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Regulating green bonds in the People's Republic of China: Definitional divergence and implications for policy making

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REGULATING GREEN BONDS IN THE PEOPLE'S REPUBLIC OF CHINA: DEFINITIONAL DIVERGENCE AND IMPLICATIONS FOR POLICY MAKING

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Abstract

The first green bond was issued in the People's Republic of China (PRC) in 2015 and since then the PRC has become a significant player in the world's green bond market. In just three years, green bond issuance in the PRC has skyrocketed from almost none to the country becoming one of the largest issuers globally. Given the nascency of the green bond market in the PRC, there are still two main questions that remain under-researched in the relevant scholarship. The first question relates to whether the multiple definitions of green bonds and the eligible use of proceeds under the Chinese regulations are consistent with international standards. The second question centers on the degree of divergence of the transparency requirements under the Chinese regulations themselves. Using doctrinal and comparative analysis, this article investigates these two questions by examining the relevant Chinese regulations and international standards that underpin the green bond issuance. This article discovers that, despite the fact that the various definitions in relation to green bonds that are provided by the multiple Chinese regulations are generally consistent, there are still some slight differences between them in terms of the eligible uses of green proceeds. These differences may potentially affect lenders' assessment of investments and impact their decisions as to whether to provide financing to the issuer.

Keywords: green bonds in the People's Republic of China, eligible use of proceeds, information disclosure, Chinese regulations

JEL Classification: K29

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1. INTRODUCTION

The first green bond was issued in the PRC in 2015 and since then the PRC has become a significant player in the green bond market in the world. In just three years, green bond issuance in the PRC has skyrocketed from there being almost none to the country becoming one of the largest issuers globally (CBI and CCDC 2019). Officially, the PRC's green bond market started after the promulgation of three essential national regulatory documents on green bonds, namely the People's Bank of China (PBoC) *Announcement* (2015) No. 39 (PBoC 2015a), the *Guidelines on Green Bond Issuance by the National Development and Reform Commission* (NDRC) (NDRC 2015a), and the China Securities Regulatory Commission (CSRC)'s *Guiding Opinions for Supporting the Green Bonds* (CSRC 2017). The PBoC Announcement lays down some fundamental regulatory aspects of green bond issuance in the PRC's market for interbank bond, including the definition of green bond and the requirements for green labeling, as well as the eligible projects that are listed in the Annex, known as the *Green Bonds Endorsed Catalog of Projects* (PBoC 2015b). The guidelines from the NDRC contain some detailed provisions on corporate green bond issuance and its approval requirements, as well as the eligible use of proceeds, with the aim of supporting green bond issuance, offering clear boundaries and streamlined approval procedures (NDRC 2015a). The *Guiding Opinions* from the CSRC provides an overarching regulatory framework for green bond trade through the stock exchanges (CSRC 2017). Shortly after the promulgation of the CSRC *Guiding Opinions*, the NAFMII (National Association of Financial Market Institutional Investors) also released the regulatory document titled *Guidelines on Green Debt Financing Tools for Non-Financial Enterprises*. These guidelines apply to debt financing instruments issued by non-financial enterprises in the interbank market to raise funds for green projects (NAFMII 2017a). The four essential regulations related to green bond issuance in the PRC have significantly supported the proliferation of green bond issuance in the country. The promotion of green bonds, as explicitly mentioned by the PBoC *Announcement* and the NDRC *Guidance*, is to "guide the finance institutions to serve green economic development" and more specifically to "enhance energy conservation and emission reductions, and to address climate change" (NDRC 2015a; PBoC 2015a).

The strong support from the Chinese central authorities has been proved to be effective. Under the official definitions of green bond, the green bond issuance in the PRC equaled \$36.2 billion and \$37.1 billion in 2016 and 2017, respectively (CBI and CCDC 2018). In 2018, the total amount of issuance in the PRC reached \$42.8 billion (CBI and CCDC 2019). Commercial banks and other finance institutions were the largest issuers; however, corporate issuers are becoming more active (CBI and CCDC 2019). Both the Shanghai Stock Exchange and the Shenzhen Stock Exchange have been proactively promoting the issuance of green bonds by the listed companies through revamping and streamlining approval procedures (Shanghai Stock Exchange 2016; Shenzhen Stock Exchange 2016). The Shenzhen Stock Exchange has also been working with some international exchanges to enhance transparency and closure (Shenzhen Stock Exchange 2016).

