

STOCK MARKET ANALYSIS OF ELECTRONIC FINANCIAL MARKETS AND ADOPTION OF CRYPTOCURRENCIES, BLOCKCHAIN APPLICATIONS OF THE ECUADORIAN FINANCIAL SYSTEM AND ITS LEGISLATIONN

¹ROBERTO ISAAC COSTALES MONTENEGRO, ²KATHERINE ELIZABETH SANDOVAL ESCOBAR, ³PATRICIO XAVIER MORENO VALLEJO, ⁴VERÓNICA SOLEDAD DILLON RICAURTE

¹Escuela Superior Politécnica de Chimborazo

Ingeniero de Empresas en la Escuela Superior Politécnica de Chimborazo, Riobamba Ecuador.
Master en Desarrollo de la Inteligencia y Educación de la Universidad Nacional de Chimborazo.
Doctor en Ciencias Económicas de la Universidad de la Habana Cuba.

roberto.costales@espoch.edu.ec

<https://orcid.org/0000-0002-6979-086X>

²Doctora Ph.D. en Ciencias Jurídicas, Magíster en Docencia Universitaria, Ingeniera en Finanzas, Abogada de los Juzgados y Tribunales de la República del Ecuador, Investigadora SENESCYT, Docente Investigador Escuela Superior Politécnica de Chimborazo (ESPOCH)

<https://orcid.org/0000-0001-9903-2376>

kathysandovallescobar@hotmail.com

³Master of Science in Computer Science and Applications, Ingeniero en Sistemas Informáticos, Docente Investigador Escuela Superior Politécnica de Chimborazo. (ESPOCH)

xavier.moreno@espoch.edu.ec

<https://orcid.org/0000-0002-9317-9884>

⁴Ingeniera en Finanzas

Master en Gestión Empresarial

Docente Investigador del "ISTOG" INSTITUTO TECNOLÓGICO SUPERIOR JOSÉ ORTEGA Y GASSET.

verodillon@hotmail.com

<https://orcid.org/0009-0007-0962-0782>

Summary: *The present work of carrying out a Stock Market Analysis of the Financial Markets for the Adoption of Cryptocurrencies and Blockchain Applications in the Ecuadorian Financial System, which will allow to have an overview of the situation in which the population finds itself with respect to the use and knowledge of cryptocurrencies and the investments that can be made with them. The research was carried out through the application of surveys and interviews aimed at users of the financial system and managers of banks and cooperatives who could make a judgment based on their experience and knowledge in finance. As a result of them, it was determined that the Ecuadorian population does not have the necessary knowledge to be able to start using cryptocurrencies on a daily basis, and that users of the financial system are accustomed to traditional financial culture, so it would require a change and update at the technological level as well. The proposal contains information on the most used cryptocurrencies and the suggestion of which would be the best cryptocurrency to adopt when the society was ready for it, with the necessary reasons and justifications on the decision taken. Therefore, the present research work may serve as a foundation for possible future research to be carried out further so that this transition can be developed in a successful manner and at the right time.*

Keywords: *Stock Market, Analysis of the Financial Markets, Cryptocurrencies and Blockchain Applications.*

ANTECEDENT.

Currently several countries make use of cryptocurrencies, and several have had a satisfactory adoption of this investment option, being that currently this alternative is already in Latin America and there are expectations of growth. Despite its success, many countries still do not have the option of making use of cryptocurrencies, since there is still not much information disseminated about them and distrust prevails to adopt their use.

In the case of Ecuador, in 2019 a similar system emerged through the BIMO (Mobile Wallet) platform, which allowed payments and transfers only through the cell phone, and people could



use it without having to be part of the financial system, that is, they did not need to be banked to be able to make use of it. However, despite the fact that the Central Bank of Ecuador made an attempt to demonstrate all the benefits that its use brought, the BIMO platform was not very well received in the market, many specialists justified this fact with the lack of information from the population regarding these new resources which generated distrust and caused suspicion of insecurity.

