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Green Credit Model of Green Banks in Some Countries around the World and Green Credit Supervision Regulations in Vietnam

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Abstract

The Banking sector contributes significantly to the implementation of green growth as a tool to encourage financial investment in environmentally friendly projects. Therefore, the green credit model is considered a unique financial tool, with important implications in controlling the environmental protection behavior of businesses and preventing uncontrolled development of businesses. Causing pollution and harm to the environment. The green credit model plays an important role in providing the necessary capital to achieve the United Nations' sustainable development goals, especially issues related to the environment and climate. In Vietnam, green credit activities have also been implemented in recent years and achieved many encouraging results in many fields, including energy saving, renewable energy, clean agriculture. And high-tech agriculture. However, there are still many obstacles and challenges in the process of implementing this new growth model. Green credit is a credit strategy of banks that does not support businesses that pollute the environment. Green credit adjusts the long-term and short-term credit ratio structure for businesses, thereby affecting the investment structure and investment efficiency of heavily polluting

businesses. In the process of granting green credit, the bank takes information related to the project and the business applying for the loan as a check standard during the lending process, then makes a lending decision. In other words, green credit is understood as credits intended to support production and business projects that pose no or little risk to the environment, contribute to protecting the general ecology, and are a manifestation of the financial system. Main direction towards sustainable development. In Vietnam, according to Article 149 of the Law on Environmental Protection 2020, effective from January 1, 2022, regulations on green credit are as follows: Green credit is credit granted to the following investment projects : (i) Effective use of natural resources; (ii) Responding to climate change; (iii) Waste management; (iv) Treating pollution and improving environmental quality; (v) Restoration of natural ecosystems; (vi) Conservation of nature and biodiversity; (vii) Create other environmental benefits. Through studying regulations for supervising green credit activities of banks, the article makes recommendations for credit activities of green banks in the coming time.

Keywords: Green Banking, Green Credit, Basel Accord

1. Introduction

Internationally, "green growth" has become a panacea to respond to risks around the world and contribute to strong development. The 2015 Paris Agreement opened a new journey for global climate action, showing the importance and global desire for green growth, moving towards low-carbon production. Wanting to implement green growth projects cannot be separated from huge financial support from banks. Thanks to the enlightenment of most parties about "green growth", in recent times, more and more organizations in the financial market have begun to provide funds for green transition. Therefore, the scale of financing in the green sector shows rapid growth. However, compared to the need for capital for green transformation, there is still a huge shortage. Banks are key in narrowing this gap, and banks are also the "leaders" in emerging or developing countries in providing green credit. However, given the high costs, long payback periods and additional certification required (also facing additional costs and legal risks) of green projects, banks are clearly not motivated enough. force to provide green credit. This creates a huge shortage in green credit supply in emerging or developing countries. Therefore, how to design an appropriate and effective mechanism to motivate banks to pour more money into green projects has become an urgent issue. To address the lack of incentives for banks to provide green credit, banking supervision policies are very important. Recently,

many scholars and international organizations have proposed that green credit sources can be increased by reducing risk weight requirements for green credit. Reducing the weight of green credit risks can stimulate banks to provide green credit without violating the principles of macro-financial supervision and management. Vietnam should take the lead in promoting risk reduction practices. green credit. Risk weight is closely related to the risk itself. Some scholars have questioned whether green projects are less risky. They believe that "green" projects are not necessarily less risky than "brown" projects in the short term.

Therefore, reducing risk weights would violate the inherent capital management requirements of the Basel accord and would also weaken the financial system. However, when it comes to the long-term risks of green projects, few would deny that they are actually lower. The reason is simple, environmental problems are often revealed more clearly in the long run. Ignoring short-term environmental risks will accumulate into long-term systemic risks. Therefore, in the long run, green projects are considered and eliminate environmental risks, so green projects will be safer than brown projects with environmental risks. As a matter of fact, after the 2008 international financial crisis, the reflection of most international management organizations is that supervision in the past has been too favorable to short-term factors, ignoring the concerns about long-term factors and resulting systemic risks. Therefore, if we look at the green credit issue from the perspective of long-term risk, it has perfect internal consistency with the ideology of macro-level prudential supervision.

