Digital Technology-Driven ESG Simulation Platform and Sustainable Yield Assessment for Investors: Case Study in China

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Abstract: At present, public scientists have not standardized the impact of green credit cards on commercial banks. The development of green credit in commercial banks in China is still in its infancy, and the impact of green credit cards on the efficiency of commercial banks is significantly different. In view of the current research situation in China, this paper uses the forest algorithm to compare and analyze bank performance, the number of green and low-carbon industries, the actual acceptance of investors, and environmental risks based on the development status of commercial banks' green loans and the data of public green loans. Notably, bank performance has increased by 10% in terms of acceptability and volume, risk has decreased by around 18% and 20%, corporate income has increased, and green credit investment remains high.

1. Introduction

The 2018 Environmental Economic Work Conference emphasized that it is to meet the development requirements of the National Assembly. At the party's national congress, pollution prevention and control became one of the three major struggles to build a well-off society in an all-round way in the next three years. As the main financial institution for green loans, the central bank has issued a series of major opinions on green loans through the central bank. The development of green loans for Chinese commercial banks is still in progress. There are many problems in the management of green loans, the enrichment of green products and the improvement of the system, which bring many potential credit risks to commercial banks. Therefore, it is very important to study the development of green credit combined with ESG and its impact on investors

This paper mainly compares and analyzes ESG combined with green credit, bank performance, the number of green and low-carbon industries, and the acceptance of investors in reality, and environmental risks. The results show that the bank's performance has increased by 10%, the acceptance level and number have increased by about 20%, and the risk has been reduced by about 18%, which also shows that green credit is currently a "treasure house" for investors.

2. Related Work

With the rapid development of modern technology, modern digital technology has also risen. Hocking W K had combined digital techniques and computer methods with old and new theoretical methods to allow the construction of new meteor radars. The radar can simultaneously stream data into memory, detect the presence of meteors, determine the location (range and angle) of meteor tracks, and find their radial drift velocity and decay time [1]. Zabatiero J surveyed the Australian Department of Early Childhood Education as part of a multi-component process for developing a national Early Childhood and Digital Technology Statement for those working in Early Childhood Education and Care (ECEC). The findings suggest that the industry holds diverse and complex perspectives, including an appreciation for the learning and teaching opportunities that technology offers, as well as a focus on children's health and digital citizenship [2].

As the global environment deteriorates, and ESG issues have shown strong domestic and international attention, addressing environmental, social and governance (ESG) issues has become a key part of business strategy. Lokuwaduge C explored the ESG reporting of companies in the metals and mining industries listed on the Australian Securities Exchange to determine the nature of ESG metrics used in the industry [3]. In response to the imperfection of the current ESG disclosure system, Oh SK discussed this. He found that many of these systems are not clear about the objects specified, and there are insufficient disclosures, and he proposed that everyone should have a certain understanding of current ESG global issues, which plays an important role in environmental governance issues [4]. Environmental, social and governance (ESG) systems have received much attention in recent years as issues such as climate change, labor conditions and corporate responsibility have grown. However, relevant comprehensive research is still insufficient, and the environmental, social security and management (ESG) system has attracted much attention. Because the construction of the financial ESG system is of great significance, Ochi N sorted out the definition and evaluation standards of ESG, summarized the international exploration and practice of the ESG system, and innovatively proposed the essence of the financial ESG system. He explored the construction of financial ESG indicator system, and deeply analyzed the implementation and existing problems of ESG in China's financial field [5]. Lagasio V pointed out that, where disclosure is voluntary but not arbitrary, the opinion contributes to ongoing disclosure. The debate centers on corporate governance mechanisms that stimulate increased Environmental, Social, and Governance (ESG) disclosures, emphasizing the necessity for a novel approach to address these matters [6]. The disclosure of social, environmental and governance (ESG) information is inherent in the implementation of a corporate social responsibility (CSR) strategy. The level of quality of sustainability reports prepared by companies may increase their credibility, which in turn affects stakeholder perceptions, thereby enhancing corporate reputation. MD Odriozola applied a logistic regression for Ibex35 companies and we found that the quality of sustainability reporting increases the likelihood of a higher corporate reputation [7].

3. Sustainable Development Strategies of Green Credit

3.1 Green credit and green management model

Green environmental protection has become the core content of Lingqiu's development, and financial capital is also an important force in green environmental protection [8]. This is not only to implement the national macro-control policies and fulfill social responsibilities, but also to improve the business development of the banking industry and adjust the internal needs of the structure. At present, China has listed new energy, energy and environmental protection as strategic emerging industries, which contain huge business opportunities. This requires banks to follow the guiding

ideology of the "Bachan Agreement" and the "Equator Principles" in macro-control and supervision. Feng supports policy formulation with a focus on green environmental protection, prioritizes green environmental protection in resource allocation, and favors green environmental protection in industrial support. The bank will strengthen the docking of green environmental protection systems and promote the docking of ecological civilization practices. Banks strengthen customer service and promote green environment. Banks actively innovate green credit management methods to promote low-carbon development [9].

