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Green Bond Issuance: What Affects And What Is Affected?

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Abstract: *This study aims to identify the factors that affect the bond issuance process, as well as the impact of bond issuance across different dimensions, as referenced by recent studies. The study applied a systematic literature review approach, and the time frame was from 2020 to November 2024, using the Google Scholar database.[1] The results indicate several groups of factors affecting the issuance of green bonds, as well as various dimensions influenced by the issuance of green bonds.*

Keywords: *Green Bond, Green innovations, and Green Bond issuance.*

Introduction

Financial studies have recently focused on the topic of green bonds, especially with the global trend towards confronting the problem of the negative effects of climate change, as well as the world's aspiration to maintain the ability to achieve sustainable development goals. Over the past few years, it has become clear that all countries need to move towards what is known as "greening the financial system" in line with the deployment of new tools, procedures, and systems aimed at urging the financial system to take climate and environmental considerations into account when managing financial risks, and thus in making investment decisions (Stefano Spinasi, 2021). Green bonds are considered one of the most appropriate sources of financing for financing environmentally friendly projects and achieving sustainable development goals. Green bonds, like any other bonds, are fixed-income securities to raise capital to finance low-carbon investments, or environmentally friendly investments in general (Eftichios S. Sartzetakis, 2021). The main difference between regular bonds and green bonds is the commitment to use the proceeds of green bond issuance in green projects (Serena Fatica, Roberto Panzica, 2021).

The OECD offers several reasons why green bonds are better for both the public and private sectors to finance low-carbon infrastructure. These reasons are: (1) providing an additional source of green finance to cover the huge needs in green investments, (2) providing more long-term financing for hard-to-achieve green projects, (3) promoting the development of green strategies for green bond issuers including improvements in their environmental risk management processes, (4) promoting a high degree of transparency, making the environmental reputation of issuers an important issue, (5) offering a cost advantage is the differentiated pricing of green bonds versus regular bonds, and (6) providing institutional investors with new financial tools to achieve their investment objectives (Eftichios S. Sartzetakis, 2021).

Studies on green bonds have been numerous and have addressed many related aspects. Some studies focus on the advantages of green bonds, while others address the legal and regulatory frameworks that support the growth of the green bond market. These studies also examine the financial factors and characteristics of the issuing companies. Of course, some of these studies focus on the relationship and role of green bonds in addressing the problem

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of climate change, financing environmentally friendly projects, and supporting sustainable development.

Therefore, the great momentum of studies related to green bonds arouses the interest of specialists and stakeholders, including company managers, investors, and government officials, to know what these studies have reached in various fields and dimensions. With the large number of these studies, there is a need to collect and list the latest results of these studies, to be among the considerations taken into account when making decisions to issue green bonds. This study attempts to answer two important questions in this regard: (1) What affects the issuance of green bonds? (2) What is affected by the issuance of green bonds? The rest of this study will proceed as follows: Explaining the study methodology, reviewing the results of the studies, and concluding.

Methodology

This study employed a systematic literature review approach, relying on studies from the Google Scholar and Scopus databases covering the period from 2020 to November 2024. The analysis was divided into two main sections: Section One focuses on studies addressing factors affecting the issuance of green bonds, while Section Two examines studies on what is affected by the issuance of green bonds. Additionally, the analysis was enhanced by categorizing the results of each section according to the factors and variables discussed in these studies.

Results and Discussion

First: What are the factors affecting the issuance of green bonds?

Regarding the factors that have been observed affecting the issuance of bonds, these studies have recently addressed several factors, and we will review these factors within groups as follows:

Green Bonds Issuance and Some Initial General Factors

The results showed that the long-term debt ratio and the level of governance can significantly influence a company's decision to choose between using green or conventional bonds for financing. Gender diversity on the board of directors and the maturity structure of a company's debt also positively influence the propensity to issue green bonds (Antonella Francesca Cicciello et al., 2022).

The decision to choose between issuing green bonds and issuing conventional bonds can also be influenced by the size of the demand for financing, the preferences of the issuing companies, the specific characteristics of the bonds, the financial advantages of the issuing companies, and external environmental conditions (Bo Qiang Lin, Tong Su, 2022).