In the meantime, the Chinese authorities have also improved the regulatory oversight of green bonds issuance in the PRC through enhanced supervision and disclosure requirements (PBoC 2018). Unlike the decentralized regulatory framework that governs the green bond market in other jurisdictions (Park 2018), the PRC's cultivation of the green bond market is largely driven by regulations that are sector-based and top-down (Jiang, Guo, and Gordon-Jones 2018). This top-down approach of institutional and

regulatory legitimacy driven by central guidance is argued to be instrumental for enhancing green financing through market-based finance approaches (Ng 2018). Asian economies are facing some significant challenges to fundamentally shifting their investments away from being fossil-fuel-intensive, and the national policies to support green financing will need to play critical roles to drive such changes (Volz 2018). Given the fact that the market for green bonds and the associated regulatory landscape are relatively new across a number of countries in the Global South, existing studies have focused on green financing in the PRC that is sector-based (Bai, Faure, and Liu 2014; Cui et al. 2018; Motoko and Yang 2010), and the role of the bond market in general (including green bonds) to fill the gap of financing required for low-carbon development in developing countries (Banga 2018; Ng and Tao 2016). To date, very little has been documented about how Chinese regulators define and regulate green bonds through the domestic regulatory framework.

Given the nascency of the green bond market in the PRC, there are still two main questions that remain under-researched in the relevant scholarship and these questions are definitional in nature. The first question relates to whether the multiple definitions of green bonds and the eligible use of proceeds under the Chinese regulations are consistent with international standards. The commonly used international standards for green bond issuance is the Green Bond Principles (GBPs), designed and released by the International Capital Market Association (ICMA). The second question centers on the degree of divergence of the transparency requirements under the Chinese regulations themselves. These two questions are of strong relevance to the development of the green bond market in the PRC, as the consistency of definitions and eligible uses of proceeds, together with the proper requirement on disclosure, will determine whether the green bonds are in fact “green” and whether these definitions and eligible uses will eventually impact the attractiveness of the green bonds from Chinese issuers, both domestically and internationally.

Using doctrinal and comparative analysis, this article investigates the abovementioned two questions by examining the relevant Chinese regulations and international standards underpinning green bond issuance. The legal and comparative analysis is essential for understanding the definitional divergence within the Chinese green-bond-related regulations, in addition to their differences from international standards. To answer the research questions, this article is structured as follows. Part two examines the international standards of green bond issuance to highlight the key principles related to the use of proceeds and information disclosure. The international standards provide a reference against which the Chinese policy and regulatory initiatives are articulated and analyzed. Part three looks at the detailed provisions under the respective regulations promulgated by PBoC, NDRC, CSRC, and NAFMII in terms of the requirements as to the eligible uses of proceeds and the information disclosure standards. Part four of this article identifies the extent to which the Chinese standards and definitions underpinning the green bond issuance are consistent with the commonly used international benchmark. Part five concludes this article and also sheds some light on the policy implications.

2. GOVERNING GREEN BOND ISSUANCE: THE INTERNATIONAL STANDARDS

Green bonds are fixed income security issued by entities, such as government agencies, multilateral organizations, finance institutions, or corporations in order to raise funds from investors to finance investments with environmental and climate-related benefits (Inderst, Kaminker, and Stuart 2012). The concept of green bonds connects to green finance, which aims to “internalize environmental externalities and adjust risk perceptions” for projects that contribute to a carbon-neutral and climate-resilient economy (G20 Green Finance Study Group 2016). In theory, green bonds work by increasing the flow of low-carbon investments, therefore reducing the marginal abatement cost of climate mitigation and enhancing the awareness of financial risks that are associated with climate change. In other words, the key aspect of green bonds is the use of eligible proceeds to fund projects that have environmentally beneficial effects (CBI and CCDC 2018).