First, the banking industry should increase the penetration of "green credit" [10]. Secondly, it is necessary to give full play to the traditional advantages of banks in supporting clean energy such as hydropower and wind power, and promote them. The bank adheres to the advantages of credit resources and gives play to its advantages in green environmental protection. At the same time, the bank keeps pace with the development of emerging technologies, especially in the field of new materials, and vigorously promotes the development of new generation information technology, biotechnology, advanced manufacturing support, renewable energy, new materials and other industries to expand the development space. In addition, banks cater to specific needs by driving product innovation. As a financial company, the bank must fulfill its responsibility to the whole society and cannot stand idly by for the sake of interests. The bank adheres to the goal of low-carbon environmental protection and strongly supports enterprises engaged in low-carbon environmental protection. The bank emphasizes financial security and establishes "green channel" services to provide strong support for low-carbon environmental protection.

Enhance the guiding influence of interest rates and foster innovation in the diversification of financial product offerings [11]. Banks should make full use of their own advantages to vigorously support the development and transformation of enterprises in the fields of new energy, environmental protection, and new materials. Various measures should be taken for the above-mentioned industries to ensure that credit funds are given priority. At the same time, it is necessary to do a good job in the investment consulting work of enterprises, correctly guide their loans, strengthen the interest rate orientation, so as to improve the efficiency of their capital use, reduce the financing costs of enterprises, and give full play to the green credit policy of "selecting the good and the bad, and differentiated". The financial situation in China is that some small and medium-sized enterprises and technology-based enterprises have difficulty in financing due to the original pledge of guarantee, which affects the development of energy conservation and environmental protection industries. Face such a situation. The leaders of the banks should actively cooperate with the credit departments to help their industrial development. Banks can continuously innovate and improve trade financing, mortgages for property purchases, joint loans and joint guarantees, and pledge of rights through various methods such as real estate mortgages, movable property mortgages, corporate guarantees, and joint guarantees to form a relatively complete guarantee system. Banks should also join forces to actively respond to the financing needs of small and medium-sized enterprises with import and export trade background. Appropriately use commercial papers, exposure, agency loans from the Export-Import Bank, direct financing and other means to meet the multi-faceted financing needs of high-quality enterprises. While vigorously promoting the development of green enterprises, banks must resolutely implement the national macro-control policy. Balance management for steel, cement and real estate loans. Loans are restricted, suspended and collected for illegal construction projects, and new credits and credits are not allowed to be issued to projects with high energy consumption, high pollution and high emissions that do not meet national regulations, which has promoted the continuous improvement of "green credit management". From a sustainability perspective, there are also issues with ESG issues. As shown in Figure 1.
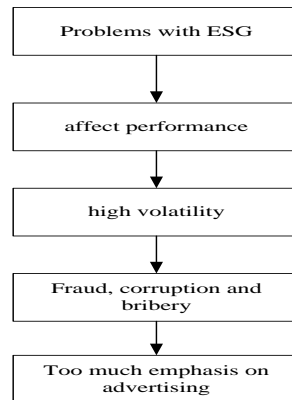
Figure 1: Current issues with ESG

3.2 Green Credit Sustainable Development Measures

Support green industry and promote economic development. To support green industries and promote economic development, we can start from three aspects [12].The banking industry should vigorously develop green industries and establish a market-oriented, socialized and diversified investment and financing system. Since the environmental protection industry is an emerging strategic industry, most of them are in the early stage of the industry. With high risks, there will be many problems in financing. Banks are the mainstay of the modern economy and the mainstay of resource allocation. They shoulder the heavy responsibility of supporting the development of green industries. In the process of developing the green industry, we should make full use of the development ideas and means of the development bank, give full play to the advantages of medium and long-term investment and financing, take the initiative to assume social responsibilities, and make positive contributions to the development of the green industry. Banks should work together with the Ministry of Industry and Information Technology, the Ministry of Science and Technology, the Ministry of Environmental Protection, and local governments in green industries and enterprises in the field of ecological environment, adhere to the policy of government-led, development-oriented financing, and market export, and actively guide social investment in green industries. Banks must resolutely implement the state's "green credit" policy and refuse to lend to projects that fail to meet standards due to environmental issues. At the same time, we actively provide consulting services and financial support for the development of green industries.