The population is not able to adopt this new system and manage to take an accelerated step in terms of the use of technology for the management of finances in Ecuador due to the lack of predisposition to improve the level of Knowledge of financial tools, caused finances to continue being handled in a traditional way and we remain in the general system.

However, technological-financial advances continue to grow day by day, so that these platforms that are handling cryptocurrencies already carry out transactions and movements of up to millions of dollars, which generates help in the economy of the system that manages it, but for this Whoever decides to enter these tools, must have a basic knowledge of what they are, their operation and the benefits or disadvantages they have when using them.

In the case of Ecuador, based on what happened with the BIMO platform, it can be said that the population does not have the necessary knowledge to be able to introduce these digital currencies into our economy. But three years after that attempt, the question arises as to whether the population continues with the same misinformation or if something has changed in users.

of the financial system, which would allow adopting these cryptocurrencies and offering a currency different from the one used legally in Ecuador, which is the US dollar.

For the above, this work seeks to use the necessary instruments that allow a stock market analysis of the financial markets in Ecuador and how the population feels about them, so that options can be generated that adapt to the reality of users.

CRYPTOCURRENCIES (BITCOINS) IN THE ECUADORIAN TAX REGIME,

The purpose of this research work is to carry out an analysis of the assumptions under which bitcoin could be taxed in Ecuador, so that the income generated by said currency, does not go unnoticed by the competent authority, since the Use of this currency is not currently regulated, in addition in the country there is no further development on this issue and there are few provisions that seek to regulate cryptocurrencies. (Hidalgo) & Bermeo, 2020)

This work allowed us to have information of great relevance for the research, since being a previously carried out study on the regulations required by the use of this cryptocurrency, it helps us to have a broader vision of the legal system. of our country and the possibility of taxing the returns generated by cryptocurrencies in case of being used in our country. In addition, this study focuses on the Bitcoin cryptocurrency, which could become the best option to adopt in our country, due to its stability and antiquity in the market.

ANALYSIS OF THE USE OF CRYPTOCURRENCIES IN THE ECUADORIAN ECONOMY,

This analysis work tries to answer basic questions that are currently generated about cryptocurrencies, such as: what are cryptocurrencies?, is it safe to invest in them?, can they be accepted as legal exchange?, among others; directing the research so that knowing the situation of our country society can understand more about this technological step and can get to use it.

With this work, you can count on more support regarding the advantages that its use could bring to the economy of our country, however, it is highlighted that there is still no greater knowledge on the part of citizens towards this new method of change, and apparently there is no necessary interest to start with a different financial culture and that allows us to make changes that could benefit us. (Montesdeoca, 2018)

ANALYSIS OF THE ADVANTAGES OF USING BITCOIN IN ECUADOR AS AN ALTERNATIVE CRYPTOCURRENCY TO COMMERCIAL TRANSACTIONS

The present analysis allowed to demonstrate the different protection mechanisms for users who belong to the P2P network that is integrating the digital currency with respect to traditional money, and in turn explain each of the safeguard measures offered by bitcoin for your users.

Again it is exposed that cryptocurrencies are not such a high risk if we compare it to that



traditional currencies could also be at risk, and that on the contrary by increasing technological tools and being able to play a role of greater development. This could be considered a strong economic boost for the country, helping us to have a more commercial vision about its use and the changes that it could generate by giving it a daily use. (Orrala & Chompol, 2017)

RESEARCH TO PROVE THAT IN A LATIN AMERICAN ECONOMY IT IS NECESSARY THAT 35% OF THE POPULATION HANDLES A VIRTUAL CURRENCY (SUCH AS BITCOIN) TO BE CONSIDERED AS A VEHICULAR CURRENCY, WITH A

SUSTAINABLE GROWTH RATE OF 4% PER YEAR,

The realization of this research served to analyze Ecuadorian banking and the factor that is a country that does not have its own monetary policy, so that a study of possible financial investments in Ecuador can be carried out, highlighting the stock market that does not have a great reception despite offering better returns than banks.