However, this textbook definition of green bonds “masks a host of complexities and ambiguities,” given that there is currently a lack of universal definition as to what precisely constitutes an eligible use of proceeds that is environmentally friendly and climate-resilient (Park 2018). The fundamental question in this regard is, to what extent can investors be ensured that the proceeds of green bonds are not “green-washed” and that the eligible proceeds are in fact invested in a low-carbon and climate-resilient approach? (Ehlers and Packer 2017). While there is no single definition of this critical aspect of green bonds, different standards have emerged, which have gained popularity and acceptance among various investors and regulators. A number of organizations have also emerged to provide green label certifications based on various green labeling standards. The indication of adherence to standards of green labeling has the virtue of aligning incentives to investors who are keen to invest in green bonds. Such an indication also enables them to identify which green bonds they would like to invest in. Despite the fact that the green bonds market has grown and expanded rapidly in the past decade and its development trend suggests that it will soon be mainstreamed, its future development still relies largely on its regulatory and governance architecture. Under any given standards, the potential loophole of “greenwashing” is one of the major stumbling blocks to the success and integrity of the green bonds market in the PRC and globally. As essential components of the green bond market in terms of governance and rule-making, the GBPs and Climate Bonds Initiative (CBI) provide some essential regulatory and governance elements, particularly the use of proceeds and disclosure requirements, against which the Chinese regulatory practices can be assessed and analyzed. The following discussion examines the key regulatory aspects of GBPs and CBI.

2.1 Green Bond Principles

Among the various standards, the GBPs provide a widely-adopted and influential governance framework that underpins green bonds issuance. As an example of the standards for green bond issuance, the GBPs are voluntary process guidelines for the verification of green bonds. In its latest version, the GBPs guidelines and processes contain four core components, namely a) use of proceeds; b) process for project evaluation and selection; c) management of proceeds; and d) reporting (ICMA 2018). The GBPs prescribe that these four components are intended to provide guidance and best practices to green bond issuers at different stages, so as to enhance the level of transparency and safeguard integrity when the green bond market continues to evolve

(ICMA 2018). As articulated by the GBPs, the center pillar of the governance framework underpinning green bond issuance is the use and allocation of bond proceeds for environmentally sustainable activities (ICMA 2018). The GBPs clearly state that assets and project activities that are claimed to be green need to demonstrate clear environmental benefits and such benefits need to be verified, assessed, and quantified, to the extent possible, by an issuer (ICMA 2018). As a general guide on eligible projects that are considered green, the GBPs explicitly deploy a number of general categories of eligible green projects with clear environmental benefits, but also clearly prescribe that such taxonomies do not contain an exhaustive list of eligible projects.

Further to the statement on use and allocation of proceeds, there is also a strong focus of the GBPs on establishing transparency and disclosure requirements to ensure market integrity. The transparency requirement focuses on reporting and the recommended use of external review (ICMA 2018). As prescribed by the GBPs, issuers should make and maintain information on the use of proceeds that is most up-to-date (ICMA 2018). Such information should be included in the annual report to indicate the allocation of green bond proceeds to the selected projects, with some additional detail such as allocation amount, project description, and the expected benefits and impact (ICMA 2018). Because of the importance of disclosure requirements, the GBPs put forward the adoption of both “qualitative performance indicators” and “quantitative performance measures” to contain as much detailed information as possible for disclosure about the investments (ICMA 2018).

To enhance the benchmark of practices, the GBPs also endorse the use of external review by issuers to obtain second opinion, verification, certification, and scoring/rating (ICMA 2018). As observed by Park, obtaining second opinions by the issuers in their process of green bond issuance and availability of various types of external review are regarded as key features of the GBPs to embrace the role of private governance as an important means for safeguarding best practices and advancing policy dissemination (Park 2018). A green bond issuer has the choice to seek professional opinions from third-party institutions that are accredited with relevant expertise in environmental sustainability or other aspects that underline green bond issuance (ICMA 2018). The coverage of external review is also flexible, allowing for inclusion of aspects such as the overarching framework of a green bond and/or the reporting by an issuer. Despite the different levels and types of review, the GBPs advocate that the environmental features of investments and projects that are closely related to the green bond need to be reviewed independently to promote transparency of green bond issuance and facilitate communication from the issuer (ICMA 2018).

