Development of Green Bond Market in China

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Abstract. Green bond has both "bond" and "green" attributes, and is one of the important financing tools of green financial market. By investigating researches on the current situation of green bond market in China, this paper finds out five major problems in China's green bond market: unmatured green bond standards, insufficient information disclosure, limited product categories, insufficient market opening, and poor drive of green investment to economy. To solve these problems, this paper proposes five policy suggestions: improve bond standards, promote green certification, standardize information disclosure, accelerate product innovation, boost green investment. All these suggestions have important practical significance to deepen the construction of China's green bond market system, and promote green development and sustainable development.

1. Introduction

Since China's reform and opening up, with the sustained and rapid growth of economy, the ecological environment has become severely threatened. The best way to coordinate economic and environmental development is to adhere to the development of a green and low-carbon economy and take the path of green development and sustainable development. At present, China's emphasis on ecological resources and environmental protection has risen to an unprecedented level, and the economy has shifted from “high-speed growth” pattern to “high-quality development” pattern. Green development is one of China's “five development concepts”. The report of the 19th CPC National Congress stressed to develop green finance and promote green development.

Green bonds generally refer to bonds that raise funds to support green industry projects. Green bonds have the advantage of solving maturity mismatch, improving market reputation effect, avoiding environmental risks and obtaining policy support. Green bonds increase the opportunities for direct financing of green industry projects and facilitate the green transformation of the real economy.

Based on the development status, this paper studies the main problems in China's green bond market, and proposes targeted reform suggestions to help the domestic green bond market develop better and faster.

2. Development Status of China's Green Bond Market

China's green bond market emerged in 2016 and experienced rapid development. China has become the world's top green bond issuer. The rapid growth of China's green bond market is mainly contributed to the implementation of regulatory and policy tools, promoting green bonds as a financing tool to solve environmental problems.

In terms of the scale of issuance, compared with the explosive growth in 2016, the scale of China's green bond market increased slightly in 2017 and 2018. According to the international common climate bond standard (CBS), China's total green bond issuance reached 210.3 billion yuan in 2018, accounting for 18% of the global green bond issuance.

According to the domestic definition of green standard, green bonds includes projects such as fossil energy. The total issuance of domestic labeled green bonds reached 282.6 billion yuan in 2018, up 12 percent year-on-year.
The scale and volume of green bond issuance of non-financial enterprises such as green corporate bonds and green corporate bonds increased significantly. Due to green non-financial bonds have strong project dependence, the direct participation of China's real economy in the green bond market will be further deepened.

3. The Major Problem in China's Green Bond Market

Although the scale of China's overall green bond market is developing at an amazing rate, there is still a significant gap between domestic emerging green financial market and the foreign mature green bond market.

3.1 Green Bond Standards

There are differences between China's green bond standards and international green bond standards. The first difference lies in the definition and classification of green projects. Green projects in China that do not meet international standards, such as the upgrading of fossil fuel power stations, the improvement of clean coal and coal efficiency, hydropower projects with social or environmental disputes, etc.

The second difference is the proportion of funds raised by green bonds going to green projects. Overseas standards usually limit green bonds to at least 95 percent of the funds raised for green projects, while domestic exchanges require that no less than 70 percent of funds raised by green corporate bonds be invested in green industries.

3.2 Information Disclosure

Information asymmetry is an important factor hindering the expansion of green investment. China bond market is not conducive to achieving unified supervision and market service because multiple regulatory agencies have issued different information disclosure standards for green bond. At present, the environmental information disclosure of China's green bonds still adopts voluntary standards. There are several problems such as lack of evaluation indicators, little quantitative evaluation analysis, and low environmental benefit information disclosure.

The environmental information disclosure of green bonds in China does not fully reflect the positive external characteristics of green bonds, and therefore it is not conducive to the long-term healthy development of the green bond market.

3.3 Product Category

First of all, unlike the vigorous development of overseas green municipal bonds, China has not yet issued local green government bonds or green sovereign bonds. Green infrastructure construction projects mainly rely on fiscal subsidies and bank loans.

Secondly, there are certain obstacles in issuing green panda bonds in China's bond market. The scale of offshore green bonds issued by overseas institutions is far from the overseas exchanges such as the Luxembourg Stock Exchange and the London Stock Exchange. The main reason is that overseas issuers do not understand China's green bond market because domestic and foreign accounting standards and audit supervision methods are not completely consistent.

3.4 Insufficient Market Opening

Although China is the second largest bond market in the world after the United States, the overseas holdings of China bonds are only 2%. The reason is that overseas institution investors in China's green bond market are mainly constrained by “green” and “non-green” factors.

In terms of “green” factors, they include differences in “green” standards at home and abroad, non-uniformity of third-party green certification mechanisms for green bonds, and imperfect environmental information disclosure systems. In terms of “non-green” factors, there are still barriers of cross-border connectivity in China's bond market, and the bond connectivity model is insufficient,
which is not in line with the trading conventions for foreign institutional investors, and limits the expansion of China's green bond market trading scale.

