The stock market and the success of fixed-income issues in Guayaquil: an analysis of the determining factors

El mercado bursátil y el éxito de las emisiones de renta fija en Guayaquil: un análisis de los factores determinantes

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ABSTRACT

This study delves into the factors that have determined the success of fixed-in- come issues in the Guayaquil stock market during the period 2013-2023. Through a qualitative and quantitative analysis, it was identified that the financial strength of the issuing companies, the confidence of investors, transparency in information, and a favorable macroeconomic environment are key elements for the success of these operations. In addition, the reputation of the company and the adequate structuring of the issue, with attractive and clear terms, turned out to be determining factors. The findings suggest that, although external conditions have an influence, the ability of companies to generate confidence and align their issues with market expectations is essential to ensure their success in an increasingly competitive environment.

Key words: Financing, Investment, Market.

RESUMEN

Este estudio profundiza en los factores que han determinado el éxito de las emisiones de renta fija en la Bolsa de Valores de Guayaquil durante el periodo 2013-2023. A través de un análisis cualitativo y cuantitativo, se identificó que la solidez financiera de las empresas emisoras, la confianza de los inversionistas, la transparencia en la información y un entorno macroeconómico favorable son elementos claves para el éxito de estas operaciones. Además, la reputación de la empresa y la adecuada estructuración de la emisión, con términos atractivos y claros, resultaron ser factores determinantes. Los hallazgos sugieren que, si bien las condiciones externas influyen, la capacidad de las empresas para generar confianza y alinear sus emisiones a las expectativas del mercado es fundamental para asegurar su éxito en un entorno cada vez más competitivo.

Palabras clave: Financiamiento, Inversión, Mercado.

1. INTRODUCTION

The study has shown remarkable growth in the last decade. However, identifying the factors that have influenced the success or failure of these issues has been a challenge. This research focuses on understanding how variables such as financial management, corporate governance and the economic environment have impacted the performance of companies in the Guayaquil stock market.

The main objective is to identify the elements that have limited or enhanced the develop-



ment of the stock market in Ecuador. Through a descriptive and quantitative analysis of the data available in the last ten years, we seek to understand the barriers faced by companies and investors in this market.

The results of this research will allow us to propose recommendations to improve the efficiency and effectiveness of fixed stock issues. Aspects such as transparency infinancial information, the ability of companies to adapt to adverse economic conditions and the importance of financial education to encourage investor participation will be analyzed.

The study will also explore the role of different market players, such as issuing companies, financial intermediaries and regulators. By understanding their roles and motivations, it will be possible to identify the areas where greater efforts are required to boost market development.

Ultimately, this research seeks to contribute to the strengthening of the Ecuadorian stock market, providing a solid basis for decision-making and the implementation of public policies that promote sustainable economic growth and financial inclusion.

By analyzing the internal and external sources of business financing, it is observed that the Ecuadorian stock market, despite its potential, has not been widely used. This is due to a number of factors, including lack of information, the complexity of processes, and investor distrust.

This research seeks to identify the main barriers that limit the development of the stock market and propose concrete solutions. By understanding the needs of companies and investors, financial instruments and regulatory mechanisms can be designed that facilitate access to financing through the stock market.

The Ecuadorian stock market has experienced sustained growth over the past 20 years, largely thanks to increased investment and the leading role of cities such as Guayaquil. The diversification of financing sources through stock issuance has been a key factor in this development. According to data from the Central Bank of Ecuador (Ecuador, Informe Anual del Mercado de Valores, 2020), the dynamism of the stock market has had a positive impact on the national economy, by improving liquidity and facilitating access to capital for companies and productive projects.

In the last ten years, the fixed income market in the city of Guayaquil has experienced significant growth, reflecting the interest of Guayaquil-based companies in expanding their operations and financing projects through the stock market. However, the topic has not been without challenges and circumstances that have affected the reliability and success of the executed issuances.

The central issue lies in identifying the determining factors that have positively or negatively impacted the placement of fixed-income issuances during the period 2013-2023.