The People's Bank of China will vigorously promote "green credit", vigorously support the environmental protection industry and energy conservation and emission reduction, and gradually establish a sound green credit system, strengthen the low-emission and low-pollution projects, environmental protection technical transformation projects, environmental protection equipment, environmental protection products and environmental protection technology. Agricultural Bank of China has carried out active reforms in credit policy, credit system, credit process, etc., and has introduced the idea and measures of "green credit" in credit policy, credit system and credit process, and strives to cultivate a "green credit" culture. Establish "green credit" systems. To ensure the effective and efficient implementation of "green credit" practices, the Agricultural Bank of China. In credit work, it is necessary to consciously abide by the national policies on environmental protection, pollution control, energy conservation and emission reduction, and ecological environmental protection. Agricultural Bank of China strictly enforces environmental standards for credit issuance, strengthens the connection between industrial credit and national industrial policies, and implements the "one-vote veto system" in the aspects of national industry, energy, and

environmental protection. Regardless of the size and efficiency of the enterprise, any enterprise that does not comply with the environmental protection policy cannot intervene, and everything involved must be eliminated decisively. For newly-built or under-construction projects, no loan of any form can be provided without an environmental assessment report issued by the national environmental protection agency. For the working capital loan of the enterprise, its environmental conditions should be strictly reviewed. If the environmental protection requirements are not met, the working capital loan cannot be provided.

The development of green credit is the only way to realize the coordinated development of economy, society and environment and achieve sustainable development [13]. The advantages and disadvantages of green credit are shown in Figure 2. Green credit is the earliest credit loan abroad, and it was not until the 1990s that China just started. At present, domestic commercial banks have formulated systems and policies related to green credit to some extent. Although China's green credit has made some progress, there is still much to be improved. First, it is necessary to strengthen the management of green credit. Although China's financial regulators have promulgated regulations on green credit, commercial banks do not have a deep understanding of green credit. Driven by their interests, they often exploit loopholes and fail to truly implement green credit, second, in the current situation of tight credit in Chinese banks To moderately ease the lending conditions of credit and ensure the credit line. Third, we must establish the concept of "green credit". It is necessary to establish the important role of green credit in the credit work of commercial banks, make them aware of promoting the harmonious development of the economy and the environment, make it a social responsibility of commercial banks, and strengthen their recognition of environmental protection. Only when everyone has established the concept of "green credit" can we incorporate "green credit" into our work. Fourth, establish and improve the environmental evaluation index system for green credit; at present, domestic commercial banks have put forward suggestions for the development of green credit, and issued corresponding policies. However, in the current environmental risk assessment, there is no complete set of assessment indicators, and it is mainly carried out manually.

Environmental and social responsibility in green credit in China. Faced with the environmental and social problems brought about by foreign-funded projects, China's banking industry and the corporate world will be greatly impacted. The banking industry must think carefully and actively respond in order to better play its own environmental protection and social responsibilities. At present, the biggest environmental disputes caused by Chinese companies investing abroad are hydropower, minerals, oil and gas, forestry and agriculture. From the perspective of regional distribution, investment in countries such as Africa, Latin America, and Southeast Asia has the greatest impact on the ecological environment of the investing countries. Chinese banks are credit investors. They should pay attention to environmental and social issues.
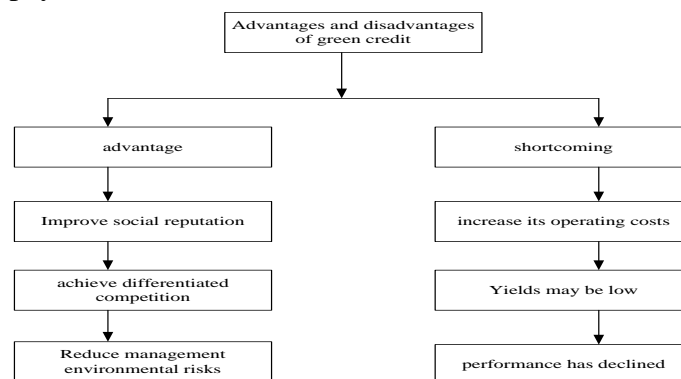

