

Analysis on the Driving Effect of Green Finance Development on the Sustainable Transformation of Tertiary Education

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Abstract: Under the background of global sustainable development, it is of great significance to explore the relationship between green finance and the sustainable transformation of tertiary education. This article focuses on the driving effect of green finance development on the sustainable transformation of tertiary education, and uses theoretical research methods to sort out the theoretical basis of green finance and the sustainable transformation of tertiary education and analyze its driving mechanism. These include financial support, policy guidance and social concept shaping mechanism. Furthermore, it reveals the challenges faced, such as the imperfect green financial system, the lack of motivation for the transformation of colleges and universities and the constraints of external environment. In view of these problems, this article puts forward to improve the green financial system, develop customized products and unify standards; Stimulate the transformation vitality of colleges and universities, reform the internal management system and strengthen the concept training; Optimize the external environment, ensure the implementation of policies, enhance social participation and other strategies. In this way, green finance can effectively drive the sustainable transformation of tertiary education and provide reference and guidance for the coordinated development of the two.

1. Introduction

Under the background of the increasingly serious global ecological environment problems and the concept of sustainable development, green finance and the sustainable transformation of tertiary education have become the focus of common concern in academic and practical fields [1]. As an important force to promote sustainable economic development, green finance is gradually permeating all levels of society. Its positive role in the adjustment of industrial structure and the optimal allocation of resources has been widely recognized [2]. Furthermore, tertiary education, as the cradle of cultivating future social pillars and innovative talents, its sustainable transformation has irreplaceable significance for realizing the long-term development of society [3].

In this situation, it is particularly important to deeply explore the driving effect of green financial development on the sustainable transformation of tertiary education [4]. Theoretically speaking, analyzing the internal relationship and mechanism between them can enrich and expand the theoretical research in the field of green finance and tertiary education, and provide new perspectives and ideas for subsequent related research [5]. From a practical point of view, a clear understanding of the driving path and influencing factors of green finance for the sustainable transformation of tertiary education will help universities to formulate scientific and reasonable transformation strategies. This can also provide reference for financial institutions to adjust their business direction and innovate financial products to better support the sustainable development of tertiary education [6]. However, at present, the research on how green finance specifically drives the sustainable transformation of tertiary education is still weak, and the related systematic research still needs to be strengthened. This study is devoted to filling this gap and comprehensively and deeply analyzing the driving effect of green financial development on the sustainable

transformation of tertiary education, with a view to contributing to the sustainable development of tertiary education.

2. Green finance and related theories of sustainable transformation of tertiary education

The core of green finance theory lies in the close combination of environmental protection and financial activities. It originated from people's deep thinking about the relationship between environmental problems and financial development, and evolved with the rise of the concept of sustainable development. Green finance theory emphasizes that financial institutions should fully consider environmental and social risks when allocating resources, and guide funds to flow to green industries and projects [7]. The theory of sustainable transformation of tertiary education focuses on the transformation of tertiary education in concept, goal and practice. Guided by the concept of sustainable development, it aims to cultivate high-quality talents with environmental awareness, social responsibility and innovation ability. This requires colleges and universities not only to impart professional knowledge, but also to pay attention to the cultivation of students' comprehensive quality, so that they can meet the needs of social sustainable development [8]. Colleges and universities themselves also need to carry out comprehensive changes in teaching, scientific research and management, such as optimizing curriculum, integrating sustainable development and promoting campus green construction. Although green finance and the theory of sustainable transformation of tertiary education belong to different fields, they agree with each other on the core goal of sustainable development, which lays the theoretical foundation for the internal relationship between them.

3. The driving mechanism of green financial development for the sustainable transformation of tertiary education

The development of green finance drives the sustainable transformation of tertiary education through various mechanisms, and affects the direction and process of tertiary education reform in all directions from the aspects of funds, policies and social concepts [9]. Green finance provides a key financial guarantee for the sustainable transformation of tertiary education. Colleges and universities need a lot of capital to carry out scientific research projects related to sustainable development, build green campus infrastructure and develop green courses. Green credit, green bonds and other products launched by financial institutions can open up new financing channels for colleges and universities. Taking green credit as an example, financial institutions can provide low-interest and long-term loans according to the green attributes and expected benefits of university projects. As shown in Table 1, a university plans to build an intelligent energy management system to reduce campus energy consumption, obtain financial support by applying for green credit, smoothly promote project implementation, and achieve the goal of energy conservation and emission reduction.