This analysis focuses on understanding how variables such as financial management, corporate governance, business adaptability, and the economic environment have influenced the performance of companies in Guayaquil's stock market.

This research aims to thoroughly examine these elements to extract recommendations that help companies and regulators improve their financial and operational activities. We will also attempt to identify patterns and trends that explain the effectiveness of fixed-income issuances.

The discussion will center on the need for transparency in financial information dis-closure, companies' ability to adapt to adverse economic conditions, and the appropriate use of risk mitigation measures. A debate on the importance of financial education and promotion in encouraging stock market participation will also be included to increase investor interest and generate market confidence.

This study will not only contribute to the academic understanding of stock market behavior in Guayaquil but also offer practical recommendations to improve the efficiency and effectiveness of fixed-income issuances, thereby promoting more sustainable and robust economic development in the region.

Business financing generally comes from internal and external sources. In the case of internal sources, these consist of contributions made by the business's partners or owners. On the other hand, external sources include those resources that do not belong to the company, such as loans. Regarding external credits, it is common for business owners to resort to bank loans within the financial system. However, the Ecuadorian Stock Market also exists as an alternative financing option in the country, which has not been widely utilized by either public or private entities, whether for investments, bond issuance, or obtaining resources to finance their goals, programs, or projects.

The purpose of this research is to propose a recommendation that serves as an analytical tool to offer alternatives that address the factors identified in this research as limiting the market's development or contributing to its growth.

To achieve this objective, a descriptive and documentary analysis of the main barriers and technical and legal issues facing the market for its expansion was conducted. Additionally, a quantitative analysis of the Yearbooks of the country's Stock Ex- changes, as well as publications and information provided by these institutions on trans- actions conducted over the past 10 years (2013 - 2023), was performed.

From these analyses, information about market participants was extracted, allowing us to identify their level of participation and, consequently, their contribution to market development. The types of instruments traded were also analyzed, revealing participants' preferences based on their availability.



The stock market in Ecuador has grown enormously over the past 20 years due to the influx of both local and foreign investment. Guayaquil is an important financial hub where companies seek to diversify their funding sources through stock issuances. Ac-cording to the Central Bank of Ecuador (2020), the growth of the stock market has been a crucial driver for the country's economy, providing liquidity and facilitating access to capital.

During the period 2013-2023, Ecuador experienced significant economic fluctuations, including fiscal crises and structural adjustments. These conditions have directly.

Fixed Income Issuances

Fixed income issuances are commonly known as corporate bonds. One of the pre-ferred financial instruments for companies is obligations. Essentially, these are other forms of raising funds from the public. However, obligations are considered a credit product that any individual investor can use. These issuances often implement a fixed interest rate and a set term. Therefore, they are used to attract investors who constantly monitor their income. In Guayaquil, the use of these instruments has been a common strategy for capital raising over the last decade (Smith & Jones, 2018).

Table 1. fixed income issuances, commonly known as corporate bonds

Amount Issued (per is-suance)	Amount of money raised	\$50,000,000
Fixed Interest Rate	Interest rate applied to the bonds	5%
Bond Term	Duration of the bondin years	10 years
Interest Payment Fre-quency	Interval at which in-terest is paid	Annual
Number of Issuances in the Last Decade (inGuayaquil)	Number of issuancesmade	25

According to Table No. 1, fixed income issuances, commonly known as corporate bonds, can be identified. The information presented offers a comprehensive overview of the dynamics of this financial instrument in Guayaquil. The bonds in question have been issued for a term of 10 years. This term is very common among bond issuances, as it provides companies with sufficient time to utilize the funds obtained in this way and offers investors a long-term period during which they can expect payments. The 10-year duration is beneficial for both sides, as it allows them to plan their finances long-term in relation to this bond. The fourth characteristic is the frequency of interest payments, and in the example of the tender, it is annual. Annual payments are generally a common condition in the bond market; therefore, it is a crucial feature for this entry.