Figure 2: Advantages and disadvantages of green credit

3.3 Factors Affecting Financial Performance of Green Credit

There are three main factors affecting the financial performance of green credit cards. As shown in Figure 3, diversity measures are one of the most important competitive strategies that can help other companies in the same industry choose CSR. Green loans help commercial banks shape their environmental image and improve their own characteristics [14]. From a commercial point of view, the development of green credit encourages commercial banks to take advantage of the opportunities of green industry development to increase the popularity of green credit brands. Banks pursue high-quality green projects to improve the profitability of green loan portfolios [15].
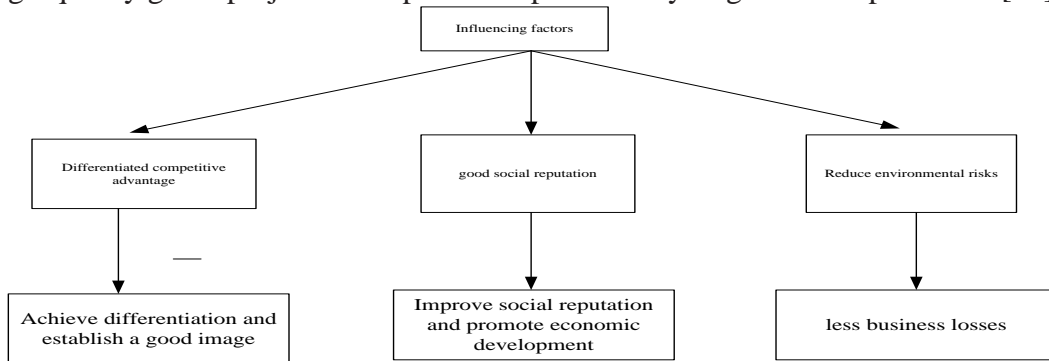

Figure 3: Factors influencing green credit

Second, create a good public image. This can improve the public image, especially the creation of a green image. And it can also have a strong transactional capacity and be supported by national regulators, with financial support and support from public authorities. For example, lowering interest rates on some banking programs to improve the implementation of green loans.

Third, reduce environmental risks. This negatively affects the company's financial environment and may increase the company's legal and economic losses. Credit risk is one of them. If a company does not meet the exemption parameters, it will be subject to penalties such as suspension, repairs and compensation. Second, risk insurance. Corporate investors regularly monitor and identify the company's environmental information during and after the period. Enterprises can still issue loans to investors and develop green industries independently, mainly focusing on protecting the environment, controlling environmental risks and improving asset quality.

The development of green loans by commercial banks also has a negative impact on financial performance, which is mainly reflected in three aspects [16].As shown in Figure 4. First, green credit cards increase operating costs, but do not bring corresponding benefits. In terms of cost, if the bank bears part of the cost, it will also lead to environmental transformation, energy saving and emission reduction will be smoother, and there will be more investors. In terms of income, banks can reduce interest and lend money to lenders to protect the environment on the other hand. Without adequate consideration of externalities, the economic impact can be very small. Second, the bank's move will also lead to the loss of some users. On the one hand, the move would turn old customers into new customers for rivals, which could hurt the short-term interests of banks seeking green credit policies. On the other hand, in the early stage, the highly invested "two big and one benefit" industries face the problem of passively renewing bank loans. If people stop lending immediately, people will break the corporate capital chain and it will be difficult for banks to recoup loans early, which could cause serious damage. Social responsibility for the environment increases resource constraints, so banks invest resources and labor in other economic activities, which negatively impacts the bank's financial performance. Green credit cards can improve and weaken banks' financial performance. Developing new business areas and improving environmental risk management capabilities can improve financial performance, increase costs and losses to customers,

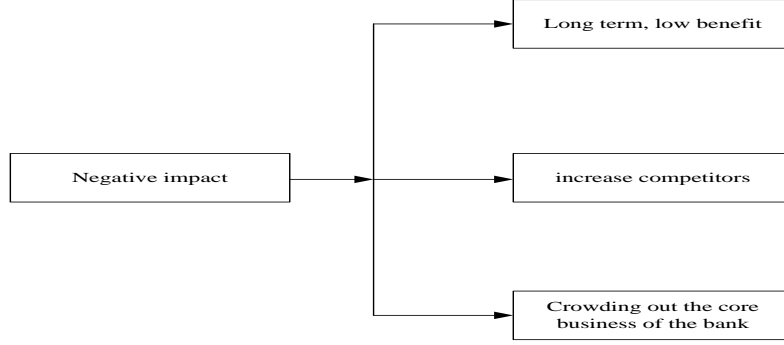and reduce financial performance [17].

Figure 4: Factors Influencing Fiscal Performance

3.4 Construction of Green Credit Credit Risk Assessment Model Based on Forest Algorithm

Random forest classification is a tree-like decision-making method, which can obtain the best solution by operation, and it is obtained after multiple operations. For each step, it is necessary to obtain samples, and the final classification is performed on the samples, and the decision tree K model of the sample K is obtained to obtain the result of classification B. Finally, the branch is operated in a manner similar to "election" to determine the final classification [18]. As shown in Figure 5.
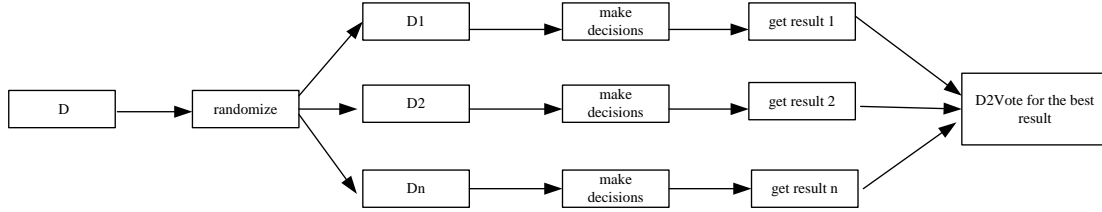