This work supports the theory of the importance of the management of a virtual currency today, and allows us to have statistical data that support the use of it and that, in addition, helps us to have a reality of the percentage of the population that Required to count with the necessary information about cryptocurrencies and can make use of it so that it can be adopted in a financial system legally and with all the regulations that are required to make use of it. (Fernández & Terán, 2015)

CHALLENGES FOR REGULATORY AND CONTROL AUTHORITIES REGARDING THE USE OF BITCOIN AS AN ELECTRONIC MEANS OF PAYMENT.

The objective of this research work is to propose the guidelines for reasonable regularization of virtual currencies, for which a critical and dogmatic analysis will be used around answering certain questions that arise about virtual currencies, their use, operation, legality and regularization.

Finally, this work allows us to have an idea of previous proposals addressed to the authorities that regulate the financial system and the securities market in Ecuador to be analyzed and compared with this work, and in this way To be able to bring an idea closer to reality about the use of cryptocurrencies as legal currency in our country, considering the risks and challenges that they present to the population and to users of the financial system, taking into account the level of current financial and technological culture in Ecuador. (Vergara, 2017)

Stock Market Analysis

When we talk about performing a stock market analysis we refer to the study of all the movements of those stock prices through graphs, balances, time series or different theories. (Lopez J., 2018) When we talk about performing a stock market analysis we embark on a very broad field, since there are currently different types of analysis in which the study of the stock market can be approached. Among them can be highlighted the following:

Technical analysis: Study stock market movements through graphs and indicators of the price of quotes. (Lopez J., 2018).

Afundamental analysis: It studies the prices of assets according to the financial variables that may affect them, that is, it calculates what is the theoretical price that an asset should have. (Lopez J., 2018)

Macroeconomic analysis: Studies stock market movements based on variables unique to the macroeconomy, that is, aggregate variables, such as GDP, interest rate, exchange rate, among others. (López J., 2018)

Quantitative analysis: It focuses on the study of time series and mathematical models to analyze the prices of financial assets of any kind. (López J., 2018)

Whereas, for this investigative work, technical analysis will be put into practice. This is because it is the analysis that will allow us to study the movement of the price of the shares quoted in the market, through graphs and indicators, in order to predict trends in the price.

The price discounts everything

It indicates that all those variables that affect the market are reflected in the price. This, in turn, means that when analyzing the price of a given asset we are indirectly analyzing all the variables



around it. (Redager, 2019).

The price moves by trends

Its objective is to identify the trends, especially the beginning and end of the trend so that the ups and downs in the markets can be taken advantage of, knowing that the trends are bullish, bearish or lateral movement. (Redager, 2019)

History repeats itself

This means that price fluctuations in the markets are conditioned, above all, by the effect of human psychology on the decisions made by investors. Based on the phrase "to understand the future it is necessary to have made a study of the past". (Redager, 2019).

Financial Markets

They can be defined as that virtual or physical space in which the possibility of exchanging financial assets between economic agents is offered and in turn the best and fairest prices for these assets are defined. (Financial Education, 2021)

Its objective is to be able to channel the savings of everyone who is part of it to the investment, this is how it supposes that people who can save obtain a remuneration for lending this money and companies can be in The possibility of making use of this money to be able to make investments. (Seville A., 2021)

Its main function is to act as an intermediary between people who save and people who require such refinancing. (Seville A., 2021)

The financial market is in a direct flow of financing demanders, that is, the claimants and bidders are in the market, and within these markets is the capital market and the money market. (Seville A., 2021)

The Superintendency of Companies, Securities and Insurance, (Superintendency of Companies, Securities and Insurance, 2021), defines the securities market as follows:

"The securities market is a segment of the capital market, in which securities (fixed and variable income) are traded between bidders (issuers) and claimants (investors), through the mechanisms provided for in the Securities Market Law, in order to allow the channelling of resources towards productive activities, without the need for the intermediation of financial institutions." (Superintendence of Companies, Securities and Insurance, 2020)

Financial Markets in Ecuador

There are several types of financial markets, such as the money market, capital market, financial derivatives market, financial commodity market, foreign exchange market, spot market, insurance market, interbank market and cryptocurrency market. However, in Ecuador the most used are the money market and the capital market. (Pazmiño, n.d.).