2. METHODS

According to Ballén, Pulido, & Zuñiga (2007), "Documentary research is a research tool or

technique aimed at obtaining data and information from written or unwritten documents that can be used within the purposes of a specific study" (p.59). In other words, this type of research seeks to collect as much information as possible on the topic from various sources to support the study and employ different methods and strategies that contribute substantially to its development. It involves reviewing theories, research, and accounts related to coffee commercialization, the use of social media, among others. It is important to note that this research design is useful because it allows for the comparison of various arguments on the presented variables to find optimal solutions to the exposed problem.

According to Bernal (2006), "it is oriented towards deepening specific cases rather thangeneralizing. Its primary concern is not measuring but rather qualifying and describing the social phenomenon based on determining traits perceived by the elements them-selves within the studied situation" (p.60). In other words, it allows for the numerical measurement of those questions developed in the questionnaire, which are used to de-limit the information for subsequent analysis and interpretation.

The research methodology to be used in this project is deductive. According to its Latin origin, deductive means deriving consequences from a principle, proposition, or assumption. This type of research allows for drawing a conclusion from the general to the particular. Through this method, the empirical and basic knowledge held at the beginning of an inquiry, combined with deductive reasoning, leads to the reality and rigor required by a project (Dávila, 2017).

Additionally, the analytical methodology was also used, which, according to Abbagnano (1961), "consists of extracting parts of a whole to study and examine them separately, to observe, for example, the relationships between them" (p.59). In other words, it allows for the segmented analysis of the study object, enabling a better understanding of it.

The quantitative approach focuses on analyzing numerical data for subsequent measurement. Moreover, this approach aids in the interpretation of data, enabling a better.

understanding of the studied object, as long as the correct methodological design has been applied (Arias, 2012). Given the characteristics of the quantitative approach, it has been chosen for this study because it will involve reviewing numerical data on employment, profit, and non-current assets extracted from official government sources.

The unit of analysis is the primary object of study in an analysis, meaning it is what orwho is being studied. In social sciences, the most common units of analysis are individuals, social groups, or organizations (Arias, 2012). For this research, the unit of analysis is the database of the Guayaquil Stock Exchange, focusing on fixed-income issuances.

Population and sample are related terms frequently used to segment the target audience of the research. The population refers to the elements to be studied, while the sample is a subset of that population (Ventura, 2017). For this project, the population is the database of current



fixed-income issuances from 2013 to 2023.

For the development of this research project, the technique to be considered is documentary review, which involves the collection and analysis of relevant documents such as financial reports, annual reports, previous studies, and current regulations during the period in question. This technique is essential for identifying trends and historical factors that have influenced the success of fixed-income issuances, providing a solid context and a robust initial database for the research ((American Psychological Association, 2020). Additionally, statistical analysis will be used as a technique to examine the collected quantitative data.

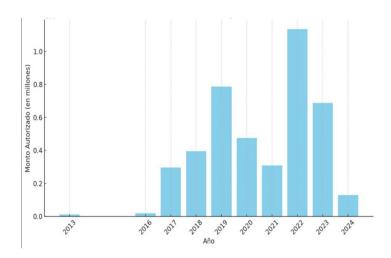
By delivering annual interest payments, issuers can cater to investors seeking regular income, such as pension funds or individual traders who prefer large, lump-sum monthly payments.

3. RESULTS

Analysis of the Impact of Fixed-Income Securities in the Stock Market in the City of Guayaquil

The stock market in Guayaquil has experienced significant growth in recent decades, establishing itself as a fundamental pillar for the local and national economy. Additionally, the key factors that have contributed to the success of local companies fixed-in- come securities issuances during the period 2013-2023 are explored. Fixed-income securities are financial instruments issued by public and private entities that promise regular interest payments and the return of the principal at maturity. This theoretical framework will provide a solid foundation for understanding the dynamics of fixed-income securities within the local stock market context.

Figure 1. The success of local companies fixed-in- come securities issuances during the period 2013-2023.



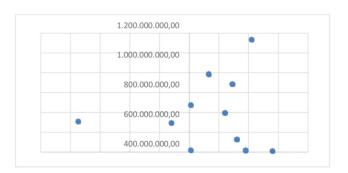
Despite the general upward trend, there are years with relatively low amounts. For example, in 2013, an amount of only \$12,000,000.00 was authorized, and in 2016, the amount was \$20,000,000.00. These significantly lower values could be related to budget constraints, economic recessions, or phases of planning and evaluation before executing large projects.

