

ELECTRONIC TAXATION IN LATIN AMERICA A SYSTEMATIC REVIEW

Rosario Violeta Grijalva-Salazar, Universidad Señor De Sipán

ABSTRACT

Due to the speed of communication transmission between people in a globalized world, companies are currently facing the demands of a rapidly changing and evolving market on an international level. Companies must react quickly to such changes in market conditions and demands in this context. This research seeks to have a better control of electronic taxation in Latin America taking into account the Scopus and Redalyc databases between 2013 and 2020. In addition, the formulation of questions had to be done General problem: What are the evidences of electronic taxation in Latin America in the Scopus and Redalyc databases between 2013 and 2020? Specific problems: In what scientific journals has the evidence of e-taxation in Latin America been published in the Scopus and Redalyc database? In what has the evidence of e-taxation in Latin America been generated in the Scopus and Redalyc database? With what methodological approach was research conducted that the evidence of e-taxation in Latin America in the Scopus and Redalyc database? What are the conclusions of e-taxation in Latin America in the Scopus and Redalyc database? What are the conclusions of e-taxation in Latin America in the Scopus and Redalyc database? Taking into account the formulation of the problems, we proceeded to carry out a systematic review in the Scopus and Redalyc databases, searching for "electronic taxation" and "electronic taxes". 6,693 initial records were found, obtaining 16 after having carried out the inclusion and exclusion criteria. In terms of conclusions, it can be seen that businesses are ahead of the curve in terms of using vouchers and electronic accounting, so tax collection agencies make it easier for them to obtain information from taxpayers.

Keywords: Taxation, Taxes, Electronic Systems in Business, Latin America, Systematic Review

INTRODUCTION

The current study of electronic taxation in light of technological advancements has resulted in a generalized growth advantage for users, resulting in a reduction of their operating expenses and allowing many companies as well as individuals with businesses to be automated. This allows them to reduce their costs while also avoiding the use of paper, resulting in faster information. This means that, before starting a business, the taxpayer is constantly advised that his reports can be obtained in seconds (Barreix & Zambrano, 2018; Ramirez et al., 2018).

According to the Economic Commission for Latin America and the Caribbean (2019), many countries are conducting studies and putting policies in place in many Latin American countries to encourage people to pay their taxes, thereby reducing tax evasion. Furthermore, the purpose of this study concludes that taxpayers must fulfill their obligations so that the state can collect and apply benefits to citizens effectively.

According to Hernandez and Robalino (2018), Latin American countries have been improving their implementation of electronic invoices, which has resulted in companies saving time and facilitating their analysis. This concludes that their revenues will increase by millions

for the years 2017 and 2018.

Related theories have been developed, for example Levrero, (2014) conveys to us through his theories of neoclassicism to classical theory the history of institutionalism has been able to clear the doubts of economic theory, one part to the labor economist and the other part to the price determination, which is similar to Marx's theory. The percentage of wages that have an impact on the economy, historical events, and social analysis.

Furthermore, the classical economists and Marx proposed from the standpoint of a market approach showed some similarity in their results with those of Veblen and other institutionalists, indicating a close relationship to an alternative theory to the neoclassical one. The various problems of determining prices and increasing interest rates to profits that Smith, Ricardo, and Marx discovered and satisfactorily solved (Roncaglia, 2006). As a result, the theories were constrained, and this theory became a point of reference for the old institutionalism. So the problematic obtained results by Piero Sraffa, whose work lays solid analytical foundations on which many contributions of institutionalism could be based, because the classical theory can fully recognize the weighing and phenomenon as hysteresis and irreversibility of what consumes and productions, or of social and historical factors in the various variations and distributions of.

According to the digital era approach, VAT in digital era businesses tries to analyze the taxation of companies in digital era businesses in the national and international economic sectors, allowing the economic sector to develop and, as a result, it can facilitate state control, reducing tax evasion (Escalonada, 2017).

Considering sociology theories, the last decade has seen the advancements of the explosion of technology worldwide, where the theory traditions and its various changes in knowledge have undergone changes. Worldwide marketing considers certain disciplines where geographical boundaries in businesses are shrinking and being replaced by electronic management (Parrondo et al., 2000).

