submitting the Article for Double-Blind Review.

Responsibilities of the Authors

Authors must guarantee that their articles are the product of their original work and that the data has been obtained ethically.

Authors must ensure that they have not been previously published or that they are not considered in another serial publication.

Authors must strictly follow the rules for the publication of Defined Articles by the Editorial Board.

The authors have requested that the text in all its forms be an unethical editorial behavior and is unacceptable, consequently, any manuscript that incurs in plagiarism is eliminated and not considered for publication.

Authors should cite publications that have been influential in the nature of the Article submitted to arbitration.

Information services

Indexation - Bases and Repositories

RESEARCH GATE (Germany)

GOOGLE SCHOLAR (Citation indices-Google)

MENDELEY ((Bibliographic References Manager)

Publishing Services

Citation and Index Identification H

Management of Originality Format and Authorization

Testing Article with PLAGSCAN

Article Evaluation

Certificate of Double-Blind Review

Article Edition

Web layout

Indexing and Repository

Article Translation

Article Publication

Certificate of Article

Service Billing

Editorial Policy and Management

38 Matacerquillas, CP-28411. Moralarzal - Madrid - Spain. Phones: +52 1 55 2024 3918, +52 1 55 6159 2296, +52 1 55 4640 1298; E-mail: contact@rinoe.org www.rinoe.org

RINOE® Journal-Financial Economy

Editor in chief

BLANCO - GARCÍA, Susana. PhD

Executive director

RAMOS-ESCAMILLA, María. PhD

Editorial Director

PERALTA-CASTRO, Enrique. MSc

Web designer

ESCAMILLA-BOUCHAN, Imelda. PhD

Web Diagrammer

LUNA-SOTO, Vladimir. PhD

Editorial Assistants

TREJO-RAMOS, Iván. BsC

Translator

DÍAZ-OCAMPO, Javier. BsC

Philologist

RAMOS-ARANCIBIA, Alejandra. BsC

Advertising & Sponsorship

(RINOE® - Spain), sponsorships@rinoe.org

Site Licences

03-2010-032610094200-01-For printed material, 03-2010-031613323600-01-For Electronic material,03-2010-032610105200-01-For Photographic material,03-2010-032610115700-14-For the facts Compilation,04-2010-031613323600-01-For its Web page,19502-For the Iberoamerican and Caribbean Indexation,20-281 HB9-For its indexation in Latin-American in Social Sciences and Humanities,671-For its indexing in Electronic Scientific Journals Spanish and Latin-America,7045008-For its divulgation and edition in the Ministry of Education and Culture-Spain,25409-For its repository in the Biblioteca Universitaria-Madrid,16258-For its indexing in the Dialnet,20589-For its indexing in the edited Journals in the countries of Iberian-America and the Caribbean, 15048-For the international registration of Congress and Colloquiums. financingprograms@rinoe.org

Management Offices

38 Matacerquillas, CP-28411. Moralarzal - Madrid – Spain.

Journal-Financial Economy

“Factors that originate tax evasion and its impact on tax collection in Ecuador”

CABRERA-QUEZADA, Ketty Adriana, CORREA JIMENEZ, Walter Vinicio and GUTIERREZ JARAMILLO, Néstor Daniel

Universidad Técnica de Machala

“Repercussions of COVID-19 on the Ecuadorian tax system and its ranking compared to other countries”

ROQUE-VALAREZO, Pamela Elizabeth, YUMBO-GUZMÁN, María de los Ángeles and ORELLANA, Milca

Universidad Técnica de Machala

“Influence of job satisfaction and training on individual performance of microfinance advisors in Sonora and Chiapas, Mexico”

VÁZQUEZ-JIMÉNEZ, Imelda, RUIZ-PÉREZ, Roberto, GOMEZ-HINOJOSA, Carolina and ACOSTA-MELLADO, Erika

Instituto Tecnológico de Sonora

“Sectoral system of innovation and agricultural policy in export products. A case study of dried mango”

PAREDES-MEDINA, Reyna Myrna, MONTES-TORRES, María de Lourdes and LOPEZ-MONDRAGÓN, Ana Cecilia

Universidad Autónoma de Nayarit