The year 2024 shows a considerable reduction with an authorized amount of \$129,450,000.00 compared to previous years, which could indicate a consolidation phase after high levels of investment in previous years or a reorientation of budgetary priorities. The years 2017 and 2018 are also noteworthy, with amounts of

\$296,050,000.00 and \$395,500,000.00, respectively. These year's show a clear trend of sustained investment growth, possibly reflecting a phase of economic growth or the implementation of medium-term projects that required continuous financing.

Analysis of the Correlation Between GDP and Its Impact on the Amounts Traded in the Stock Market

Figure 2. the analysis of the scatter plot between Ecuador's Annual GDP and the Authorized Investment Amounts



According to Figure No. 2, the analysis of the scatter plot between Ecuador's Annual GDP and the Authorized Investment Amounts reveals several important interpretations regarding the country's economic dynamics during the studied period. Observing the scattered points on the graph, the following can be inferred:

First, the dispersion of the points along both axes indicates that there is no clear linear relationship between the authorized investment amounts and the variations in Ecuador's Annual GDP. Although some years with higher GDP growth rates are associated with significantly elevated investment amounts, as observed in the case of the 4.20% growth with \$1,135,340,000.00 USD authorized, this pattern is not consistently repeated across all periods studied. This suggests that additional factors beyond investments may significantly influence the country's economic performance.

The variations in Annual GDP, ranging from moderate growth to pronounced economic contractions like -7.50%, show that the Ecuadorian economy is susceptible to a variety of



external and internal influences that cannot be fully mitigated through monetary investments.

A deeper and more statistically rigorous analysis would be necessary to quantify the strength and direction of any correlation between these variables, as well as to identify other determinants of Ecuador's economic performance over time

The Need to Incorporate Legal Reforms to Strengthen Compliance with Guiding Principles in Ecuador's Stock Market

Given the current circumstances surrounding the stock market in Ecuador and considering the unfortunate events of the last two decades, it is essential to design an ap- propriate regulatory framework for the progress of the stock market. This regulatory framework provides the necessary structure and regulations to ensure integrity, transparency, and trust in the market, which in turn stimulates the participation of investors and companies.

Below are various proposals for fundamental legal reforms for the development of the capital market in the Ecuadorian context:

Regulation and Supervision: As previously reviewed, the principle of proper reg-ulation and supervision is what guarantees the efficient functioning and compliance with the rules and regulations governing the stock market. In Ecuador, following the ISSPOL fraud, the impact on investors caused by the collapse of Ecuagran and Delcorp, and other unfortunate events such as the issuance of prohibitive regulations for the participation of banking entities, which have responded more to a series of ideological political impositions of the time, the shortcomings in the area of regulation and super-vision have been evident and can be addressed through legal reform.

To avoid the incidents mentioned in the previous paragraph, it is proposed to make the relevant reforms within Ecuadorian regulations that allow for strengthening the responsibility of regulatory and supervisory entities to efficiently evaluate and monitor the risks emerging in the stock market and ensure the stability of the financial system. The goal is to transition to a new risk-based regulatory and supervisory model, which is an approach used by regulatory authorities, inspired by best international practices, to monitor and supervise financial activities and markets based on potential risks that may arise. Instead of applying the same rules and requirements uniformly to all participants, this model focuses on identifying and addressing the most significant risks that may affect the sustainability and integrity of the financial system. This risk-based regulatory and supervisory model presupposes several key elements:

• **Proportional Approach:** The regulatory model adopts a proportional approach to supervision, meaning that proportional measures are applied to the magnitude of the risk. This implies that financial entities with higher-risk activities (including those more exposed to money laundering and financing of illegal groups, generally terrorism—



AML/CFT) are subject to more intensive supervision and stricter requirements.

