GREEN BONDS - FINANCIAL TOOL FOR SUSTAINABLE DEVELOPMENT OF ENTERPRISES

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Abstract

Green bonds are still a new financial instrument in Vietnam’s financial market. Awareness on developing green financial tools and green financial markets needs to be raised to support Vietnam’s Green Growth Strategy. The study has conducted a small-scale survey of consumers to confirm the need for green consumer products and support for green investments among the Vietnamese community. The opinions of experts from in-depth interviews, combined with the synthesis of research results from the literature review of foreign studies, have shown policy implications for the development of green bond tools for Vietnam.

Keyword:

1. INTRODUCTION

The development of the world economy as well as of each country poses many challenges to the quality of life of people. Economic growth can bring comfort to humans, but it also creates a polluted environment that directly affects human health. The issue of sustainable economic development in the direction of environmental protection has been increasingly attracting the attention of researchers and policy makers. The concepts of “green growth” and “green economy” have become familiar to many communities. The concept of “green” is also spread into each economic sector and type of business. In particular, green bonds have become a capital raising tool for businesses with the desire to enhance sustainable activities for the green economy.

Although all individuals have a common awareness of the need to bring awareness about business activities towards green economy, personal interests are often not consistent with the common interests of the whole community. Therefore, the green bond market has also grown rapidly in recent years, but still has a
limited scale compared to other financial markets (Kochetygova & Jauhari, 2014). Quantitative studies also show that there is no difference between yields of green bonds and ordinary bonds, but investors are increasingly attaching importance to green bonds than ordinary bonds (Derwall & Koedijk, 2009; Jo, Kim & Park, 2014; Ulrika Ross, 2014;)

This study also focuses on clarifying the awareness of green bonds in Vietnam. Based on Vietnam's green growth strategy (2012), studies on green bonds are quite limited. Based on in-depth interviews with experts from market management agencies, investment funds, securities companies, green bond capital mobilization tools in Vietnam which is considered a new tool but not yet a tool of choice for Vietnamese businesses. However, the survey results of people on the need to use green products and the level of support for green investment activities have shown the potential of developing green bond tools in Vietnam. This initial research result will be policy implications for future green bond market development in Vietnam.

2. LITERATURE REVIEW

The research on green bonds has attracted the attention of researchers in recent years. Research issues include:

* **Comparison between green bonds and traditional bonds:**

   There is no difference in yields between green bonds and / or socially responsible instruments compared to bonds or regular investments.

   Studies on green bonds have not been much due to the appearance of this tool is quite new. However, similar studies on the comparison between traditional investments and ethical investments have been conducted by Statman (2000). Investment funds associated with social responsibility are considered investments that are similar to green investments and green bonds. Since investment funds have long been associated with social responsibility, research data is long enough to compare between conventional investment funds and investment funds associated with social responsibility (Hamilton et al., 1993; Statman., 2000).

   The return on the investments is no different. Return on investments has no significant relationship to the nature and structure of the investment, whether it is a high social morality investment (Friberg & Sanctuary, 2012), or is a specific investment for the Muslim community (Ariff et al., 2013)

   Meanwhile, Elsässer (2014) studied Sweden's pension fund on the basis of a survey. 25% of respondents think that ethical investments should be paid attention to even if returns are lower.
The comparative method used with pairs of bonds (Ariff et al., 2013) or between pairs of investment funds (Kreander et al., 2005; Renneboog et al., 2008; Bauer et al. 2005) also have some general criteria, but differ in nature related to social responsibility. The research results show that there is no difference between investments or between bonds in terms of income. Despite the awareness, everyone shows the need for socially responsible investments but the returns are not high. This also implies that green bonds are still a policy intervention tool, not a competition-for-profit tool.

Östlund (2015) in his study “Are investors rational profit maximisers or do they exhibit a green preference?” has shown that Green bonds are a newly developed debt investment product to stimulate green investment. Using a data set of 28 matching pairs, the difference between the green and ordinary bonds of the same issuer has been studied to find out if investors have green priority or not. The results show no evidence of the existence of a green priority among investors and instead indicate that green bonds are traded like a traditional bond. Research shows that without a priority policy for green bonds, green bonds are not the factor that increases the proportion of green investment of businesses.