2.2 Climate Bonds Initiative

The CBI provides a typical example of certification as a model of governance. Certification involves the establishment of some more detailed standards, evaluation, and assessment for compliance with the established standards, a certification label, accreditation requirements for the certifier, and monitoring for compliance (Liaw 2018). Under the certification arrangement, an issuer can choose to have certain aspects of its green bond (such as the associated green bond framework and the use of proceeds) certified against a standard that is well established and recognized to be green (Ehlers and Packer 2017). A green standard contains specific definitions and criteria, and in practice, qualified and accredited third-party agencies can test whether certain aspects of the green bond is aligned and consistent with such definition and criteria under the certification framework (Ehlers and Packer 2017).

An essential component of the CBI is the Climate Bonds Standard & Certification Scheme. The Standard and Certification Scheme allows some key stakeholders, particularly investors and regulators from the government agency, to prioritize investments that are climate friendly, and offers them confidence that the funds will be used to deliver such investments (CBI 2017). CBI's governance regime provides a screening tool that establishes the substantive provisions and eligibility standards for climate bonds certification. The standard adopted by the CBI has set forth a broad Climate Bonds Taxonomy that is detailed and supported by criteria that are sector specific. To meet the certification requirement of CBI, a green bond is required to fulfill some substantive standards regarding both pre-issuance and post-issuance, and the time restriction for satisfying post-issuance requirements is set to be the first two years (CBI 2017). These requirements address some core standards related to green bond issuance, such as assets and activities, internal management, disclosure, and the use and non-contamination of proceeds (CBI 2017). CBI's standards and certification-based governance model highlights the use of more prescriptive and inclusive standards, as compared to the GBPs. The prescriptiveness of CBI's standards is featured by the incorporation of external verification that presents an important progress from the broad and overarching principles established and endorsed by the GBPs. The revolving nature of CBI's governance framework around the interlinked standards and its certification regime are key features that reflect its investor orientation, aiming to establish confidence that a green bond certified by the CBI is genuinely "green" (Park 2018). A limitation of the standard adopted by the CBI is that monitoring and verification is not mandated on an ongoing basis (Ehlers and Packer 2017). For projects that span across a number of years, it is particularly helpful for investors to have timely communication from the issuers about the ongoing greenness of the investment.

3. THE PRC'S POLICY AND REGULATORY INITIATIVES TO PROMOTE GREEN BOND DEVELOPMENT

The use of proceeds and information disclosure requirements are cornerstones of green bond issuance and they are essential for safeguarding the required transparency, accuracy of information, and integrity of practices that are of particular value to the relevant stakeholders. The nascent state of the policy and regulatory initiatives underpinning the green bond development in the PRC makes it possible to individually assess the provisions that are stipulated on the use of proceeds and information disclosure. The discussion below examines each of them in detail and also provides some comparative insights on the use of proceeds and information disclosure.

3.1 The Use of Proceeds

As observed by some key stakeholders that monitor the PRC's green bond market, among the green bonds in the PRC, the portion of those with definitions not consistent with the international standards has remained at 20%–40% since 2016 (Hong Kong Stock Exchange 2018); however, this share decreased in 2018 as compared to 2017 (CBI and CCDC 2019). The key area under scrutiny is the eligible use of proceeds under the respective Chinese rules and guidelines for green bond issuance. A close examination of Chinese standards suggest that most of the regulatory agencies refer to the *Green Bonds Endorsed Catalog of Projects* issued by the PBoC as the identification of eligible use of proceeds and in general the Chinese definition of "green" is consistent with the international standards, despite some minor divergence in terms of the eligibility of whether some specific investments are allowed, as well as the limit

of proceeds used for repayment of debt and general corporate purposes, under the respective Chinese and international frameworks.

Table 1: Assessment Standards for Green Bonds under the PRC's Regulatory Initiatives