- Continuous Monitoring: Regulatory authorities continuously monitor the financial system and markets to identify and prevent emerging risks. This allows for a more agile response to changing situations and prevents the emergence of systemic risks.
- **Flexibility and Adaptability:** The risk-based model is flexible and adapts to changing market and economic circumstances. Regulations and requirements can be adjusted as needed to address evolving risks.
- Promotion of Self-Regulation: In some cases, the risk-based regulatory model can
 promote self-regulation by financial institutions and other market participants. Entities
 are expected to understand and adequately manage theirown risks to ensure the sustainability and security of their operations.
- **International Coordination:** Given that many systemic financial risks are potentially global, the risk-based regulatory model promotes cooperation and coordination among regulatory authorities at the international level to effectively address risks.

Development of the Public Debt Market: As previously explained and extensively covered by specialized literature on the development of stock markets in developing economies, securities issued by the Government or the Public Sector have a significant share in the market's size. The importance of public fixed-income securities within the stock market is evidenced in at least two aspects: first, by the potential volume of fixed- income securities issued by the Government, relative to other issued securities; and second, by the way these securities establish a benchmark for determining interest rates within the market and the economy.

To boost the development of the stock market, it is vitally important that bonds is- sued by the State meet the most rigorous standards established in various manuals and guidelines issued by international organizations such as the International Monetary Fund (IMF) or the Committee on the Global Financial System of the Bank for International Settlements (BIS). This is essentially done to ensure that the prices of these bonds accurately reflect the inherent level of risk associated with these financial instruments. In the context of Ecuadorian legislation, this implies the need to propose reforms that ensure:

- It is of utmost importance that the Government is strictly committed to the principle of transparency, thereby generating trust and credibility among investors. It is critical that the Government, through the Ministry of Economy and Finance as the issuer, builds and maintains a high level of trust in the market, as this is essential for demand, especially in medium and long-term issuances. Transparency also entails the responsibility to keep the market in-formed about any relevant events that may impact the price of securities or somehow influence decision-making related to investment in these securities.
- Sovereign bonds should be standard securities, with predetermined terms and amounts

that are issued periodically according to a public schedule, allowing investors to have predictability regarding the supply of securities and reducing uncertainty. Additionally, it is important that there is variety in these terms to capture the interest of different types of investors with varying risk appetites and investment horizons. This will allow for an expansion of the investor base, including foreign investors, thereby encouraging growth in the demand for securities.

- The implementation of top-tier financial systems and infrastructure that meet international standards should be required for trading, custody, settlement, and disbursement of securities. A solid market infrastructure protects investors while ensuring the integrity and credibility of the market.
- The participation of institutional investors should be ensured, following the principle of competition and accessibility, through an auction system that leads to price discovery. While direct negotiation between public entities cankeep interest rates below what could occur in the market, this practice limits the Government to negotiating with a very small number of entities, creating dependency and preventing the development of the market. It is important to highlight international experience, which indicates that the best way to develop the public debt market is to start with short-term issuances in the money market. A money market supports the development of the bond market by increasing the liquidity of securities. It also facilitates financial institutions in covering short-term liquidity needs (repo market) and makes it less risky and more profitable to hold short-term securities for sale to other investors or to finance funds and investment managers.

Centralized Deposits and Clearing and Settlement Systems: The financial infra-structure of the stock market in the country faces very critical operational and reputational risks, where significant improvements are needed to ensure compliance with international standards. Let's recall the ISSPOL case, where more than \$900 million in investments by the entity were affected, exposing the concerning condition of centralized deposits, both the DCV and DECEVALE. Consequently, it is necessary for a reform of the stock market regulations to incorporate, as a requirement for their authorization to operate, compliance with international standards, and demand that:

- An internationally certified electronic system be used.
- Transactions are settled in real-time, and the "delivery versus payment" principle is
 ensured, which stipulates that payment is made before or at the sametime as the delivery of securities.
- Systems and processes are audited by internationally certified or accredited entities.
- Centralized deposits have mechanisms for identifying, preventing, monitoring, and managing operational risks.