In recent years, technological advancement has facilitated information, in the era of the Internet, where it has evolved in many countries at a globalized level, giving way to electronic commerce, by which the coverage of businesses is broadening, and the very traditional businesses are disappearing. (Vicente & Daz, 2000; Garcia et al., 2005)

Culminating in the business approach from the previous century's revolution industries. We are talking about international electronic buying and selling, which gives rise to a type, model of international trade as an economic and social result. Reasons why anyone with a computer and Internet access can become a businessman with a business.

In such a way that any client in any part of the world will be able to contact the referred person and request the product or service that is being developed. As a result, new methods of managing and managing transactions between a businessman and a client will be implemented (Garca et al., 2005).

Within the characteristics of electronic taxation have evolved from barter, in addition in the past centuries worldwide pay taxes in person, using paper, 10 years ago many countries around the world make their commercial transactions quickly and simplified offering goods or services, so it leads to not maintaining a physical stock in a local or office generating the issuance of electronic receipts (Ruiz, 2020).

Regarding electronic taxation at the Latin American level, it has evolved in recent years and even more globally, taking into account that we are affected by the coronavirus disease, which is an infectious disease that has caused both companies and the state to seek strategy and scientific character to obtain information on their obligations to be assumed with generate a

transaction, i.e. has a company.

Regarding the general Problem: What is the evidence of e-taxation in Latin America in the Scopus and Redalyc database between 2013 and 2021? Specific problems: In which scientific journals has the evidence of e-taxation in Latin America been published in the Scopus and Redalyc database? In which scientific journals has the evidence of e-taxation in Latin America been generated in the Scopus and Redalyc database? With what methodological approach was research conducted that the evidence of e-taxation in Latin America in the Scopus and Redalyc database? What are the conclusions of e-taxation in Latin America in the Scopus and Redalyc database? What are the conclusions of e-taxation in Latin America in the Scopus and Redalyc database? In which scientific journals has the evidence of e-taxation in Latin America in the Scopus and Redalyc database been generated?

And so, the objectives of this investigation were:

General objective: To identify the evidence of electronic taxation in Latin America in the Scopus and Redalyc databases between 2013 and 2021.

1. To identify in which scientific journals evidence of e-taxation in Latin America has been published in the Scopus and Redalyc database.
 2. To identify in which countries evidence on e-taxation in Latin America has been generated in the Scopus and Redalyc databases.
 3. To identify with which methodological approach researches were carried out that evidence of e-taxation in Latin America in the Scopus and Redalyc databases.
 4. To identify which are the conclusions on e-taxation in Latin America in the Scopus and Redalyc databases
- And so, the objectives of this investigation were:

MATERIALS AND METHOD

The idea is to provide alternative solutions to the questions posed in the introductory chapter of our research work and to be able to achieve the proposed objectives, we chose a systematic review.

The process that is usually followed includes seven steps (Kitchenham, 2004):

1. Specification of the research questions.
2. Search in databases.
3. Inclusion and exclusion criteria.
4. Selection of studies.
5. Data analysis and extraction.
6. Results and interpretation of results.
7. Final conclusions.

Specification of the Research Questions

As specified in the introductory chapter, the research questions are: In which scientific journals has the evidence of e-taxation in Latin America been published in the Scopus and Redalyc database between 2013 and 2021? In which scientific journals has the evidence of e-taxation in Latin America been generated in the Scopus and Redalyc database? In which scientific journals has the evidence of e-taxation in Latin America been published in the Scopus and Redalyc database? In which scientific journals has the evidence of e-taxation in Latin

America been generated in the Scopus and Redalyc database? What is the methodological approach used to conduct research on the evidence of e-taxation in Latin America in the Scopus and Redalyc database? What are the conclusions of e-taxation in Latin America in the Scopus and Redalyc database?

Database Search

Petticrew & Roberts (2006) advises that database searches should be multifaceted, using the different names that exist for the same information. Therefore, two searches were performed

1. "Taxation" and "electronic taxation".
2. "Taxation" and "electronic taxes".

Table 1 detail each of the names associated with the same phenomenon, together with a code assigned by the researcher.