Green Bond Types	Green Financial Bond	Green Enterprise Bond	Green Corporate Bond	Green Debt Financing Instrument
Promulgation and Regulating Agency	PBoC	NDRC	CSRC	NAFMII
Regulatory Document	PBoC Announcement No. 39 22 December 2015	Guidelines on Green Bond Issuance, NDRC No. 3504 31 December 2015	Guiding Opinions for Supporting the Green Bond Issuance, CSRC No. 6 2 March 2017	Guidelines on Green Debt Financing Tools for Non-Financial Enterprises, NAFMII No. 10 22 March 2017
Classifications on Use of Proceeds	Green Bonds Endorsed Catalog of Projects	NDRC Guidelines	Green Bonds Endorsed Catalog of Projects	Green Bonds Endorsed Catalog of Projects
Management of Proceeds	A specialized account to be set up to clearly track the management of proceeds	Unspecified	A specialized account to be set up to clearly track the management of proceeds	A specialized account to be set up to clearly track the management of proceeds
Project Evaluation and Assessment	Third-party Certification (voluntary)	Evaluation and Assessment by Regulator	Third-party Certification (voluntary)	Third-party Certification (voluntary)
Information Disclosure	Disclosure on use of proceeds every quarter; publish an annual report on funds use in the previous year and special auditor report before 30 April each year; as well as reporting to PBoC	Unspecified (issuers to disclose based on the requirements stipulated by the general <i>Guidelines for Information Disclosure on Corporate Bond Issuance</i>)	Issuers to disclose on the use of proceeds, progress of green projects, and environmental benefits according to relevant rules or agreements; the bond trustee shall disclose this information in the annual management report	Disclosure on the use of proceeds and progress of green projects in the previous year each year before 30 April; Prior to 30 August each year, disclose the use of proceeds and progress of green projects in the first half of the current year; Encourage third-party certification institutions to disclose information regarding the level of "green" of the debt financing instrument in the assessment conclusion, and implement follow-up assessments to support green project development and environmental benefits, as well as publish relevant assessment reports on a regular basis

Source: Compiled by author based on the regulatory document published by the respective government agency.

As shown in Table 1, the *Green Bonds Endorsed Catalog of Projects* has been used by the PBoC, the CSRC, and the NAFMII as the basis for identifying the project category and determining the project eligibility, with the only exception that the NDRC has established its own project catalog (NDRC 2015a).¹ The commonly used *Green Bonds Endorsed Catalog of Projects* contains six project investment categories including

¹ The NDRC is aligning its catalog with the commonly used PBoC catalog to ensure better consistency for project eligibility.

energy saving, pollution prevention and control, resource conservation and recycling, clean transportation, clean energy, ecological protection, and climate change adaptation (PBoC 2015b). The catalog is specified by some further explanation related to eligibility of sub-sectors and the applicable standards for assessment. As compared to CBI's standards, these Chinese standards contain some very detailed technical specifications that are tailored to the PRC's particular circumstances so as to drive finance into more advanced technology. As shown by the CBI report, the top sectors that received the most green bond financing in 2018 include clean transportation, clean energy (particularly solar and wind), and pollution prevention and control (in particular waste water treatment) (CBI and CCDC 2019). With clear taxonomies and assessment standards as to project eligibility, the PRC's green bond issuance has been clearly guided and enhanced by the types of projects listed under the PBoC's taxonomy.

3.2 Information Disclosure

Being a critical part of the assessment standards for green bonds, information disclosure aims to safeguard transparency of the green bond issuance process and ensure timely communication between the issuer and the investor.

At present, the PRC's green bond market is supervised by four government agencies, namely the PBoC, the NDRC, the CSRC, and the NAFMII. These government agencies have issued corresponding issuance guidelines or relevant rules and regulations for the green bond issuance. In general, the current regulatory requirements for green bonds are established on top of the information disclosure requirements underlying the issuance of ordinary bonds, for example the NDRC's general requirements of disclosure for corporate bonds (NDRC 2015b). At the time of issuance, additional information regarding the eligibility of green projects and the expected outcome of environmental benefits, fund management system, and information disclosure arrangement is required. During the lifetime of the green bond, further disclosure of information on three modules is required: the use of funds that have been raised, the progress of projects, and the progressive realization of environmental benefits (see table below). In addition, although third-party evaluation and certification is yet to be made a legally binding requirement, obtaining outside input from the recognized certification agencies to evaluate and verify the green bond during the different stages of issuance and its duration is encouraged (CSRC 2017; NAFMII 2017a; PBoC 2015a).