It has also been shown that more sustainability-focused business culture and financial institutions lead to accelerated growth in green bond issuances (Asbjørn Torvanger, Aaron Maltais, Iulia Marginean, 2021). At the same time, competition, immaturity of the financial market, and low awareness of the importance of environmentally friendly investments can hinder the expansion of green bond issuances (Ivan Sangiorgi, Lisa Schopohl, 2023).

Another important factor that leads to the success of green bond issuance, especially unrated ones, is external reviews by entities such as the Capital Market Authority because these reviews lead to reducing the severity of the problem of information asymmetry between issuers and investors, and thus increasing the demand for green bond issuances (Marco Ghitti, et al. 2023). Therefore, it can be said that credit rating is one of the factors that must be taken into account when issuing green bonds (Kentaka Aruga, Timothy Bolt, 2023).

Among the most important obstacles facing the decision to issue green bonds are the weakness of the regulatory framework, the lack of incentives and tax benefits provided to companies and issuers, and the lack of a high level of confidence among investors in the quality and credibility of environmentally friendly projects (V Hong Nguyen, Lan Anh Thi Nguyen, Hong Quan Le, Linh Chi Tran, 2024).

Issuing Green Bonds and Disclosure, Transparency

Disclosure and readability of green bond frameworks and annual reports have been shown to increase bond liquidity (Martin Lebel, Souad Lajili Jarjir, Sirin Sassi, 2022). While the lack of clarity in reporting and the low quality of the process of allocating bond proceeds to green projects, make most investors reluctant to invest in green bond issues (Ivan Sangiorgi, Lisa Schopol, 2021). There is evidence that the transparency of green bonds has a significant impact on the success of their issuance, as higher levels of transparency lead to higher returns, which motivates investors to make decisions to invest in green bond issues (Irina Janković, Vladimir Vasic, Vlado Kovacevic, 2022).

Issuing Green Bonds and Fintech

Fintech, through blockchain, smart contracts, and digital platforms, is raising the level of ESG reporting associated with green bond issuance. It is also positively impacting the structuring and distribution of green bonds (Pascal Ugochukwu Ojukwu, et al., 2024). Therefore, it is natural to say that the development of financial technology greatly supports the issuance of green bonds (Misra, Neeti, et al. 2023).

Issuing Green Bonds and Monetary Policies

Monetary policies are of great importance in supporting the success of green bond issuance and the development of its market (Chuc Anh Tu, Ehsan Rasoulinezhad, Tapan Sarker, 2020). However, unconventional monetary policies negatively impact the spread of green bond trading in the secondary market, although their effect is weak in the issuance market (Fang Fang, Deng-Kui Si, Debao Hu, 2023).

Second: What is affected by green bond issuance?

Issuing Green bonds and green transformation

Issuing green bonds significantly supports the green transformation of enterprises, particularly state-owned enterprises, small-scale enterprises, and non-industrial enterprises, by promoting green regulatory compliance and governance (Zhonghua Zheng, Yixuan Wu, 2024).

Green bond issuance also supports progress in increasing investment in green technologies and environmentally friendly innovations (Tuo Wang, Xiaoxing Liu, Hu Wang, 2022). Issuing green bonds has a positive impact on the efficiency of using renewable natural resources in the short and long term (Xiang Ye, Ehsan Rasoulinezhad, 2023). Issuing green bonds gives issuers greater ability to have a better level of environmental commitment and lower carbon dioxide emissions (C. José García, et al., 2023).

On the other hand, issuing green bonds encourages companies to invest in clean energy, renewable energy projects, enhance environmental sustainability, and improve and raise the energy efficiency index and environmental quality in society (Syed Sumair Shah, Gulnora Murodova, Anwar Khan, 2024). It is also proven that issuing green bonds can raise the level of companies in terms of environmental commitment, social responsibility, and governance measures (Jinlin Zheng, Yaohui Jiang, Yadong Cui, Yue Shen, 2023). Issuing

green bonds helps to raise the level of green technological innovation (GTI) of enterprises, through the function of financing restriction, investment incentive function, and green regulation function (Penghan Ren, Zhonghua Cheng, Qingling Dai, 2024). Issuing green bonds promotes green innovation in regions with weak climate regulation, industries with better environmental performance, and companies with more concentrated ownership. As a result of this promotion of green innovation, the allocation of funds to research activities is improved (Hanmin Dong, Lin Zhang, Huanhuan Zheng, 2024).