Thematic Code	Search
A	"taxation" and "electronic taxation"
B	"taxation" and "electronic taxes"

It was considered convenient to search in databases specialized in high-level scientific literature, in this case Scopus and Redalyc.

Inclusion and Exclusion Criteria

In order to obtain a conclusion of searches that answer the research questions, in accordance with the PRISMA methodology (Liberati et al., 2009), inclusion and exclusion criteria were established.

Inclusion Criteria

- Only scientific articles were included.
- Scientific articles disclosed between 2013 and 2020 were included.
- Scientific articles published in English language were included.
- Scientific articles catalogued in the "management and accounting" discipline were included.
- Scientific articles from Latin American countries were included.

Exclusion Criteria

- Any scientific dissemination that is not in the format of scientific articles (books, theses, dissertations, manuals, etc.) was excluded.
- All research published in 2012 or before; or from 2021 onwards was excluded.
- All search results in languages other than English were excluded.
- Any search result other than the discipline "management and accounting" was excluded.
- Scientific articles from non-Latin American countries were excluded.

Study Selection

The strategy for study selection was to adhere strictly to the inclusion and exclusion criteria. The searches were carried out on January 1, 2021.

Two searches were carried out in the Scopus database: one with subject code A ("taxation" and "electronic taxation") and the other with subject code B ("taxation" and "electronic taxes").

The first search was carried out, giving as results 3252 records at the beginning, of which, after applying the criteria of excluding and including, 10 final records were identified. When the second search was performed, the initial records were 3441 and the final records were 6 (Table 2).

Thematic Code	Initial search	Identified records	Included records	Final records
A	3,252	3,252	14	10
B	3,441	3,441	10	6

Data Analysis and Extraction

The following data were identified:

- a) List of articles.
- b) Year of publications.
- c) Scientific journal place where the study publication was made.
- d) Countries of origin.
- e) Methodological approach.
- f) Conclusions

RESULTS AND INTERPRETATION OF DATA

Evidence Identified

Evidence of electronic taxation in Latin America has been identified in the Scopus and Redalyc databases through scientific journals.

Code	Citation	Title
1	(Ossandón, 2020)	Digitalization of tax obligations
2	(Benítez & Lopez, 2017)	Electronic auditing and its effect on the taxpayer's formal obligations
3	(Faúndez et al., 2018)	Tax auditing by electronic systems. Tax audit and taxpayers' rights: A study.
4	(Del Valle, 2017)	Spatiality of virtual companies in direct electronic commerce taxed with Venezuelan value added tax Management Vision.
5	(Rossignolo, 2017)	The tax inefficiency in the Argentine provinces: the gross income tax.
6	(Moscoso et al., 2017)	Tax administration as the axis of compliance with income tax advance payment in the cooperative Sector.
7	(Cabrera & Medina, 2013)	Tax reforms in Central America, 2009-2012.
8	(Da Silva & Hernandez, 2016)	An analysis of the operating model and the fiscal role of electronic invoicing in Brazil.

9	(Rodríguez & Ávila, 2017)	The burden on labor and capital income in Colombia:the case of income tax and VAT.
10	(Católico et al., 2016)	E-government in Latin American tax administrations.
11	(Biehl et al., 2019)	Taxes without Taxpayers: The Invisibility of Taxes in Chile
12	(Castaño et al., 2019)	Analysis of the implementation of electronic Invoicing in Colombia.
13	(Perez, 2013)	Fiscal outlook for Latin America and the Caribbean Tax reforms and renewal of the fiscal covenant.
14	(Varius, 2020)	Measures of the Chilean Tax Administration and the effects on international taxation due to the covid-19 Crisis.
15	(De León et al., 2016)	Impact of the implementation of electronic invoicing In MSMEs in the commerce and services sector in Mexico.
16	(Roncallo, 2019)	Electronic invoicing in Colombia: A reflection on its Effects on the health sector.

Table 3 shows that we have identified 16 articles after having evaluated them, taking into account our specific objectives 1.

Scientific Journals where the Identified Evidence was published

In the present point we are presenting the Latin American journals taking into account the evidence (Table 4).

In addition, we must take into account that the scientific journals make mention of electronic taxation that have been published in Latin American and Caribbean scientific journals.