Petrova (2016) in the study “Green Bonds: Lower Profits or Higher Responsibilities?” Studied the question of whether green bonds are a tool that is not only attractive to investors for social target, but also attractive to conventional investors pursuing profit targets. The conclusion of the study showed that no evidence was found for the difference between green and traditional bonds in the period 2008-2016 by using time series analysis and data tables in the framework of Multi-index model. Some studies have similar results when comparing the green bond index with the normal bond index (Derwall & Koedijk, 2009).

* **Green bonds have a higher credit risk from environmental factors than traditional bonds**

Ehlers and Packer (2017) investigated credit risk from environmental factors, which is the risk that borrowers cannot repay their debt due to abnormal fluctuations from the environment, weather or climate or due to changes from environmental regulations. A number of studies have been done to quantify risk factors from the environment into bond prices. Several credit rating agencies have also studied to bring the financial risks related to the issue of carbon emissions under the Paris Agreement when analyzing the credit risks of bond issuers on sectors that cause environmental pollution (Moody’s Investors Service, 2016b).

Baker et al. (2018) in the paper “Funding for climate change response: US green
bond prices and ownership" examines the pricing model and ownership of urban green bonds by using models that combine assets with informal utility sources. The results suggest that green bonds are issued at a higher price than traditional bonds, resulting in lower after-tax returns. The research results also show that green bonds are held longer than traditional bonds.

It can be seen that green bonds are often less competitive than traditional bonds when environmental risk factors are identified and quantified into bond prices. Meanwhile, traditional bonds may not have been comprehensively valued on environmental impacts, so the price does not reflect all risks from investment financing activities from mobilization sources. This is particularly the case with risks related to the environment.

Due to the absence of data and the absence of green bonds in Vietnam, the study was conducted in the interview and initial surveys only to determine the priority and general awareness of the community about green bonds in Vietnam. Based on some findings from the literature review, green bond instruments should be considered as a policy and priority tool to increase attractiveness and competitiveness compared to other conventional financial instruments.

3. RESEARCH METHODOLOGY

Designing a questionnaire about awareness of green products and green investment needs

To assess the public's awareness of the need for green consumer products, and to evaluate the support for mobilizing green resources, the research team tested the survey for consumers based on random basis. We select a Linkert scale of 5 levels from 1 to 5 corresponding to the level of “Disagree” to “Strongly agree” to survey the opinions of the survey participants on green product development and developing a plan to mobilize resources for green product development.

The questionnaire was initially designed with 10 questions about developing green consumer products and 7 questions about investment orientation for green products in the future.

Content of questionnaire:

Part 1: Consists of 6 questions about the surveyed person
- Gender;
- Age;
- Place of residence;
- Workplace;
- Investment channel;
- Know about green bonds.

**Part 2: Consists of 10 questions about consumer awareness and support for green consumer products**

- Green products used?
- Knowing about green products through which channels / means?
- Frequency of using green products?
- Which other green product brands?
- Quality of green products?
- Is the quality of green products good value for money?
- Satisfaction when using green products?
- The need to continue using green products instead of other common products?
- Ready to try out when launching a new product?

**Part 3: consists of 7 questions about the investment orientation for green products in the future**

- A strong development of green products will bring great benefits to the future
- Green bonds (capital mobilization tools that benefit the environment) should be issued.
- Enterprises should promote economic activities towards environmental benefits as part of social responsibility.
- Calling for many human resources to participate in the process of developing green products is essential for businesses.
- Green products bring about sustainable and long-term development for the country.
- The responsibility of each individual in supporting the development of environmental projects is essential.
- Support for increasing investment capital for companies to develop more green products.
Method of interviewing experts

The method of expert interview (in-depth interview) is the type of interview only applied in cases where the researcher has more or less determined the research problem and information to be collected for the topic. The purpose of in-depth interviews is not to understand in a holistic, general way but to help to gain insights into a specific issue. Therefore, in-depth interviews, the interviewer is completely free in how to lead the interview as well as in the order of questions, even how to ask questions to collect the desired information.