2. The role of banks in calling for green capital

In emerging countries, there is a shortage of green credit sources. Because air pollution in these areas is particularly severe, they bear a huge environmental burden. A research report jointly published by the Asian Development Bank (ADB) and Germany's Potsdam Institute for Climate Impact Research (PIK) in July 2017, said Asian countries will be greatly impacted by climate change. Climate Change. Asia is greatly affected by floods, where average summer temperatures in northwestern China, Pakistan, Afghanistan and Tajikistan are expected to rise as high as 8 degrees Celsius by 2100, while on the other hand, rainfall in many areas in Asia will increase 0.5 times, or cause new floods and rising sea levels. Large coastal cities are the most affected, more than three-quarters of which are in Asia^[1]. In addition to climate change, increasing pollution also poses major economic risks. The report published by the Global Alliance on Health and Pollution (GAHP) affirms that environmental pollution is the biggest reason why people die prematurely on this planet, accounting for 15% of all deaths on the planet. Globally, approximately 8.3 million people. Among the 10 countries with the most deaths from pollution in 2017 were the largest and richest countries, alongside some poorer countries. India and China lead in the number of deaths due to pollution, about 2.3 million and 1.8 million respectively. Next are Nigeria, Indonesia and Pakistan. The United States, with a population of 325 million people, ranks 7th with nearly 200,000 deaths^[11]. In addition to human health and life, factors including reduced agricultural production, affected transportation and brain drain are all caused by environmental risks. Therefore, emerging countries' green credit needs are not only related

to climate and environmental management needs, but also related to infrastructure and energy needs, as well as a variety of other needs. Health and increase productivity^[10]. However, green projects mainly focus on energy saving, emission reduction, pollution control and other projects mainly related to investment in converting production equipment, upgrading and building Construction of facilities and management equipment means green projects have a large initial investment scale, a generally low rate of return, and a long payback period. The G20 report points out that renewable energy projects can be more expensive to build than traditional energy projects, with the upfront cost of building a building being more energy efficient than traditional energy projects. Conventional buildings; Compared to thermal power plants, the initial phase of building a solar or wind power plant has a much more expensive initial investment and operating costs. At the same time, banks providing green credit also require additional certification for green projects, making banks insufficiently motivated to provide credit for green projects. The G20 report also points out that among the few countries that currently have a clear definition of green credit, only about 5%-10% of loans are "green"^[13].

3. Green credit model of green banks in some countries around the world

3.1 UK Green Investment Bank

The most famous green bank abroad is the UK Green Investment Bank (GIB). In 2010, the British Government announced plans to establish a Green Investment Bank specializing in investing in green infrastructure projects that the market cannot finance due to concerns about associated risks. GIB went into operation in 2012 and is a policy bank owned by the British Government. The main goal of establishing GIB is to solve the difficulty of mobilizing funding for green infrastructure projects.

Through the establishment and operation of GIB, the British Government hopes to encourage private capital for green projects to increase the transition to a green economy. GIB evaluates the project's potential on the basis of certainty, investment efficiency and the degree to which it meets environmental friendliness requirements. The bank's main investment areas include renewable energy, transportation, waste treatment and water resources, etc. The bank gives priority to risky green infrastructure projects. Since its founding, GIB has grown rapidly. Through direct investment of £1.8 billion, and private mobilization of £6 billion poured into the green economy^[6]. Green goals measured by GIB investment projects include: reducing greenhouse gas emissions, promoting efficient use of natural resources, beneficial to the protection of the natural environment, beneficial to maintaining biodiversity and promoting sustainable development of the environment. Unlike conventional investment banks, green investment risk is one of GIB's main risks. It mainly measures whether the green environmental protection indicators of the investment comply with the principles of sustainable green development. At the same time, to promote the development of science and technology finance, the UK has ventured to invest more than one billion pounds in the high-tech industry and used high-tech bonds and asset mortgage guarantees. Intelligence, loan guarantees and innovation investment funds to support technological innovation.

3.2 European Bank for Reconstruction and Development

The European Bank for Reconstruction and Development (EBRD) promotes green technology transfer. The EBRD has launched a green economy transformation program to support the implementation of international climate goals and the 2030 agenda for sustainable development. The bank aims to increase green practices in renewable energy, water, waste management and remote heating projects. To promote green technology transfer, relevant organizations need to carry out capacity building and consumer education to change the public's consumption behavior and reduce the high costs needed to promote green technology.