Figure 5: Schematic diagram of random forest classification

Before introducing the random forest algorithm, the extraction principle and procedure of the random forest algorithm are briefly introduced. As people all know, a decision tree is a view of a tree consisting of a hierarchy of rules. Each node in a decision tree must learn to decide whether to divide the input data into left or right nodes (usually a two-variable function). Assuming the measurement data set d at node K, the sharing function at node K can be defined as follows:

$$f_k(x, \omega_k) = I(\Phi(x)^T \omega_k > 0) : x^{d+1} \times y^{d+1} \to \{0,1\} \tag{1}$$

Among them, ω_k is a variable parameter, and ω_k can be expressed as:

$$\omega_{k=}\omega_{k1}, \omega_{k2}...\omega_{kn} \tag{2}$$

Formula (2) represents the trained parameter set, and $\Phi(x)$ represents the matrix of the number set x, which can be expressed as:

$$\Phi(x) = [\Phi_1, \Phi_2...\Phi_{d+1}]^T = [x_1, x_2...x_{d+1}]^T \tag{3}$$

Representing $f_k(x, \omega_k)$ with $f_k(x)$ and recording the decision tree as the form of disjunctive normal form, it can be got:

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$$h(x) = \bigvee_{i=1}^{n} (\bigwedge_{j \in R_i} f_j(x) \bigwedge_{j \in L_i} -f_j(x))$$

(4)

Among them, n represents the "number of trunks", which represents the number of points between the nodes on the right from the i-th trunk. And $\bigvee_{i=1}$ is represented by $\coprod_{i=1}$, representing the left parent node on the path from the i-th positive node to the root node. Make differentiable adjustments. First, get the value of the binary variable. Finally, the formula obtained is to approximate the splitting function Formula (1) with the Logistic sigmoid function:

$$f_k(x, \omega_k) = \frac{1}{1 + e^{-\sum_{j=1}^{d+1} \omega_{kj} \Phi_j}}$$

(5)

Bring the differentiable disjunctive normal form into Formula (4) to get the differentiable normal form:

$$h(x) = 1 - \prod_{i=1}^{n} [1 - \prod_{j \in R_i} (f_j(x, \omega_j)) \prod_{j \in L_i} (1 - f_j(x, \omega_j))) / g_i(x)] = 1 - \prod_{i=1}^{n} (1 - g_i(x))$$

(6)

Finally, the error function is defined and solved by gradient descent. Given training samples,

$$S = \{(x_m, y_m) : m = 1,2...M\}$$

(7)

Among them, $y_m \in (0,1)$ is the expected classification value, and $h(x)$ is the classification result obtained by the classifier training, then the quadratic error function is defined as:

$$E(h, S) = \sum_{m=1}^{M} (y_m - h(x_m))^2$$

(8)

The error function is solved for the minimum value using gradient descent:

$$\frac{\partial E}{\partial \omega_{kj}} = -2(y - h(x) \times \langle \sum_{k \in R_j} \prod_{i \neq 1} (1 - g_r(x)) g_i(x)(1 - f_k(x)) - \sum_{k \in L_I} (\coprod_{i \neq 1} (1 - g_r(x) g_j(x) f_k(x))) \rangle$$

(9)

To verify the obtained operation results and judge the influence, it is necessary to use a mathematical calculation method to measure, and finally get the set. A random forest is a collection of tree-structured classifiers that can be expressed as:

$$A = \{h(x, \theta_k), k = 1,2,3...k\}$$

(10)

Among them, $\theta_k (k = 1,2,3...k)$ is based on independent distribution, and K represents the number of points in the forest. After much training and sample selection, a certain number of samples are selected from the initial sample set to establish a standard model. The samples are then classified for "election", and the final result is the model. In classification work, the random pattern of forest combinations can be expressed as:

$$H(X) = \arg\max_Y \sum_{i=1}^{k} I(h_i(X) = Y)$$

(11)

Here H(x) represents the combined classification model, hi represents the single tree solution

classification model, and Y represents the output variable. An important feature of the random forest algorithm is the evaluation of the BSE. Typically, it can be used to evaluate ranking results and modeling results, filter and refine initial input parameters. In particular, if the number of samples in the original dataset is n, the probability that each sample will not be drawn from the dataset can be expressed as:

$$P = (1 - \frac{1}{N})^N$$

(12)

If N is large enough, the limit is deduced to get:

$$\frac{1}{e} \approx 0.368$$

(13)