Stock Market in Ecuador

The stock market or stock market in Ecuador is regularized by the Superintendence of Companies, Securities and Insurance, and it is said that it is that market that is made up of offers, demands and negotiations of securities registered in the Registry of the Securities Market and in the Stock Exchanges. (Superintendence of Companies, Securities and Insurance, 2016)

Currently in Ecuador there are two stock exchanges where these exchanges are developed, these are: the Guayaquil stock exchange and the Quito stock exchange, it should be noted that previously there was the Cuenca stock exchange, however, it closed because as its vision was that banks could own their own stock exchange nationwide, before the securities market law was issued where financial institutions were prohibited from owning securities positions and having in 1993 the permits that banks can have stock exchanges, most institutions went to the Quito stock exchanges. and Guayaquil, causing great economic losses causing the expectations of this one not to be met, culminating in its total closure in the first half of 1997. (Arévalo, n.d.)

Stock exchanges

It can be defined as a stock exchange to that private organization whose main objective is to have the mechanisms and tools so that all members can carry out transactions of purchase and sale of certain securities, as long as this negotiation is based on conditions of equity, transparency and above all a fair price for each and every one of them. (Mercapital Editor, 2020)



In the case of Ecuador, there are two stock exchanges, which are the Guayaquil Stock Exchange and the Quito Stock Exchange, these organizations are regulated by the Superintendence of Companies, Securities and Insurance, its main function is to achieve an organized, integrated, transparent and effective market. (Superintendence of Companies, Securities and Insurance, 2020)

Securities traded on the stock exchange - brief analysis of the Ecuadorian Civil Code - Securities Market Law - Commercial Code.

The stock exchange trades securities that are classified into two large groups that are the following:

Variable income: They are those that represent the shares of a company, this means that the investor is considered the owner of a certain company in the fraction in which he has decided to invest in it. Profitability is subject to the economic performance of the company. (Mercapital Editor, 2020)

Fixed income: They have a fixed payment scheme from the moment they are issued until the agreed maturity date, which is why the profit is predictable and the issuing companies depend on the confidence of investors. (Mercapital Editor, 2020)

It is necessary to indicate what is established in the Commercial Code that establishes verbatim in its article 8 literal 4 and 8 "... The following are acts of commerce for all legal purposes:

4. The intervention as an associate in the constitution of commercial companies, the acts of administration of the same or the negotiation for consideration of the shares, participations or social shares;

7. The operations described and regulated by the Organic Monetary and Financial Code, without prejudice to the fact that they are subject to said law (Commercial Code, 2020)

Knowing in this way that the Ecuadorian Civil Code in its Article 1492 determines "... If the condition is negative of a physically impossible thing, the obligation is pure and simple. If it consists in the creditor refraining from an immoral or prohibited act, it vitiates the disposition..." (Ecuadorian Civil Code, 2019), specifically consistent with the aforementioned article 94 of the Organic Monetary and Financial Code that establishes textually "... Article 94.- Of the currency in the Republic of Ecuador. All transactions, monetary and financial operations and their accounting records, carried out in the Republic of Ecuador, shall be expressed in United States dollars, in accordance with this Code..."

Legally, a thorough and detailed analysis has been carried out on what this innovative and new fear for Ecuadorian legislation represents, finding that it is very basic and is not yet inserted in the regulatory framework, considering that a bill must be made by the legislative body that contemplates everything related to Stock market analysis of electronic financial markets and adoption of cryptocurrencies, blockchain applications of the Ecuadorian financial system, considering that more and more people are interested in the dynamics of cryptocurrencies and invest in it.

Additionally, consideration should be given to the creation of control bodies for these activities or, in turn, delegate this control function to a State entity in order to comply with the provisions of paragraph 2 of article 276 of the Constitution of the Republic, which states that the development regime will have, among other objectives: Build a fair, democratic, productive, solidary and sustainable economic system based on the equal distribution of the benefits of development, the means of production and the generation of decent and stable work.