Issuing Green Bonds and Corporate Performance

The announcement of green bond issuance leads to positive returns on the issuing companies' stocks, which means that companies' engagement in sustainable finance practices improves the long-term value of the company, which is the goal of shareholders (Jia Zhen Wang, Shen Chen, Xiaoxia Li, Jing Yu, Rui Zong, 2020; Dragon Yongjun Tang, Yubo Zhang, 2020).

Green bond issuance also has a positive effect on the development of corporate innovation performance (Mohammad Osman Khurram et al., 2023). Green bonds drive corporate performance in a positive direction if the company is related to the renewable energy sector, or is located in communities with high renewable energy consumption (Xiujie Tan et al., 2022).

Using the return on equity ratio as a measure of corporate financial performance, an improvement in the financial performance of energy companies was observed in the years in which these companies issued green bonds (Maria Clara Pereira Pires, Ana Isabel Guerra Cantarinha, 2024). Green bond issuance is also associated with a reduced cost of debt and overall cost of capital for green bond issuers, which occurs through the success of green projects financed by green bond issuances in (a) reducing information asymmetry, (b) improving the liquidity of securities, and (c) reducing the perceived risk of bond issuers (Ran Zhang, Yanru Li, Yingzhou Liu, 2021).

Conclusion

This study showed that recent research on green bond issuance identified several factors impacting the issuance process, with the most significant being the direct effects of disclosure and transparency levels, financial technology, regulatory frameworks, provided incentives, and monetary policies. Additionally, issuing green bonds positively influences green innovation, the efficient use of renewable resources, investment in clean energy, the environmental commitment of issuing entities, social responsibility, governance, equity returns, long-term company value, return on equity, and reductions in the cost of debt and total cost of capital. The studies also largely agree on the importance of green bond issuance for facilitating green transformation in all its dimensions. The findings of this study can benefit various stakeholders, including green bond issuers, financial market regulators, governments, and investors.

Future Research

Despite the diversity of studies addressing the issuance of green bonds and their rich findings, many aspects related to green bond issuance still require further investigation. These include, for example, strategies to encourage companies to expand financing through green bonds, identifying the types of incentives that can support the growth of the green bond market, and raising investors' awareness of the importance of green financing through green bonds.