This means that about 37% of the samples in the initial set were not present in the lead samples. Since the training set is barely 37% error-free, the data may replace part of the test set to validate the impact of the model's classification. The initial sample D percentage of green credit institutions should be determined according to the value of the green credit assessment system index and the credit status of the enterprise. The random sequence is as follows.

$$\theta_i (i = 1,....k)$$

(14)

When randomly constructing a sub-sample set, use Bootstrap resampling method to extract k sub-sample sets from the original sample set D, which can be recorded as:

$$D_i (i = 1...k)$$

(15)

Establish a green credit decision tree model. After k rounds of training, the classification model sequence is obtained as:

$$B = \{h_1(X)h_2(X)...h_i(X)\}$$

(16)

In short, a green credit risk assessment model is established based on the random forest algorithm. And replace the matrix of parameter X in the model, the ECAF index value should include the risk category y from which the company can derive.

3.5 Future Focus and Significance of Green Credit Development

Under the leadership of the former China Banking Association Supervision Committee, the China Banking Regulatory Commission issued the "Green Bank Assessment (Trial) Plan for China's Banking Industry". Under the rules, regulators must provide the material to the China Banking Association after submitting an assessment report to each bank. The China Banking Union organized a green bank assessment team to conduct assessments and reviews, submit the preliminary results of the assessment, and submit the review and conclusions of the Green Bank Rating Expert Panel. The publication of the operating plan indicates that the assessment exercise for the Chinese green bank has begun. Common criteria have been developed for assessing green financing practices, resources and progress across different banks. The first assessment of green banks should take place this year. The "Guidelines for the Green Financial System" issued by seven ministerial-level committees clearly stated, "We will promote the establishment of self-regulatory institutions in the banking industry and gradually establish an environmental protection assessment mechanism for the banking industry". The green bank assessment plan announced this time represents the specific implementation of the policy. According to the guidelines, the operating plan

should specify the development of evaluation indicators, the organizational process of evaluation work, and the rational use of evaluation results. The assessment scope of green banks will be gradually expanded to small and medium commercial banks. The evaluation of green banks will help promote the healthy and sustainable development of green loans in China's banking industry. Green bank valuation is an important benchmark for local governments to evaluate local green banks, and bank loans still account for the majority of social funds in China. Therefore, it is particularly important to mobilize the Chinese banking industry to develop green loans. As an important part of China's green loan, green loan is the oldest, largest and most mature part of China's green loan. Regulatory and administrative departments have established a green credit policy system based on a green credit statistical system and evaluation mechanism. Effectively regulate the green credit development of Chinese banking institutions. In the absence of an effective mechanism to stimulate, and limit the motivation and enthusiasm of banks for green lending, this is still not enough, and only banks that see green lending as an important sector will attract attention. Through the green bank evaluation mechanism, the implementation of the green bank evaluation plan can provide effective incentives for banks to issue green loans, manage financial institutions, actively participate in environmental finance, do a good job in environmental risk management, and improve environmental performance. Effectively promote the healthy and stable development of green loans in China's banking industry. Banks' green credit cards are one of the biggest concerns. Many countries have established mechanisms to limit and support green lending. Banks are required to report annual progress in green lending and green lending. Conduct environmental assessments of local banking institutions and make rational use of the assessment results. In the case of assessment methods, local regulators and administrators can develop assessment methods for local green banks, as well as local green credit and banking conditions. The annual results of green bank assessments, as well as some local incentive policies such as interest rate repayment, appropriate financial deposit incentives, and risk sharing, can effectively and appropriately implement the assessment results to promote the sustainability of local green loans.

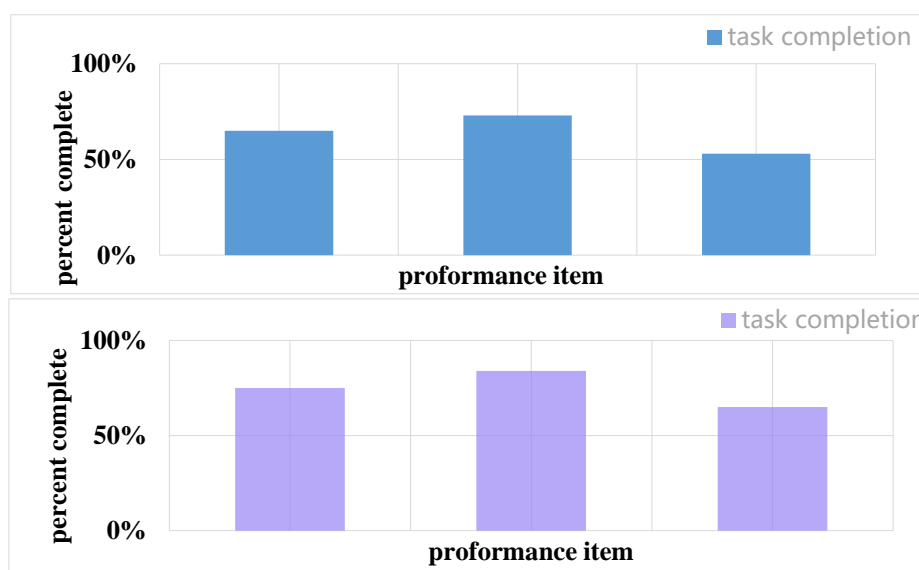## 4. Comparison of ESG Combined with Green Credit