Code	Scientific journal
1	Revista de Estudios Tributarios
2	Revista Horizontes de la Contaduría en las Ciencias Sociales
3	Chilean Journal of Law and Technology
4	Visión Gerencial Magazine
5	Cuadernos de Economía Magazine
6	Sapienza Organizacional
7	ICEFI Journal.
8	Fundação Getúlio Vargas (FGV)
9	Cuaderno de Economía
10	Logos, Science & Technology Magazine
11	Mexican Journal of Political and Social Sciences
12	Gisesa Group Magazine
13	Economic Development Division of the Economic Commission for Latin America and the Caribbean
14	Tax Law Review
15	Global Business Magazine
16	CUC Magazine

Geographic Area from which the scientific evidence was extracted

Table 5 shows the geographic area from which the scientific evidence was extracted.

Country	Count
Colombia	6
Chile	5
Venezuela	2
Guatemala	1
Brazil	1
Mexico	1

In Table 5 it can be visualized that 37.50% evidence was identified came from Colombia, 31.25% from Chile, and 12.5% from Venezuela. In addition, there is little information from other Latin American countries.

Methodological Aspects of the Evidence Identified

Specific objective 3 is taken into account, where methodological approach research related to taxation is carried out. In the methodological approach we have been able to identify showing the approach, level and Methods and statistical techniques (Table 6).

Code	Approach	Level	Method and techniques
1	Quantitative	Explanatory	An analysis of published documents was used where a study in 1999 Highlighted the forms of non-compliance and VAT evasion of 75%.
2	Quantitative	Descriptive	The population of this study comprises those small and medium-sized Companies that have from 11 to 250 workers, which are obliged to issue Tax Receipts.
3	Quantitative	Explanatory	A documentary analysis of the legislation of the countries of the region Under study was carried out.
4	Qualitative	Exploratory	A documentary analysis of the taxpayers or the legal tax relationship has Been used.
5	Quantitative	Descriptive	A survey of 90% of the advance payments of income tax that affect Cooperatives were carried out. As a result, an analysis of the different options to eradicate tax evasion was obtained.
6	Qualitative	Explanatory	A population that uses public services in a more intensive way was used, in this case, the unemployment rate by province to calculate this tax to be Restated according to the requirements and needs of each economic sector.
7	Quantitative	Explanatory	An analysis was made showing the Central American economy for the years 2008-2009, where its activities fell by 2% that year.
8	Quantitative	Descriptive	A survey and a compilation of the legislation regulating the use of Electronic invoicing by companies was carried out.
9	Qualitative	Explanatory	The data collected is used to support the National Tax and Customs Directorate (DIAN),
10	Qualitative	Exploratory	The information collected has been sampled from 20 of the 21 tax Collection offices in Latin America.
11	Qualitative	Exploratory	National Survey taxpayers are aware of the scale and scope of their tax obligations.
12	Qualitative	exploratory	Documents such as books and journal articles in both digital and print format

13	Qualitative	Exploratory	A consolidated VAT tax consolidation has been used, taking into account The GDP information.
14	Qualitative	Exploratory	Information from the budget directorate of the Ministry of Finance was Used, taking into account the GDP.
15	Quantitative	Explanatory	A survey was conducted according to data from the National Institute of Statistics and Geography (INEGI, 2012).
16	Quantitative	Descriptive	A bibliographic search was conducted on tax evasion in Latin America.

Conclusions of the Scientific Evidence Identified

Specific Objective 4 should be taken into account, where it is necessary to identify the conclusions on electronic taxation in Latin America disclosed in the Redalyc and Scopus databases (Table 7).