Raising standards and improving the quality of the stock market's systems and infrastructure offers a significant benefit: attracting foreign investment in national sovereign bonds and other securities. This brings in resources that strengthen the country's capital account, increases liquidity in the stock market, and expands the base of investors interested in local securities. When systems and infrastructure comply with international standards, the connection of national deposits with international centralized systems like EUROCLEAR or Clearstream is enabled. This further simplifies foreign investors'access to local securities, as they often prefer to use these international deposits. This integration represents a significant boost for the development of the domestic market.

The stock market in Guayaquil has experienced sustained growth, with an increase in fixed-income issuances from \$1.5 billion in 2013 to \$1.9 billion in 2023. Despite some fluctuations, the general trend has been positive, driven by economic stability and market confidence.

A correlation was observed between GDP growth and the amounts traded in the stock market. Periods of economic growth, such as in 2021 with a GDP of 4.2%, coincided with high trading volumes (\$1.135 billion in fixed-income issuances).

The public sector has dominated the stock market with a 59.39% share, while the private sector accounts for 40.61%. However, in 2022, for the first time, the private sector surpassed the public sector with 51% of the market, reflecting a shift in business financing dynamics.

4. CONCLUSIONS

Over the past decade, Guayaquil has witnessed a significant increase in activity within the fixed-income securities market, reflecting the ambition of local companies to finance projects and expand their operations through the stock market. This analysis explores the key factors that have influenced the success of these issuances, considering economic conditions, business strategies, and financial regulations.

Corporate Financing Strategies: Various financing strategies were employed by companies in Guayaquil to attract investments. It was observed that companies with solid financial management and clear long-term objectives had an easier time attracting investors because they could demonstrate that their projects had great potential for re-turn on investment and viability.

Regulatory Compliance and Transparency: Transparent communication regarding financial information and strict compliance with stock market regulations were crucialin building investor confidence. Companies that upheld high ethical and governance standards were able to reduce risks and improve their risk-return profile.

Resilience to Economic and Political Crises: In the face of political changes or economic downturns, companies that demonstrated resilience and flexibility achieved better outcomes in the demand for their issuances. Flexibility and risk management became key differenti-

ators in the stock market.

Education and Awareness of the Stock Market: Educational campaigns and effective communication about the benefits and risks of investing in the stock market were identified as factors that helped increase investor participation and confidence. For the success of fixed-income issuances, the level of education among both investors and the general public in Guayaquil was crucial.

Impact of Technology and Digitalization: The adoption of cutting-edge technologies in financial management and corporate communication increased real-time access to information and improved operational efficiency. Companies that utilized digital platforms to promote and manage their fixed-income issuances demonstrated a greater ability to reach a broader range of potential investors.

Future Prospects and Challenges: As Guayaquil continues to grow as a regional financial center, companies will face new challenges and opportunities in the fixed-in- come securities market. Adaptability, continuous innovation, and maintaining high standards of transparency and governance will remain essential to ensuring success and sustainability in this constantly changing economic and financial environment.

5. RECOMMENDATIONS

Strengthening Financial Management: It is imperative that companies in Guayaquil maintain solid and transparent financial management by adopting clear and consistent practices in financial reporting to ensure accurate and accessible information for investors and regulators. This practice will help maintain good relationships with all stakeholders and improve their trust in the companies.

Continuous Improvement in Corporate Governance: The continuous improvement cycle in corporate governance should always be in place, which involves strengthening audit committees and ensuring independent representation on the board of directors. Adopting international governance standards will increase transparency and best practices in accountability, which is vital for enhancing investor confidence.

Business Adaptability and Resilience: Companies should place special emphasis on fostering organizational cultures that value adaptability to change and resilience. This will equip them with the tools to address economic and political changes by adjusting their strategies and operations based on market conditions and current regulations.

Active Monitoring of External Factors: Companies must develop capabilities for evaluating and transforming in response to changes in external factors. These factors may include global economic fluctuations and geopolitical events, to which companies must quickly adapt their processes or organizational culture to minimize risks and capitalize on opportunities.



Commitment to Sustainable Development: Demonstrating a genuine commitment to sustainable development and community well-being helps build a strong reputation in the market. By using sustainable and responsible practices, companies can enhance public perception and attract investors who value ethics.

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