Functions of stock exchanges

Some of the most noteworthy functions of stock exchanges are the following:

- They must succeed in channelling savings into productive investment.
- They must be able to better optimise financial resources.



- They should contribute to the allocation of fixed prices in the market. (National Stock Exchange, 2020)

However, it could be mentioned that its main function is to help facilitate transactions that are carried out with securities while authorizing, supervising and regularizing such transactions under the provisions of the law. (National Stock Exchange, 2020)

Investment Portfolio

By investment portfolio you can understand all that documentation that are quoted in the stock market and are those in which an individual or a company can decide to invest their money in them. (Herzog Economics, S.F)

Its objective is to spread the risk by combining different instruments such as:

- Actions.
- Time deposits.
- Effective.
- International currencies.
- Bonuses.
- Realty. (Herzog Economics, S.F)

BLOCKCHAIN

Blockchain (or chain of blocks) consists of a set of technologies that allow to maintain a distributed, decentralized, synchronized and very secure record of the information that computers and other devices work. In this sense, it fulfills the function of a public registry in digital operations, allowing each user and device to be identified in a unique way, storing and tracing that identification at all times. The authenticity of the Blockchain is not verified by a third party, but by the consensus of all participants of the same user network. (Macrotest, 2022)

Its main advantage is that it allows you to register a transaction on the web in a verifiable, unfalsifiable and transparent way, without the need for a third party to corroborate its validity. In addition, Blockchain technology has the potential to reduce costs, speed up both domestic and international transactions and reduce fraud risks through online authentication. The potential of this technology is virtually limitless. (Macrotest, 2022).

How Blockchain Apps Work.

Each block of the chain carries the packet of transactions and two codes, one that indicates which is the block that precedes it (except the source block, of course), and another for the block that follows it, that is, they are interlaced or chained so that they call codes or hash pointers. Now comes into play the concept of mining performed by the nodes, that is, the process of validating the information. (I'MNOVATION, 2022)

In this process of mining or checking, when there are two blocks that point to the same previous block, the first to be decrypted by the majority of nodes simply wins, that is, most of the points of the network must agree to validate the information. Therefore, although blockchain generates multiple blockchains, the longest chain of blocks will always be legitimized. (I'MNOVATION, 2022)

Criptomonedas

It is the name given to digital currencies that work with blockchain technology, arises from the prefix "crypto" that refers to the cryptography used by currencies to ensure all transactions made between users and the term "currency" is due to that are used as if they were traditional currencies despite the fact that certain authors prefer to call it "digital assets" since it is considered an investment method. (Arias, Campos, & Oraco, 2019)

Cryptocurrencies work with cryptography, which is a mathematical method responsible for making a secure sending of information between a sending and receiving user, this together with blockchain technology serve to protect their transactions. (Arias, Campos, & Oraco, 2019)

The International Monetary Fund (IMF),

Crypto assets make fast and inexpensive financial operations possible, while offering the convenience of cash. Some payment services make transfers abroad in a matter of hours, not days. If privately issued cryptocurrencies remain risky and unstable, there could be a demand for central banks to supply money digitally. (Lagarde, 2018).

These markets are characterized by offering the following features to their users:

Table 1-1: Characteristics of financial markets in Ecuador

Money Market	Capital Market
Offers and demands short-term funds	Offers and demands funds in the medium and long term
Instruments tend to be low risk and highly Negotiable	Instruments involve high risk
It allows to conduct the monetary policy of the government (purchase-sale of short-term government securities)	Instruments should provide high rates of return for Investors, including long-term debt obligations
Typical instruments are discount securities issued by the government, certificates of deposit	

Source: (Pazmiño, n.d.)

It should be noted that, in the capital market, is where the values channeled towards long-term investment are located, it is one of the markets with the greatest diversification and specialization in the financial market, also within this market there are two Divisions that are fundamental in the management of finances, which are: the credit market and the stock market. (Pazmiño, n.d.)