Figure 6: Comparison of Bank Performance

ESG combined with green credit, the article mainly compares these four aspects, bank performance, the number of green and low-carbon industries emerging, ESG integration into real

decision-making, investor acceptance and environmental risks. From the specific analysis of the current social situation, in today's society, green credit is doing very well. In this paper, the comparison of green credit and the performance of banks after the combination of ESG is shown in Figure 6.

Through data comparison, it is found that the performance of green credit combined with ESG will be about 10% higher than that of green credit without combination, which also shows that ESG has played a role in promoting bank performance. It promotes investors to invest, and also allows investors to have actual benefits. For investors, effective investment is the most important, and ESG is still very important for investors to invest effectively, and it also plays a role in promoting follow-up work.

Through ESG information, many entrepreneurs are paying more and more attention to low-carbon investment, and the country is also paying more and more attention to low-carbon. Corresponding low-carbon companies are gradually being explored by entrepreneurs for their intrinsic value. The number of low-carbon companies combined with ESG is compared, as shown in Figure 7.
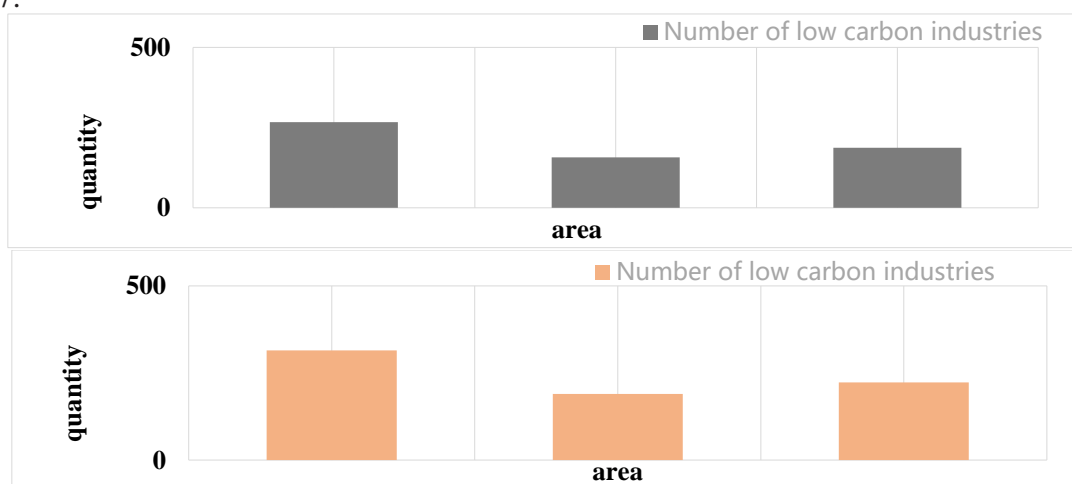

Figure 7: Comparison of the number of low-carbon industries

It can be clearly seen from the two sets of data that the number of low-carbon industries combined with ESG will increase by 20% compared with the previous one, which further shows that ESG is gradually becoming known. And began to know the country's follow-up direction, investors flocked to the project. Because generally follow the national policies and guidelines, there is basically no loss. Investors are still very clear about these. The national policy is also a major reason for promoting economic development.

However, there are still a large number of people who do not know much about ESG, which makes it difficult for people to accept it and lack of awareness of social and environmental governance. The public does not even know what ESG is, and the relative understanding among enterprises will be higher. Figure 8 shows the degree to which ESG is integrated into reality and investors' acceptance.