Specifically speaking, the different rules and guidelines governing the PRC's green bond issuance have different levels of disclosure requirements. The PBoC's *Announcement* stipulates disclosure on the use of proceeds every quarter; publishing the annual report on fund usage in the previous year and the special auditor report before 30 April each year; and reporting to PBoC (PBoC 2015a). The CSRC *Guiding Opinions* require green bond issuers to disclose the use of proceeds, progress of green projects, and environmental benefits according to relevant rules or agreements; and the bond trustee shall disclose this information in the annual management report (CSRC 2017). The NAFMII guidelines contain provisions that mandate two disclosures, the first one being on the use of proceeds and progress of green projects in the previous year before 30 April each year; and the second one being prior to 30 August each year, disclosing the use of proceeds and progress of green projects in the first half of the current year (NAFMII 2017a). In addition, the NAFMII also encourages third-party certification institutions to disclose information regarding the level of the "green" portion of the debt financing instrument in the assessment conclusion, and to implement follow-up assessments to support green project development and environmental benefits, as well as to publish relevant assessment reports on a regular

basis (NAFMII 2017a). As compared to other regulatory agencies, the NDRC has yet to specify any particular or additional reporting requirements (NDRC 2015a). Issuers that are bound by the NDRC guidelines are only required to disclose based on the requirements stipulated by the general *Guidelines for Information Disclosure on Corporate Bond Issuance* (NDRC 2015b).

4. DEFINITION DIVERGENCE

The above sections review international standards and certification mechanisms available to any green bond issuer. For many jurisdictions that are proactive in further developing the green bond market, such as the PRC, a regulatory system containing the national taxonomies of what constitutes a green investment project has been developed. Notably in the PRC, the PBoC has issued the *Green Bonds Endorsed Catalog of Projects* (PBoC 2015b). Given that the PRC has a relatively large domestic market, having developed an endorsed project catalog is a sensible choice. However, as the green bond market in the PRC is increasingly driven by attracting more overseas international investors, the extent to which the harmonization between the international standards and the Chinese criteria is an issue. The domestic regulatory regime, particularly the guidelines and rules that underpin the issuance of green bonds in the PRC, will carry the risk of diminishing the value of outside input from green bond certification and verification to domestic and international investors. Unless otherwise encouraged or mandated, the alignment between international and Chinese standards is challenged by the limited outside input in the progress of the PRC's green bond market.

4.1 The Use of Proceeds

Despite the general consistency between the Chinese eligibility of projects and the international standards on the use of proceeds, there are still two notable divergences in terms of the specific eligibility of investment in clean coal and the maximum limit of use of proceeds for repayment of debt and general corporate purposes. Under PBoC's catalog, investment in clean coal is listed as an eligible "green" investment, while under international standards, investment in clean coal is not eligible. The eligibility of clean coal as green project means that investment in coal-fired generation is still encouraged, as long as certain technology types will be deployed and the installation capacity is met. Under the PBoC catalog, the technology type is confined to "ultra-supercritical or supercritical combined heat and power generator units, and back pressure heating units" (PBoC 2015b). The capacity requirement is also set for ultra-supercritical or supercritical combined heat and power units to be no less than 300 MW and there is no capacity limit for back pressure heating units (PBoC 2015b). Despite the fact that these two general types of combined heat and power units have much higher and improved energy efficiency, they are still carbon-intensive and contribute to the increasing greenhouse gas emissions in the PRC. Similarly, under the NDRC's project catalog, the key areas of support for green bond investment include the retrofitting of coal-fired generation units toward ultra-low emission and better energy efficiency (NDRC 2015a).² The inclusion of these projects as the eligible use of proceeds faces a challenge in justifying that the investments under the green bond market in the PRC are in line with the policy objective

² Worth noting is that although NDRC is working to align its catalog with PBoC's catalog, the scope of investment in coal-fired generation under NDRC's catalog is much bigger than the specified eligibility under the PBoC catalog.

of protecting the environment and combating climate change, therefore affecting the overall credentials of green bond market development in the PRC.

In addition to this divergence on the eligible use of proceeds, another major difference in terms of the eligible use of proceeds is the maximum limit of proceeds used for debt repayment and general corporate operations. Under the NDRC guidelines, corporate issuers are encouraged to use the proceeds to refine their debt structure (NDRC 2015a). Under the conditions that a safeguarding mechanism to repay the debt is in place, corporate issuers are permitted to use up to 50% of the proceeds for the purposes of debt repayment and general corporate operations (NDRC 2015a). In contrast, the maximum limit of the use of proceeds for such purposes under the international standards is only 5% (Hong Kong Stock Exchange 2018). The vast difference in this regard is of particular challenge to offshore investors who seek to access the market of green corporate bond in the PRC due to the increased transaction cost. Because bonds recognized under the NDRC guidelines are not automatically recognized as green in another market, the divergence entails that foreign investors will have to perform additional due diligence, particularly when the disclosure requirements are also inconsistent under the various regulatory frameworks in the PRC and internationally.