The credit market is characterized by financial intermediation, it is where the financial system is located, where they are responsible for capturing the savings of the population offering in exchange solvency and guarantee through credit. (Pazmiño, n.d.)

On the other hand, the stock market is composed of the intermediation between securities and securities, this market seeks to capture the resources of the surplus sectors (which do not consume all of their income), and orient them towards the deficit (there is a lack or shortage of what is necessary) so that in this way a restitution of capital can be allowed. (Pazmiño, n.d.)

Two markets offered by Ecuador should also be mentioned, although they are not so widely used and are the following:

The market of options or Derivative Obligations: It can be defined as a legal contract to the holder of the right to buy or sell a certain amount of securities, currencies or products at a fixed price in a specific time. (Pazmiño, n.d.) . Futures market: It is developed only in the over-the-counter market and is subject to the regulations of the former Monetary Board and under the control of the Superintendency of Banks, this forward contract It is an agreement between two parties that is made according to certain needs to be able to buy or sell an asset at a fixed price and a specific future date. (Pazmiño, n.d.)

The financial markets mentioned above, are those that Ecuador manages with great skill, however, there has not been an update of them, since today in several countries the stock markets are beginning to be used with great force; but Ecuador has not yet taken the step of venturing into this market that offers great possibilities to expand our economy and improve it.

Stock Market in Ecuador

The securities market of Ecuador is regulated by the National Securities Council as a supervisory entity and the control entity is in charge of the Superintendence of Companies, Securities and Insurance; followed by them is the Registry of the Stock Market, here is the information of the other institutions regulated by this law. We also have the main part of the market which is composed of the intermediaries of the stock exchange, which are: the Houses or Securities



Agents and finally are the entities Risk rating agencies as a support entity. (Arévalo, n.d.).

Elements of cryptocurrencies

Digital currencies

They are computer programs that have the possibility of saving, sending and receiving money, through the generation of 2 keys, the first is the public key, which is one that resembles the bank account number and the other is a private key which fulfills the role of password for the recipient and that in this way can unlock and make use of existing funds. For the transaction to work, the recipient and recipient keys must match. (Arias, Campos, & Oraco, 2019)

Blockchain

It is the database in which the information is grouped into blocks to which all the information that continues to be added one after the other is added through a timeline. At the same time this information is encrypted at the moment that all the blocks accept and confirm the new information, so from this moment the information becomes impossible to modify, generating a transparent, simple and secure system. (Arias, Campos, & Oraco, 2019).

Cryptocurrency mining

It refers to the activity by which new crypto-assets are issued after confirming transactions in the blockchain network, it is done in two ways:

Proof of work: Miners employ computers that have processors with a high power to solve mathematical problems (hash), allowing them to continue transactions by adding a new block to the chain and receiving cryptocurrencies as a reward. (Cryptonews, 2018)

Proof of stake: It is an alternative consensus algorithm to Proof-of-Work in which participants send a special transaction that blocks their funds for a certain period of time and allows them to enter the process of creating and validating blocks. The participants who achieve the highest number of validated blocks are added to the chain. (Cryptonews, 2018)

Cryptocurrency exchanges


Exchange houses or cryptocurrency exchanges are considered to be those online platforms in which the commercialization of cryptocurrencies is authorized regardless of which one you want to choose, they allow you to buy or sell them, and also allows you to exchange traditional money for digital currencies or only make the exchange of cryptocurrencies. (Arias, Campos, & Oraco, 2019).

CONCLUSIONS:

- The research shows that there is a general knowledge about cryptocurrencies which has made many people feel attracted to this type of investment, but the specific ignorance about the use of Blockchain applications has caused fear and distrust when making the decision to invest your money, which could be the main factor that delays its adoption within the Ecuadorian financial system.
- It is suggested that users of the Ecuadorian financial system seek to learn more about the new tools that technology offers us today for the management of our finances and consider that they have greater security and applications that support our data, so that the existing gap decreases.
- Together with a legal regulation, bodies must be created to regulate and control the activity of electronic financial markets and adoption of cryptocurrencies, blockchain applications, in order to regulate these activities, attending to the principle of legality.