Specifically in this study, the research team conducted interviews with bond experts in Vietnam:

- Mr. Nguyen Quang Thuong - Deputy Director of Market Development Department of State Securities Commission.
- Ms. Nguyen Thi Lan - Deputy General Director of Vietinbank Capital Investment Fund
- Mr. Nguyen Quang Thuan - General Director of Stoxplus Joint Stock Company
- Mr. Le Xuan Dong - Director of Stoxplus Joint Stock Company
- Ms. Nguyen Thi Hoat - Finance and bond issuer TCBS

With the questionnaire include the following:

- Policy framework and regulations on green bonds in Vietnam
- Financial infrastructure for Green Bonds
- Financial systems for Green Bonds
- How to set up a risk insurance plan for green bonds
- Mobilized capital for Green Bonds
- When the green bond market loses its liquidity, what are the solutions that need to be implemented?

After interviewing experts, the research team synthesized the ideas and included recommendations on the development of the Green Bond market in Vietnam.

4. RESULTS AND DISCUSSIONS

4.1. Results from questionnaire survey

Based on the results collected from 300 questionnaires, the number of valid responses collected is 200, the survey results are summarized and have the following results:
Cơ hội và thách thức phát triển hệ thống tài chính xanh ở Việt Nam

<table>
<thead>
<tr>
<th>Survey participants worked at</th>
<th>Number of questionnaires sent</th>
<th>Number of questionnaires answered</th>
<th>Density satisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>State agencies</td>
<td>50</td>
<td>39</td>
<td>100%</td>
</tr>
<tr>
<td>Private enterprises</td>
<td>90</td>
<td>68</td>
<td>100%</td>
</tr>
<tr>
<td>State enterprises</td>
<td>70</td>
<td>45</td>
<td>100%</td>
</tr>
<tr>
<td>Freelancer</td>
<td>60</td>
<td>45</td>
<td>100%</td>
</tr>
<tr>
<td>Others</td>
<td>30</td>
<td>3</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>200</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 2: Statistics on characteristics of survey participants

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Number (Frequency)</th>
<th>Proportion (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Male</td>
<td>120</td>
<td>60</td>
</tr>
<tr>
<td>- Female</td>
<td>80</td>
<td>40</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Under 25</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>- 25 – 30</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>- 31 – 40</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>- Over 40</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>Working in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- State agencies</td>
<td>39</td>
<td>19.5</td>
</tr>
<tr>
<td>- Private enterprise</td>
<td>68</td>
<td>34</td>
</tr>
<tr>
<td>- State enterprises</td>
<td>45</td>
<td>22.5</td>
</tr>
<tr>
<td>- Freelancer</td>
<td>45</td>
<td>22.5</td>
</tr>
<tr>
<td>- Others</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>Investment channel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Government bonds</td>
<td>35</td>
<td>17.5</td>
</tr>
<tr>
<td>- Corporate bonds</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>- Stocks</td>
<td>45</td>
<td>22.5</td>
</tr>
<tr>
<td>- Savings</td>
<td>115</td>
<td>57.5</td>
</tr>
<tr>
<td>- Real estate</td>
<td>70</td>
<td>35</td>
</tr>
<tr>
<td>- Others</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Know about green bonds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Yes</td>
<td>77</td>
<td>38.5</td>
</tr>
<tr>
<td>- No</td>
<td>123</td>
<td>61.5</td>
</tr>
</tbody>
</table>

Source: Statistical survey data

The above table shows an overview of the participants of the survey. Questionnaire survey: Most of them are people who have little knowledge about green bonds (accounting for 61.5%), the distribution is quite equal are based on sex and age, living area in Hanoi.
Table 3: Data analysis of questionnaire statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>KS1</td>
<td>200</td>
<td>1</td>
<td>5</td>
<td>4.45</td>
<td>0.542</td>
</tr>
<tr>
<td>KS2</td>
<td>200</td>
<td>1</td>
<td>5</td>
<td>4.50</td>
<td>0.545</td>
</tr>
</tbody>
</table>

Source: Statistical survey data

The results showed that the average score of most factors is 4.45 and 4.50 on the 5-point scale, which proves that most people agree with the opinions of the author about the awareness and support of customers for green consumer products (KS1) and investment orientations for green products in the future (KS2). Specifically:

Customer awareness and support for green consumer products (KS1) Unit: %

![Customer awareness and support for green products](image)

Source: Statistical survey data

Figure 2.1: Customer awareness and support for green products

Question: “The quality of green products is good value for money” (CH3) and “You feel satisfied using the product” (CH4) in the figure 2.1 shows that only about 15% of people Interviewees disagree with the quality of green products being commensurate with the price and not satisfied with using green products. About 75% of people agree with both issues and nearly 20% of people interviewed in the neutral opinion. Thus, it can be seen that the quality of green products is somewhat commensurate with its price and users are also satisfied with the green products they have used.
For two questions: “Do you want to continue using green products instead of other common products” (CH5) and “You are ready to try when launching new green products” (CH6) about 70% of respondents agree on both issues via Figure 2.1. Thus, it can be seen that green products are always highly appreciated and cared for by people.

Investment orientation for green products in the future (KS2, Unit: %)

![Figure 2.2: Investment orientation for green products in the future (KS2)](image)

Source: Statistical survey data

Looking at Figure 2.2, it can be seen that most of the comments on future green product-oriented investment questions have resulted in agreement. Specifically: Regarding the question of assessing the benefits of green products: “According to you, a strong development of green products will bring great benefits to the future” (CH1) and “Green products bring about the sustainable and long-term development for the country” More than 40% of the respondents totally agree with the above issues and about 35% of the respondents agree. Thus, the majority of people surveyed (accounting for 75%) said that a strong development of green products will bring great benefits to the future, this is also the general development trend of the world to develop a long-term and sustainable economy. Regarding the green development issue of Vingroup, the question: “Should green bonds be issued” (CH2) and the question: “Do you support increasing the investment capital to develop additional products?” green products” (CH7) more than 70% of the people surveyed agreed on both issues. Along
with the development of green products, attracting capital for this issue is also an indispensable requirement, and towards green development, the capital mobilization tool of green bonds will soon be deployed. On the side of green development for businesses, two questions: “Enterprises should promote economic activities towards environmental benefits as part of their responsibilities” (CH3) and “Calling for more resources involved in the development of essential green products for businesses” (CH4) also have high results and only about 10% of people surveyed disagree with the above issues. Environmental protection issues will not only be in the present and the future should be focused by businesses. On the part of individuals for green development, the question of “Each individual’s responsibility in supporting the development of environmental projects is essential” (CH6) is also agreed by most people. Thus, environmental issues are no longer a separate issue of the state and of businesses, but each individual should be aware of environmental protection.

4.2. Policy discussion

The initial survey results show that awareness of a green life, through green products and support for green investment mechanisms, has been raised among the population in Vietnam.

Combining expert judgment and findings from the review and international experience, the development of green bonds in Vietnam is discussed on several points as follows: In terms of awareness, the Government of Vietnam needs to raise people’s awareness, create reforms in the economy and the financial system to pave the way for the formation and development of green bonds. This is also an important prerequisite for countries to successfully implement green bond development. Policies related to green growth in general and green financial system in Vietnam in particular have been good guidelines for entities in the economy to pay more attention to environmental factors in their activities. This will create green bond supply and demand entities in the market, in particular investors and issuers. In particular, investors will make environmental factors analytical content when making investment decisions, and at the same time, financial institutions and businesses, which have not yet focused on sustainable growth, will pay more attention to environmental factors and consider green bonds as a tool to attract funding for green projects. The components of supply and demand in the market are formed, which will contribute to green bonds being born and develop in Vietnam.

Regarding the mechanism and policies, the Government needs to have a legal
framework for the development of green bonds - issuing directives and guiding documents related to green bonds. Despite mentioning the issuance of green bonds in a number of issued documents, there has not been a specific legal framework for the issuance and use of green bonds. In particular, the Government of Vietnam needs to promulgate specific documents related to green bonds, in which it is necessary to specify its own standards in the identification of green bonds, green projects as well as the principles in the issuance and management of capital formed from green bonds. These standards need to be developed according to GBP 2015 but must also conform to Vietnam’s unique characteristics in the process of economic, political, environmental and social development. This will help green bonds to suit the domestic market and soon become a financial instrument of interest in the market. The principles related to green bonds also need to be specified and detailed so that green bond issuers comply. In addition, transparency of information related to the issuance and use of funds from green bonds should be strictly regulated as a basis for the inspection and supervision of interested subjects. Research and development of a set of indicators to evaluate sustainable development companies also need to be carried out by the competent authorities to attract the attention of investors for green bonds.