Code	Conclusions
1	The development of technology has originated that many countries can incorporate their digital tools to their activity, besides determining a modern audit and being able to choose the taxpayers classifying them Based on their size, activity and level of risk in the non-compliance of their obligations.
2	The main objective of the tax administration is to determine the correct compliance of taxpayers, so the tax administration has been delegated the power to perform digital auditing.
3	By means of the systemic and technical analysis it establishes the regulations by means of the procedures against the rights of the taxpayers, applying their eventual sanctions.
4	It is suggested that the Venezuelan State may elaborate an electronic platform and assign to the National Tax Collection Office the creation of a Link called "virtual entrepreneurship", in which all the Aforementioned topics must be registered.
5	The tax effort methodology, which may contribute to determine the tax capacity of a jurisdiction in relative terms to those of other provinces, based on certain characteristics. The difference between potential and observed revenue collection involves both technical inefficiencies and discretionary policy variables (rates, tax bases, exemptions), but also decisions on the level of provision of public goods by the communities and their financing.
6	Analyzing income tax payments, it is possible to indicate that this payment on account has a great impact, Especially in cooperatives that have not complied with art 41 numeral 2 of the Organic Law of Internal Tax Regime.
7	The tax collection has been beneficial in the ISR, although the recovery of the VAT has not recovered the tax burden, because it is still at crisis levels.
8	All Latin American countries can be incorporated to the advances in technology and can incorporate global Trends, taking into account that buyers and sellers must register their invoices with their tax collecting entities electronically.
9	In the legal and economic field, the third category income tax and the Colombian VAT on labor and capital Sector income must be evaluated by means of regulations for the collection process.
10	The state institutions in charge of collection must keep the company's financial information secret.
11	The explicit and visible tax, the personal income tax, is also more likely to recognize massive, implicit and Invisible payments.
12	The stratification of the income tax and the stratification of the visibility of the vat raises the question of What kind of citizen is strategic and consciously committed to the country's fiscal compact?
13	It consists of implementing the electronic invoice and thus being able to control tax evasion of taxes by Using technology to be able to reduce paper.
14	It is facilitating taxpayers' procedures and audits, and will also seek new remote auditing strategies.
15	Develop existing tax laws to comply with technological developments and global e-commerce laws. Develop a computerized tax system and qualified personnel to support electronic invoicing and conform to the provisions of modern tax and e-commerce legislation.

16	Consists of the use of information and communication technology, the degree of familiarity with ICT, Which are considered necessary in business operations, has not been achieved.
----	--

Electronic Taxation in Its Initial Stage

Many Latin American countries have sought the way to seek greater collection for both individuals and businesses, which should be taken into account in an electronic platform of the National Tax Administration, and in turn the creation of a Link called "virtual entities" in which they can register from a small to a large company (Del Valle, 2017), in addition to the need to obtain (Rossignolo, 2017).

It can be stated that Latin American countries have always needed to use these internet means to be able to make any transaction, and this is especially true in these times when many Latin American countries have had to adapt to the new era of apogee to the electronic tax. They should make it easier to analyze the taxes that are applied to different companies (Moscoso et al., 2017), and all Latin American countries should be able to incorporate technological advances and global trends (Da Silva et al., 2016). Every time, citizens are trained to raise funds in a strategic manner and to commit to a fiscal pact with the country (Biehl et al., 2019).

Electronic Taxation Focuses on Greater Tax Collection and Reduction of Tax Evasion

A search of scientific journals revealed that the tax burden can often affect workers and capital owners in different ways, eventually giving rise to inequities, both foreseen and unforeseen, to such an extent that they can collapse (Rodriguez & Avila, 2017). Furthermore, state-backed collections are prohibited from disclosing taxpayer financial information (Católico et al., 2016). Considering that the effects of a fiscal pact's changes may be opposed by the majority of citizens (Castao et al., 2019). One of the benefits of electronic tax is that it reduces the number of technical errors; it also improves efficiency, ensures document delivery, and reduces government spending on tax administration (Perez, 2013). Another benefit is the ability to create a computerized tax system and qualified personnel to support electronic invoicing and comply with modern tax and e-commerce legislation (Rafat & Khader, 2021). The use of information and communication technology (ICT) is the third advantage, as familiarity with ICT has not been achieved (De León, Cerón et al., 2016). Finally, there is the benefit of not using paper; it is estimated that businesses will save up to 80% on invoicing issuance and management costs (Roncallo, 2019; Varios, 2020).