4.2 Information Disclosure

As illustrated in the table below, the requirements from various regulatory authorities for information disclosure of different types of green bond are different and the differences can be seen from the following aspects. First, despite the fact that overall the green bond issuers are required to disclose some additional information, the NDRC *Guidelines on Green Bond Issuance* does not specify any special requirements for information disclosure on green bonds issued by enterprise in the PRC. At present, the issuers of green corporate bonds are only mandated to disclose information based on the requirements stipulated by the general *Guidelines for Information Disclosure on Corporate Bond Issuance* (NDRC 2015b). Undoubtedly due to the nature of general requirements on information disclosure, the guidelines do not contain any specific requirements to disclose the “greenness” of the green corporate bond, including information about the use and management of proceeds for eligible projects that qualify as investments that deliver low-carbon and environmental benefits.

Second, the various regulations contain different provisions in terms of the scope of disclosure. The CSRC and the NAFMII require issuers of green corporate bonds and green debt financing instruments to disclose the category of green project that the investment belongs to, the basis or standards for identifying the category, and the prospective environmental benefits (CSRC 2017; NAFMII 2017a). In response to the uncertainty of the use of proceeds in the financing process of green financial bonds, the PBoC requires the issuer to disclose the project screening criteria, the fund-using plan and the management system for the proceeds (PBoC 2015a).

Finally, in addition to the different scope, there are also some levels of divergence in terms of the specific requirements such as the frequency of reporting and the detailed information needed. The PBoC’s information disclosure on green financial bonds contains stipulation with clear timelines for reporting, the types of documents and information required for disclosure (PBoC 2015a). However, the regulation from the PBoC does not stipulate or specify the extent to which the detail of the disclosure content needs to be for compliance purposes. In contrast, the NAFMII has incorporated relatively clear rules on the content, form, and disclosure of information on green debt financing instruments. As to information disclosure practice, the issuers and third-party certification bodies are given clearer instructions to follow the required disclosure requirements

provisioned under the two officially designed forms, namely the *Information Disclosure Form for Green Debt Financing Instruments* and the *Information Disclosure Form for Green Assessment Report* (NAFMII 2017b). As a matter of operational practicality, these two forms are observed to be more user-friendly and provide clearer instructions to the issuers of green debt financing instruments (Yu and Li 2017).

5. CONCLUSION AND POLICY IMPLICATIONS

This article discovers that, despite the fact that the various definitions in relation to green bonds, as provided by the multiple Chinese rules and guidelines, are generally consistent, there are some major differences in the area of information disclosure. These differences may potentially affect lenders' assessment of investment and impact their decision on whether to provide financing to the issuer. In addition, the various Chinese definitions of what comprises a green bond also differ from international standards in terms of transparency requirement as well as the eligible uses of green proceeds. In practical terms, these differences will dis-incentivize international investors from providing financing to Chinese issuers.

The development of the green bond market in the PRC is supported by the central government's regulatory and policy framework through a top-down approach. With strong policy support and streamlined approval procedures, green bond issuance has been underpinned by the increasing demand for green finance by Chinese investors. Although there has been some offshore issuance of green bonds by Chinese issuers, the definitional divergence within the Chinese regulatory documents and their difference from the international standards are the major stumbling blocks to further enhancing the attractiveness of Chinese green bonds.

Due to the definitional divergence of green bond issuance in the PRC, there is a strong need to close the gaps between the Chinese regulations themselves, as well as between the Chinese definitions and the international standards on green bond issuance. In addition, there is some room for improvement in the area of transparency and disclosure. Greater transparency is in demand, but the measures to safeguard adequate transparency and disclosure, such as external review, are yet to be made mandatory under the Chinese green bond policies and regulations. Harmonization of the standards for green bond issuance is a key area for further development of the green bond market in the PRC so as to scale up responsible and sustainable investment. Given the strong top-down support by the Chinese central government authorities, harmonizing the standards requires better coordination between various regulators and policy makers to achieve uniformity of green labeling and an adequate level of information disclosure.

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