REFERENCES

1. Antonella Francesca Cicchiello, Matteo Cotugno, Stefano Monferrà, Salvatore Perdichizzi,Which are the factors influencing green bonds issuance? Evidence from the European bonds market, Finance Research Letters, Volume 50,2022.
2. Asbjørn Torvanger, Aaron Maltais, Iulia Marginean, Green bonds in Sweden and Norway: What are the success factors?, Journal of Cleaner Production, Volume 324, 2021.
3. Boqiang Lin, Tong Su, Green bond vs conventional bond: Outline the rationale behind issuance choices in China, International Review of Financial Analysis, Volume 81, 2022.
4. C. José García, Begoña Herrero, José Luis Miralles-Quirós, Maria del Mar Miralllles-Quirós, Exploring the determinants of corporate green bond issuance and its environmental implication: The role of corporate board, Technological Forecasting and Social Change, Volume 189, 2023.
5. Chuc Anh Tu, Ehsan Rasoulinezhad, Tapan Sarker, Investigating solutions for the development of a green bond market: Evidence from analytic hierarchy process, Finance Research Letters, Volume 34, 2020.
6. Dragon Yongjun Tang, Yupu Zhang, Do shareholders benefit from green bonds?, Journal of Corporate Finance, Volume 61, 2020.
7. Fang Fang, Deng-Kui Si, Debao Hu, Green bond spread effect of unconventional monetary policy: Evidence from China, Economic Analysis and Policy, Volume 80, 2023.
8. Fatica S, Panzica R. Green bonds as a tool against climate change? Bus Strat Env. 2021.
9. Hanmin Dong, Lin Zhang, Huanhuan Zheng, Green bonds: Fueling green innovation or just a fad?, Energy Economics, Volume 135, 2024.
10. Irena Jankovic, Vladimir Vasic, Vlado Kovacevic, Does transparency matter? Evidence from panel analysis of the EU government green bonds, Energy Economics, Volume 114, 2022.
11. Ivan Sangiorgi, Lisa Schopohl, Why do institutional investors buy green bonds: Evidence from a survey of European asset managers, International Review of Financial Analysis, Volume 75, 2021.
12. Jiazhen Wang, Xin Chen, Xiaoxia Li, Jing Yu, Rui Zhong, The market reaction to green bond issuance: Evidence from China, Pacific-Basin Finance Journal, Volume 60, 2020.
13. Jin Huang, Ruiqi Liu, Wenting Wang, Zi'ang Wang, Congwei Wang, Yong (Jimmy) Jin, Unleashing Fintech's potential: A catalyst for green bonds issuance, Journal of International Financial Markets, Institutions and Money, Volume 93, 2024.
14. Jinlin Zheng, Yaohui Jiang, Yadong Cui, Yue Shen, Green bond issuance and corporate ESG performance: Steps toward green and low-carbon development, Research in International Business and Finance, Volume 66, 2023.
15. Kentaka Aruga, Timothy Bolt, Identifying factors affecting the preference for green bonds: A Japanese case study, Journal of Climate Finance, Volume 5, 2023.
16. Khurram, Muhammad Usman, Xie, Wenwu, Mirza, Sultan Sikandar, Tong, Hao, Green bonds issuance, innovation performance, and corporate value: Empirical evidence from China, 2023/04/01, 2023.
17. Martin Lebelle, Souad Lajili Jarjir, Syrine Sassi, The effect of issuance documentation disclosure and readability on liquidity: Evidence from green bonds, Global Finance Journal, Volume 51, 2022.
18. Misra, Neeti, et al. Role of blockchain technology integration for green bonds issuance with sustainability aspect. International Journal on Recent and Innovation Trends in Computing and Communication, 2023, 11.06: 134-142.
19. Nguyen, Phi-Hung, Thi Nguyen, Lan- Anh, Hong-Quan, Tran, Linh-Chi, Navigating critical barriers for green bond markets using A fuzzy multi-criteria decision-making model: Case study in Vietnam, 2024/07/15, 2024.
20. Pascal Ugochukwu Ojukwu, Emmanuel Cadet, Olajide Soji Osundare, Ololade Gilbert Fakeyede, Adebimpe Bolatito Ige, Abel Uzoka, Advancing Green Bonds through FinTech Innovations: A Conceptual Insight into Opportunities and Challenges, International Journal Of Engineering Research And Development, Volume 20, Issue 11 November, 2024.
21. Pengfei Ge, Wen Yue, Chuxiong Tang, Rui Zhu, How does the issuance of green bonds impact stock price crash risk: An analysis utilizing the NCSKEW and DUVOL, Journal of Environmental Management, Volume 367, 2024.
22. Penghan Ren, Zhonghua Cheng, Qingling Dai, Can green bond issuance promote enterprise green technological innovation?, The North American Journal of Economics and Finance, Volume 69, Part A, 2024.
23. Pires, M. C. P., & Cantarinha, A. I. G, Do Green Bonds Issue Statistically Significant Effect on the Indebteness' European Companies' Performance?, Vol. 18 No. 10, 2024.

24. Sartzetakis, Eftichios, Green Bonds as an Instrument to Finance Low Carbon Transition 2021.
25. Stefano Spinasi, European green bonds, European Parliamentary Research Service, 2023.
26. Syed Sumair Shah, Gulnora Murodova, Anwar Khan, Achieving zero emission targets: The influence of green bonds on clean energy investment and environmental quality, Journal of Environmental Management, Volume 364, 2024.
27. Tuo Wang, Xiaoxing Liu, Hu Wang, Green bonds, financing constraints, and green innovation, Journal of Cleaner Production, Volume 381, Part 1, 2022.
28. Xiang Ye, Ehsan Rasoulinezhad,Assessment of impacts of green bonds on renewable energy utilization efficiency, Renewable Energy, Volume 202,2023.
29. Xiujie Tan, Hanmin Dong, Yishuang Liu, Xin Su, Zixian Li, Green bonds and corporate performance: A potential way to achieve green recovery, Renewable Energy, Volume 200, 2022.
30. Zhonghua Cheng, Yixuan Wu,Can the issuance of green bonds promote corporate green transformation?, Journal of CleaneProduction,Volume 443, 2024.