3.3 New York Green Bank

New York Green Bank promotes green renewable energy technology. In early 2014, the New York Green Bank project was implemented. The general goal is to limit the use of public funds, mobilize private capital many times more than public funds to invest in clean energy projects and change the financial market. In terms of financial product and service innovation, it provides financial products such as credit enhancement, loan preparation, loan guarantees and loan binding. In addition, for projects with longer maturities, it is mainly used to invest directly in the project or through high-grade bonds and depends on the project portfolio and guarantees each transaction the service can meet the credit standards and investment standards required by green banks.

4. Regulations on green credit supervision of banks in Vietnam

4.1 The Basel Accord lacks consideration of environmental risk factors

Although Vietnam is not yet part of the Basel Committee in banking supervision, in recent years, the State Bank has also issued regulations and legal documents based on Basel II orientation. Since the beginning of 2019, banks have implemented capital and risk management methods according to Basel standards. The State Bank issued Circular No. 13/2010/TT-NHNN, raising the minimum capital adequacy ratio (CAR) from 8% (period 1999 - 2009) to 9% (from 2010) and the calculation method has been changed. Constantly approaching the Basel II treaty. In 2019, Circular 22/2019/TT-NHNN of the State Bank took effect in developing new standards on governance; regulations on minimum capital adequacy ratio; credit limits and restrictions; affordability ratio; Maximum ratio of short-term capital used for medium and long-term loans; rate of purchasing and investing in Government bonds and Government-guaranteed bonds; limits on capital contribution and share purchases; ratio of outstanding loans to total deposits.

The Basel Accord, which serves as a model for global banking regulation, lacks environmental consideration. Basel III lacks consideration of environmental risks. Although environmental risks directly and indirectly affect the stability of the banking industry, the main goal of the Basel Accord is also to ensure the stable development of the banking industry. Does not consider the environment because environmental risks are also an extremely important source of risk^[5]. Not only that, the first pillar of the Basel Accord, the minimum capital requirement, prevents banks from providing green credit: because banks provide most green credit to finance projects. Long-term projects, and

within the Basel framework, credit for long-term projects always has a higher risk weight^[2, 8].

4.2 Reduce capital requirements for green assets to promote banks providing green credit

By reducing the risk weight of green credit, it motivates banks to more effectively redistribute credit capital to sustainable economic sectors. Immediately after implementing the Basel I Accord, the risk weight of real estate mortgage loans was only set at 50%, a smaller risk weight when compared to conventional loans. Since then, real estate mortgage loans have increased rapidly. The CBRC had previously published capital management measures for commercial banks issued in June 2012, which clearly stated that 75% of the risk weighting should be Applicable to agriculture-related loans and small and micro enterprise loans. Recently, many scholars and organizations have made proposals to relax the first pillar and reduce the risk weight of green credit to promote banks to respond to green credit sources. Campiglio proposed that different capital adequacy ratios could be applied according to the characteristics of banks and loan types to support their green credit offering^[4].

Traditional credit focuses on short-term economic and credit risks, while ecological credit risks often appear in the medium and long term, credit institutions often ignore these risks. Environmental risks, even when considered, are often underestimated. When the entire market does not include environmental risks in risk pricing, even if a credit institution is aware of this, it cannot take effective action because it will face the big challenge is due to the phenomenon of "bad money driving out good money" in competition. The article calls this situation "ecological imbalance" in competition. To limit this "ecological imbalance", the article proposes a number of regulatory tools, the first of which is capital tools, that is, adjusting risk weights by assigning higher risk weights. For carbon-intensive assets to reduce their attractiveness to credit institutions, while at the same time the risk weight of carbon-neutral assets should be reduced. The article believes that this is a very suitable tool because it can also encourage credit institutions to incorporate "carbon risk" into their overall risk assessment. Adjusting the capital adequacy ratio or determining different risk levels for different assets will impact a bank's ability to create credit. Therefore, the central bank can refer to the Basel accord's approach in reducing capital requirements for loans to small and medium-sized enterprises, reducing the risk weight of green loans to promote credit. Used for green projects.