Regarding international cooperation, the Government needs to link with foreign organizations such as the World Bank, UNEP, GIZ ... to be consulted and guided in the issuance and development of green bonds in the market. The knowledge and experience of these organizations in green development in recent years will be very helpful for Vietnam in the process of building and developing this type of financial assets. A team of leading experts on economic and environmental development plays an important role in the research and policy advice for the Government in the development of green financial systems as well as green bonds.

Regarding support policies, Vietnam needs to have preferential policies to encourage green bondholders and attract investors interested in this type of asset. After making the principles related to green bonds, the State should give tax, fee or other advantages to issuers as well as domestic and foreign investors. In the project of green bonds, the Hanoi Stock Exchange has proposed to the State Bank to approve the use of green bonds in the open market with the preference that the discount rate is higher than that with the same kind of bonds. In addition, to increase the liquidity of green bonds, the State Bank may set up a mechanism to accept the use of some types of green bonds as a compulsory reserve ... This will create a good impact on encouraging banks to own green
bonds in their asset portfolios, contributing to the development of the market. In short, in order to develop green bonds, the Government and relevant agencies need to promulgate many preferential policies for market participants as this is a relatively new financial asset in the market. Vietnam.

In addition, the Government needs to improve the domestic bond market as well as consider issuing bonds internationally. The stock market, especially the debt trading market in Vietnam, has not really developed. Therefore, in order to develop green bonds in the coming time, Vietnam needs to take measures to help develop the debt trading market in the coming time, thus creating favorable conditions to develop the green bond market. On the other hand, after successful bond issuance overseas, our Government also needs to have orientation for the issuance of green bonds to the international market in order to obtain a large foreign currency source for development green economy in the country.

Regarding the liquidity of green bonds, In order to promote the liquidity of green bonds, the Ministry of Finance needs a mechanism to accept the use of green bonds in open market operations with a higher discount rate than bonds of the same type; allowing credit institutions to use green bonds (government-guaranteed bonds ...) as compulsory reserves. Along with that, there should be a orientation for the issuance of green bonds to the international market in order to obtain a large source of foreign currency, serving the development of green economy.

The Ministry of Finance should develop a Decree on policies to support the implementation of green bond issuance as well as regulations on information disclosure, capital use and project monitoring. For the fields to be issued green bonds, it is necessary to identify specific areas, the list of priority projects and set clear and specific green project selection criteria.

For the State Securities Commission, it is necessary to concentrate on studying and completing the policy framework for developing the modern bond market according to international practices, with priority being given to the development of the green bond market. In particular, continue to study and finalize the sustainability report, requiring a separate report as an independent, higher compliance with GRI criteria. The study provides criteria for offering, listing and monitoring for green labeled products. Encourage businesses to offer, mobilize investment capital for green growth through the capital market for green businesses, projects and products such as listing, issuing green shares, green bonds, and early certificates investing in green projects, programs and fields. In
addition, other issues should be considered such as the development of a green indicator set, green investment certificates issued by Investment Funds for green projects, programs and fields, and future contracts based on green index, green stock. Finally, research should be conducted such as research and development of guidance regulations on social environmental risk management, social responsibility enhancement (CSR) of listed enterprises and public companies.

5. CONCLUSION

Green bonds are a new tool for Vietnam's financial market, but are a potential tool in implementing the Green Growth Strategy. Green bonds may not be a competitive tool on income factors, so it is necessary to have the impact from the Government and related ministries to develop the green bond market in the future. At the same time, public awareness needs to continue to improve, along with the fuller valuation of environmental and social factors into financial instruments. On that basis, green factors will be identified and spread in all fields and activities of the economy.

REFERENCES


[3] Bloomberg (2017), Investors are willing to pay a “green” premium, Bloomberg new energy finance report