FINAL CONCLUSIONS

After having evaluated the scientific journals at the international level, sixteen evidences were identified that will support international taxation in Latin America. The authors of the evidence gathered are from the following countries, which have had an impact and are well-positioned in the field of research. Taxes have been identified as a potential source of business innovation, and it is also necessary to have a tax policy that is not only revenue-generating, but also consistent, with marginal rates increasing according to strata. After determining the comparative analysis, that is, the form of collection as it is developed in Latin American countries, it was discovered that they share the same goal of making information on their tax obligations accessible and that they do not use paper, thereby reducing their company expenses. This is why, in the above points, we will delve deeper and provide more information.

FUNDING STATEMENT AND ACKNOWLEDGMENTS

This study was carried out and funded by the Universidad Señor de Sipán, within the framework of the work plan outlined in RR N° 016-2021/USS. The presented results are the result of the development of research project N° 1, which was approved with RR N° 038-2021/USS.

REFERENCES

- Barreix, A. & Zambrano, R. (2018). Inter-American Center of Tax Administrations Avenida Ramón Arias. Panama City, Republic of Panama.
- Benítez, Y & Lopez, B. (2017). Electronic auditing and its effect on the formal obligations of the taxpayer. *Horizontes Journal of Accounting in the Social Sciences*, 7(2).
- Biehl, A., Labarca, J. & Vela, J. (2019). Taxes without Taxpayers: The Invisibility of Taxes in Chile. *Revista mexicana de ciencias políticas y sociales*, 64(236), 49-82.
- Cabrera, M. & Medina, A. (2013). Icefi Tax reforms in Central America, 2009-2012. Guatemala: Central American Institute for Fiscal Studies.
- Castaño, P., Ramírez, T. & Escobar, J. (2019). Analysis of the implementation of electronic invoicing in Colombia. *Revista Grupo GISESA*, 8(1), 15-19.
- Católico, D., Suárez, S. & Velandia, J. (2016) E-government in Latin American tax administrations. *Revista Logos, Ciencia & Tecnología*, 7(2), 50-65.
- Da Silva S., Hernandez, L. & Da Silva, M. (2016). An analysis of the operating model and the fiscal role of electronic invoicing in Brazil. *RIGC Magazine*, 14(7).
- De León V., Cerón, M., León, F. & Rodriguez, S. (2016). Impact of the implementation of electronic invoicing on MSMEs in the commerce and services sector in Mexico. *Global Business Journal*, 5(7), 85-94.
- Del Valle, M. (2017). Spatiality of virtual firms in direct e-commerce taxed with Venezuelan value added tax. *Visión Gerencial*, 1(1), 144-155.
- Economic Commission for Latin America and the Caribbean (2019). Fiscal Panorama of Latin America and the Caribbean, 2019. Santiago de Chile: ECLAC.
- Escalona, E. (2017). VAT in business in the digital era. *Revista Centro de estudio Tributarios*, 17(1), 31-56.
- EduTEKA Universidad ICESI (2009). EduTEKA estuvo en NECC 2009. Bogotá: EduTEKA.
- Faúndez, A., Osman, R. & Pino, M. (2018). Tax auditing by electronic systems versus taxpayers' rights: A comparative study comparative study in Latin America. *Revista chilena de derecho y tecnología*, 7(2), 113-135.
- Hernández, K. & Robalino, J. (2018), Evidencias del impacto de la facturación electrónica en América Latina. Panama: Inter-American Development Bank/Inter-American Center of Tax Administrations (IDB/CIAT).
- Kitchenham, B. (2004). Procedures for performing systematic reviews. In Procedures for performing systematic reviews. England: Keele University.
- Leverero, E. (2014). Institutionalism and economic theory: from "neoclassicism" to classical theory. *Journal of Institutional Economics*, 16(31), 81-99.
- Liberati, A., Altman, D.G., Tetzlaff, J., Mulrow, C., Gøtzsche, P.C., Ioannidis, J.P.A., Clarke, M., Devereaux, P.J., Kleijnen, J., & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: Explanation and elaboration. *PLoS Medicine*, 6(7), e1000100.
- Moscoso, J., Tapia, P., Erika et al. (2017). Tax administration as the axis of income tax advance payment compliance in the cooperative sector. *Sapientia Organizacional*, 4(7), 97- 114.
- Ossandón, F. (2020). Centro de Estudios Tributarios de la Universidad de Chile. *Revista de estudio Tributario*, 23(1), 153-199.