Table 1: Funding Support Provided by Green Financial Products for Sustainable Development Projects at Universities

Green Financial Product	Type of Supported University Project	Funding Amount (10,000 yuan)	Interest Rate (%)	Repayment Term (Years)
Green Credit	Green campus infrastructure construction (intelligent energy management system)	500	3.5	10
Green Bond	Sustainable development research projects (research and development of new energy materials)	800	4.0	15

The green financial policy issued by the government plays an important guiding role in the sustainable transformation of tertiary education. Preferential tax policies can encourage financial institutions to increase capital investment in green projects in colleges and universities. Furthermore,

the policy requires colleges and universities to match the development needs of green industries in terms of specialty setting and curriculum system construction. For example, under the advocacy of green finance policy, many colleges and universities have added majors such as environmental finance and sustainable development management, adjusted the course content, integrated knowledge modules such as green finance and ecological economy, and trained professionals who adapt to the development of green economy.

The development of green finance promotes the society to form a strong demand for sustainable development talents, and then promotes the adaptive transformation of tertiary education. With the growth of green financial market, the demand for talents with green ideas and professional skills has surged. According to relevant surveys, the talent gap in the field of green finance is increasing year by year. This makes colleges and universities realize the urgency of cultivating talents related to sustainable development, actively adjust the direction of education and teaching, strengthen practical teaching, and cooperate with green enterprises in Industry-University-Research to provide students with internship and employment opportunities, so as to enhance their green professional quality and practical ability. Through the three mechanisms of financial support, policy guidance and social concept shaping, green finance strongly drives the sustainable transformation of tertiary education and helps universities to move towards the road of sustainable development in personnel training and scientific research innovation.

4. Challenges faced by the sustainable transformation of tertiary education driven by the development of green finance

Although the development of green finance plays an important role in promoting the sustainable transformation of tertiary education, it still faces many obstacles in practice. These challenges limit the full play of the driving effect. The singularity of green financial products and services is difficult to meet the diversified needs of tertiary education [10]. At present, the green financial market is mainly concentrated in the traditional fields such as green credit and green bonds, while the characteristic financial products for colleges and universities, such as education green fund and green financial leasing, are relatively scarce. In addition, the standard of green finance is not uniform, which leads to the lack of clear basis for financial institutions to evaluate green projects in colleges and universities. The definition and evaluation criteria of green projects vary greatly in different regions and institutions, which increases the difficulty and cost of financing in colleges and universities. The survey results of the matching degree between the supply of green financial products and the demand of universities are shown in Table 2:

Table 2: Survey on the Matching Degree between the Supply of Green Financial Products and University Demand

Green Financial Product Category	University Demand Level (%)	Market Supply Sufficiency (%)
Green Credit	80	60
Green Bond	65	50
Education Green Fund	70	30
Green Financial Leasing	60	25

The constraint of internal system and mechanism in colleges and universities is an important reason for the lack of transformation motivation. The traditional management mode and academic evaluation system make colleges and universities pay too much attention to short-term scientific research achievements and academic rankings, and are not enthusiastic about sustainable transformation, which requires long-term investment and accumulation. In terms of discipline construction, colleges and universities tend to develop popular and fruitful disciplines, and their support for green-related emerging disciplines is limited. The management and teachers of colleges and universities have insufficient knowledge of the concept of sustainable development, lack the consciousness of active transformation, think that green finance has little connection with the

development of colleges and universities, and do not fully realize the importance of green transformation to the long-term development of colleges and universities. Although the state has issued a series of policies to support the sustainable transformation of green finance and tertiary education, in the process of local implementation, there are some situations such as unclear policy interpretation and imperfect supporting measures. Low social participation also affects the process of green finance-driven tertiary education transformation. The cooperation between enterprises, social organizations and universities in green projects lacks depth and breadth, and fails to form an effective collaborative innovation mechanism. The public's attention and support for the sustainable transformation of tertiary education is not enough, and it is difficult to form a strong pressure of public opinion to promote the transformation of colleges and universities.

5. Strategies to promote the sustainable transformation of tertiary education driven by green finance

In order to effectively meet the challenges faced by the sustainable transformation of tertiary education driven by green finance, it is necessary to improve the green financial system, stimulate the transformation vitality of colleges and universities and optimize the external environment to promote the coordinated development of the two.