BIBLIOGRAPHERA.

- [1] Gabriela Merino F. Roberto Costales M. (2022) *Thesis Stock Market Analysis of Financial Markets for the Adoption of Cryptocurrencies and Blockchain Applications and the Ecuadorian Financial System.*
- [2] Arenas, V. (February 22, 2022). *These are the 9 largest companies that accept Bitcoin as a payment method.* Retrieved from Ebankingnews: <https://www.ebankingnews.com/noticias/estas-son-las-9-empresas-mas-grandes-que-aceptan-bitcoin-como-metodo-de-pago-0053921>
- [3] Arévalo, C. (2013). *Analysis of the Stock Exchange: Study of Statistics in the period 2000-2010 and Comparison of Costs with the Banking System.* Retrieved from Repositorio Universidad del Azuay: <https://dspace.uazuay.edu.ec/bitstream/datos/3079/1/09854.pdf>

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- [4] Arias, E. (September 12, 2020). Technical feasibility. Retrieved from Economipedia: <https://economipedia.com/definiciones/factibilidad-tecnica.html>
 - [5] Arias, L., Campos, W., & Oraco, J. (September 02, 2019). Cryptocurrencies and their contribution to portfolio diversification. Retrieved from ESAN Repository: https://repositorio.esan.edu.pe/bitstream/handle/20.500.12640/2004/2019_MAF_16-2_09_T.pdf?sequence=1&isAllowed=y
 - [6] National Assembly Republic of Ecuador. (September 12, 2014). Organic, monetary and financial code. Retrieved from National Assembly Republic of Ecuador: <http://www.pge.gob.ec/documents/Transparencia/antilavado/REGISTROOFICIAL332.pdf>
 - [7] Banco Bilbao Vizcaya Argentaria. (November 04, 2021). What are the differences between a token and a cryptocurrency? Retrieved in 2021, from Banco Bilbao Vizcaya Argentaria: <https://www.bbva.com/es/que-diferencias-hay-entre-un-token-y-una-criptomoneda/>
 - [8] Central Bank of Ecuador. (January 08, 2018). Official statement on the use of Bitcoin. Retrieved from Central Bank of Ecuador: <https://www.bce.fin.ec/index.php/boletines-de-prensa-archivo/item/1028-comunicado-oficial-sobre-el-uso-del-bitcoin>
 - [9] Central Bank of Ecuador. (February 08, 2021). In four years, access to the financial system increased by 3.7 million people. Retrieved from Central Bank of Ecuador: <https://www.bce.fin.ec/index.php/boletines-de-prensa-archivo/item/1411-en-cuatro-anos-aumento-el-acceso-al-sistema-financiero-en-3-7-millones-de-personas>
 - [10] Central Bank of Ecuador. (December 2021). Monthly Statistical Information No. 2038 - December 2021. Retrieved from Content Central Bank of Ecuador Finance: <https://contenido.bce.fin.ec/home1/estadisticas/bolmensual/IEMensual.jsp>
 - [11] Central Bank of Ecuador. (2022). Current Effective Interest Rates. Obtained from Central Bank of Ecuador Monetary and Financial Sector: <https://contenido.bce.fin.ec/documentos/Estadisticas/SectorMonFin/TasasInteres/TasasHistorico.htm>
 - [12] [Tax Code of Ecuador, Studies and Publications, Ecuador 2018.](#)
 - [13] Civil Code, Studies and Publications, Ecuador 2019
 - [14] Organic Monetary and Financial Code, Studies and Publications, Ecuador 2018
 - [15] Law on Securities Market, Studies and Publications, Ecuador 2018.
 - [16] Code of Commerce, Studies and Publications, Ecuador 2020.
 - [17] Constitution of the Republic of Ecuador, Studies and Publications, Ecuador 2018.