Through the comparison of the two sets of data, it is found that in general investment companies, when ESG is integrated into reality, the general acceptance of investors is about 50%. But after some investors have embedded ESG issues into reality, acceptance has increased by around 20% because they are actually profiting from it. There are also some who disagree with other issues. Maybe they have many concerns. But it is also optimistic to understand that for some investors who really understand and implement it, it is obviously beneficial.
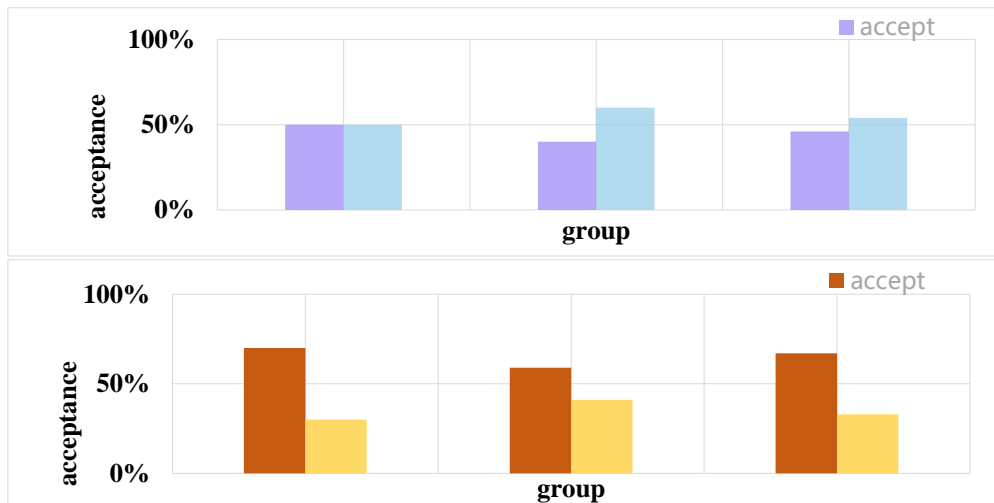
Figure 8: Investor's Acceptance Comparison Figure

At present, more and more companies have obvious mistakes in ESG issues in manufacturing supply, resulting in many companies having great risks in this regard, and some companies are facing closure and production suspension. Because of the great impact on the environment and the high environmental risk of enterprises, it is easy to face many major problems. Figure 9 shows the comparison of environmental risks of different enterprises (0-0.2 is very low, 0.2-0.4 is low, 0.4-0.6 is medium, 0.6-0.8 is high, and 0.8-1 is high).
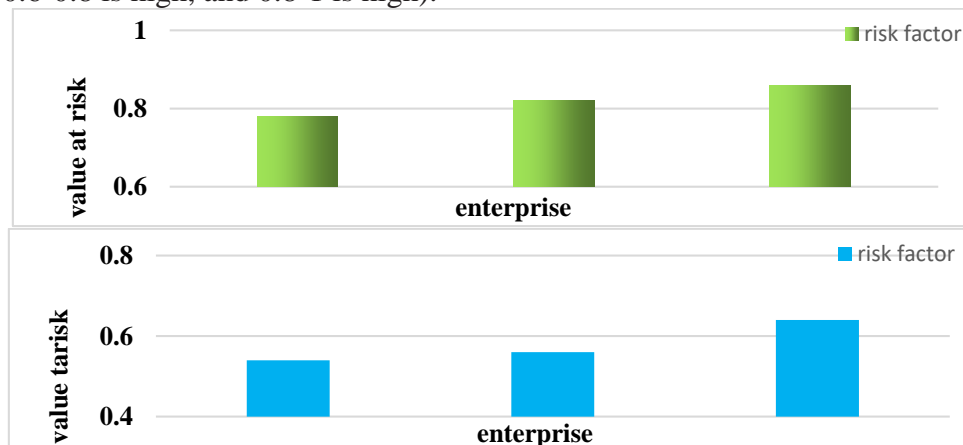

Figure 9: Environmental Risk Comparison

Through the comparison of the two sets of data, it is found that general enterprises do not combine ESG issues. The general risk is relatively high, generally around 0.8. However, because some companies are combined with ESG issues, if they manage the social and ecological environment, their risks are reduced by a degree, which in the medium risk. The reduction from high risk to medium risk also shows that the country is paying more attention to this aspect. Moreover, in order to sustainably develop the ecology, environment, enterprises, etc., and coordinate with each other, people should also pay more attention to the governance of environmental problems.

5. Discussion

Today, many citizens need to raise awareness of economic benefits as soon as possible, while also focusing on protecting the environment. Traders should actively look for ways to develop a

green economy. Banks need to strengthen their institutional structures and capital. Although people do not have a good human, material and financial environment, people must actively support the green loans of small banks, and people must also strengthen our confidence in green development and promote economic development. In addition, it can fully reduce the risk of green loans, reduce the cost of retail investors, and improve the quality of green loans.

6. Conclusions

This article mainly describes the evaluation of investor returns in the ESG simulation platform, using the forest algorithm to analyze and evaluate. At the same time, the bank performance, the number of emerging green and low-carbon industries, the acceptance of ESG into reality investors and environmental risks were compared. It describes the relationship between ESG and business investment, the link and influencing factors of green credit and bank financial performance. Through the analysis and calculation of the forest computing method, the bank's performance acceptability is obtained, and the low-carbon industrial projects have been significantly improved, and the risk of environmental pollution will be reduced, which has an important guiding role for investors.

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