Enriching green financial products and services is a top priority. Financial institutions should develop customized products according to the characteristics of colleges and universities. For example, the launch of the Education Green Fund is dedicated to supporting green scientific research projects and green discipline construction in colleges and universities; Expand green financial leasing business and help colleges and universities update environmental protection teaching equipment. Furthermore, it is very important to unify the green financial standards. Relevant government departments should unite with financial industry associations to formulate a scientific and unified evaluation standard and certification system for green projects, so as to reduce the financing cost and difficulty of colleges and universities. See Figure 1 for the idea of innovative products of green finance in colleges and universities:

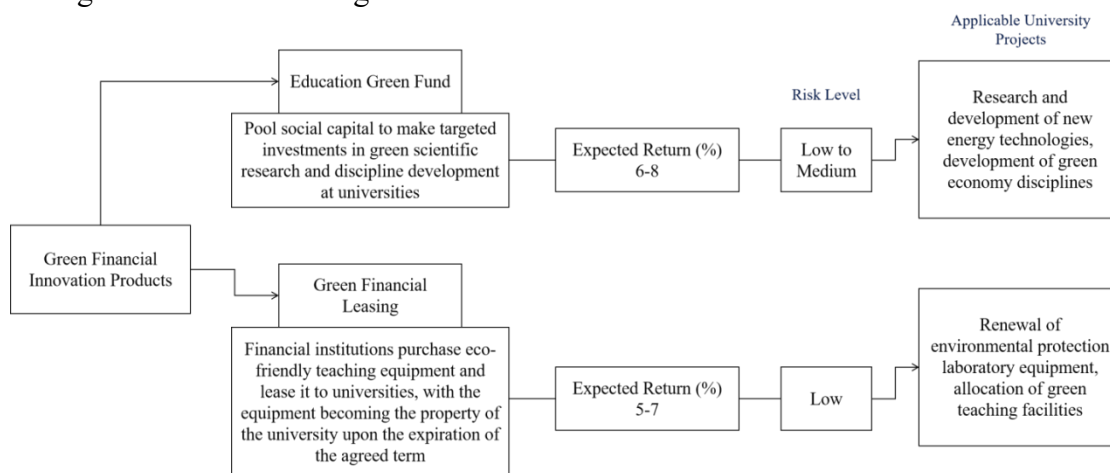


Figure 1 Ideas on innovative products of green finance in colleges and universities

Colleges and universities should establish a sustainable development-oriented management mechanism, adjust the academic evaluation system, and increase the weight of indicators such as green scientific research achievements and sustainable development teaching practice. Teachers who have made outstanding achievements in the construction of green disciplines and the development of green courses are inclined in the evaluation of professional titles and the evaluation of excellent teachers. Furthermore, we should strengthen the training of university management and teachers on the concept of sustainable development, and organize seminars and academic lectures to enhance their understanding of the importance of green finance and the sustainable transformation of tertiary education, and enhance their willingness to take the initiative to transform. The government needs to strengthen the publicity and interpretation of policies related to green finance

and tertiary education, formulate detailed implementation rules and operational guidelines, clarify the responsibilities of various departments, strengthen supervision and assessment, and ensure that policies take root. It is also indispensable to enhance social participation. Enterprises and universities are encouraged to carry out in-depth industry-university-research cooperation and jointly conduct green project research and personnel training. Furthermore, social organizations can play a bridge role, build a communication platform, and promote information sharing and cooperation among universities, financial institutions and enterprises. Through media publicity and public welfare activities, we will raise public awareness and support for the sustainable transformation of tertiary education, create a good social atmosphere, and comprehensively promote the sustainable transformation of tertiary education driven by green finance.

6. Conclusions

This article deeply discusses the driving effect of green financial development on the sustainable transformation of tertiary education, and the research results have certain significance. Theoretically, it clarifies the theoretical basis of green finance and the sustainable transformation of tertiary education, and reveals the close internal relationship between them. The theory of green finance integrates environmental protection into financial activities, and the theory of sustainable transformation of tertiary education is guided by the concept of sustainable development. Both of them agree on the core goal of sustainable development.

In terms of driving mechanism, green finance plays an active role in the sustainable transformation of tertiary education through three mechanisms: financial support, policy guidance and social concept shaping. Financial support provides the necessary economic foundation for green projects in colleges and universities, policy guidance points out the direction of university transformation, and social concept shaping forces university reform from the perspective of talent demand. However, there are many challenges in reality. The green financial system is not perfect, the products are single and the standards are not uniform; The internal institutional constraints and lack of conceptual cognition in colleges and universities lead to the lack of transformation motivation; The implementation of external policies is not in place and social participation is low, which limits the full play of the driving effect of green finance. In view of these problems, this article puts forward corresponding strategies. To promote green development, the green financial system should be improved by enriching financial products and services and unifying relevant standards; the transformation vitality of colleges and universities should be stimulated by reforming their internal management systems and enhancing concept awareness; and the external environment should be optimized by ensuring policy implementation and improving social participation. Through the coordinated promotion of these strategies, it is expected to build a benign interactive relationship between green finance and the sustainable transformation of tertiary education, so that tertiary education can better meet the needs of social sustainable development and lay the foundation for cultivating high-quality talents with green ideas and professional skills.

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