4.3 The issue of reducing supervision and management requirements for green credit capital

Care should be taken regarding the EU's "green enablers", while creating incentives for banks and financial markets to promote green credit that is beneficial for sustainable development, policies should be used. Regulatory policies designed to reduce financial system risks to mobilize green credit; Green industry is not necessarily safer than brown industry. Whether it is a low-carbon industry or a carbon-intensive industry, there are likely to be major shifts in technology, and there will be winners and losers. Although the purpose of the proposed green support element is worthy of attention, it could weaken the already fragile banking system, on the contrary, they believe that increasing the

requirement for brown loans will be more effective [4]. Adding green support to facilitate and promote credit and lending for green investments is not the best approach, but the issue of transition to a sustainable economy should be addressed. Decided at a more macro level. There are three main reasons:

First, the definition of green credit is still unclear and the risks of green credit cannot be determined based on experience;

Second, adding green support factors will cause appraisal costs to increase, not decrease;

Third is that transitioning to a sustainable economy does not just mean investing more in renewable energy or any other "green" sector, it is more than just changing cash flows. Therefore, adding green support elements can only be considered when penalties for other industries become more severe.

In short, the core focus is whether the risk of a "green project" is actually lower than a "brown project", otherwise, reducing the risk weight will violate the inherent requirements of management. Capital regulations in the Basel accord and will weaken the stability of the financial system.

5. Conclusion and recommendations

With the urgency of the climate, environmental and resource crises, the concept of green development has become a global consensus. However, green development and transition require large amounts of financial support, and there remains a large gap between the current amount of green finance and the amount needed to achieve a low-carbon economic model. Banks play a key role in bridging the gap in green finance. However, given the high costs of green projects, long payback periods and the need for additional certification, banks' incentives to finance green projects are clearly insufficient. How to design a reasonable and effective mechanism to encourage banks to invest more money in the green field has become one of the important issues necessary to achieve sustainable development of green credit.

To deal with the problem of encouraging banks to provide green finance, banking supervision policy plays an important role. Through banking supervision policies, banks can be encouraged to redistribute credit and capital to sustainable sectors of the economy. But unfortunately, the Basel Accords, which serve as the template for the implementation of global banking supervision, did not consider environmental factors. In this regard, some scholars also believe that the first pillar of the Basel Accord, the minimum capital requirement, actually restrains banks from financing green projects, because green loans mainly long-term project financing but long-term project financing under the Basel framework has a higher risk weight.

From reviewing relevant research documents, it is not difficult to see that many scholars and international organizations have proposed relaxing capital requirements and reducing the risk weight of green assets to promote credit. Green applications and effective implementation of systemic risks that the banking industry faces in the long term. This recommendation is being heeded by a number of regulatory agencies. For example, the European Union made clear in early 2018 that it was considering adding "green support elements," meaning reducing minimum capital requirements for green bonds and green loans, and

introducing them into the sustainable finance action plan in April. But at the same time, there are also voices of doubt. The core question is whether the risk of a green project is actually lower than that of a brown project, otherwise reducing the risk weight would violate the inherent requirements of the Basel Accord on capital management, will also weaken the stability of the financial system.

Aiming at the question of whether the risks of green projects are higher or lower, this article analyzes from a long-term risk perspective. In the short term, green projects do not appear to have a special advantage over other projects, but persistently overlooking environmental risks in the short term accumulates into systemic risk in the long term. In fact, after the 2008 international financial crisis, global regulators realized upon reflection that the systemic risk of banks is a fundamental issue that regulators need to pay attention to. Most important, and systemic risks often appear in the long term. In the long term, green projects are safer and have lower credit risk than other projects with environmental risks because they consider and eliminate the environmental risk factor. This view has been verified experimentally. At the same time, many empirical studies based on ESG investing also show that in the long run, the ESG performance of businesses is positively correlated with the company's production efficiency, meaning that companies pay attention environmental, social and governance concerns will tend to perform better and the risks of investing in these companies will be lower. Therefore, from the perspective of long-term risk, setting a lower risk level for green projects, while increasing the risk weight for brown projects, will be an effective measure to promote growth. growth of green credit globally.

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