3.5 Green Investment

China's green bond market is still in a state of "green investment still needs to be pulled". The environmental, social and governance (ESG) investment awareness of Chinese investors is still in the embryonic stage, and the socially responsible investment philosophy and cultural atmosphere have not yet been formed.

Due to the lack of effective incentives and conflicts of interest, investors tend to overconsider short-term factors in asset allocation and investment analysis, and pay more attention to financial indicators such as solvency and cash flow, while environmental factors related to long-term sustainability are not considered enough. At the same time, investors generally lack the capabilities to identify, assess and manage environmental risks. Most investors fail to clearly recognize the environmental risks of pollution projects and the environmental benefits of green investments.

4. Policy Suggestions to Improve China's Green Bond Market

In order to accelerate the healthy development of China's green bond market and encourage and guide capital flows to green projects, it is recommended to make breakthroughs in the following aspects:

4.1 Improve Bond Standards

Vigorously strengthen the integration with internationally recognized green bond standards and promote consistent recognition of green bond standards. Coordinate domestic regulatory authorities for green bonds, unify the definition and classification of green projects, and improve regulatory rules. Strengthen the interconnection between the domestic exchange bond market and the inter-bank bond market, improve the problems brought by the decentralization of the regulatory system of China's green bond market. Improve the convenience of capital entering the market, reduce the transaction costs of investors, and promote the standardization of the market.

4.2 Promote Green Certification

Actively encourage green bond issuers to carry out green certification and vigorously promote the green certification process. According to related research, green certification of green bonds is conducive to reducing the risk premium of green bonds. It is recommended to refer to the international market experience, standardize the third-party green certification system for green bonds, improve the standardized management structure system, clarify the implementation specifications of the evaluation business before and during the issuance, update the green certification standards regularly, strengthen the supervision of third-party certification bodies, and attract domestic and foreign investors discover and invest high-quality green bonds.

4.3 Standardize Information Disclosure

Accelerate the establishment of mandatory environmental information disclosure system, raise the awareness of environmental information disclosure of the issuer. Coordinate the establishment of information communication and linkage mechanism, unify environmental information disclosure standards, and refine the forms and requirements for green bond information disclosure. Clarify quantitative indicators for environmental benefit assessment, formulate minimum environmental information disclosure standards, increase quantitative environmental information disclosure. Strengthen the sharing of basic database of environmental information to facilitate investors to understand environmental information in a timely manner. At the same time, strengthen the supervision over the duration of the green bond market, urge the issuer to use the raised funds reasonably according to the stipulated or agreed purposes, urge intermediaries to perform their duties, and strengthen the supervision and verification of environmental violations.
4.4 Accelerate Product Innovation
First, introduce innovative interest rate bonds, such as green government bonds and green sovereign bonds, to support green infrastructure construction. Second, promote the development of socially responsible bonds and sustainable development bonds. Third, broaden the scope of basic assets, promote the development of green asset securitization. Fourth, develop the green bond index and encourage the development of ETF products and other green fund products that track the green index.

4.5 Guide Green Investment
Cultivate a green investment culture in China and raise the market's awareness of green investment. Enrich the multi-level green bond investor system, accelerate the development of domestic responsible investors and professional institutional investors, such as pension funds, mutual funds and insurance companies, and support Chinese institutional investors to adopt the principle of responsible investment (PRI). Vigorously support the cooperation of various investment entities, advocate investment strategy of the environment, society and governance (ESG), and explore the establishment of a green investor network. Strengthen market services, extensively carry out investor education, and promote a voluntary guideline for green investment.

References
[1] Wang Yao, Xu Nan. Comparative Study on the Development of China's Green Bonds and Chinese and Foreign Standards[J]. Financial Forum, 2016, 21(02): 29-3.
[2] Climate Bond Initiative and China Central Depository & Clearing Co.Ltd. China Green Bond Market 2018 [EB/OL].
[3] Climate Bond Initiative (CBI), 2018. Green Bonds Market Summary-H12018.
[4] Lin Mengyao. A Comparative Study of Green Bond Standards at Home and Abroad[J]. Finance & Economy, 2018(04): 46-51.
[5] Cao Yuanyuan, Liu Songtao, Liu Wei. China Green Bond Evaluation and Certification System [J]. China Finance, 2017 (14): 69-71.
[6] Wan Zhihong, Zeng Gang. International Green Bond Market: Status Quo, Experience and Enlightenment[J].Financial Forum,2016,21(02):39-45.
[7] Zhang Chenxu. A Comparative Study of Green Bond Supervision Standards [J]. Fujian Forum (Humanities and Social Sciences Edition), 2018 (09):37-44.
[8] Zerbib O D. The effect of pro-environmental preferences on bond prices: Evidence from green bonds[J]. Journal of Banking & Finance, 2019, 98: 39-60.
[9] Reboredo J C. Green bond and financial markets: Co-movement, diversification and price spillover effects[J]. Energy Economics, 2018, 74: 38-50.
[10]Karpf A, Mandel A. The changing value of the ‘green’label on the US municipal bond market[J]. Nature Climate Change, 2018, 8(2): 161.