Green Transformation and Development of Economy and Society of China Based on ESG Investment

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Abstract. With the deepening influence of ESG investment concept, ESG investment has shown a vigorous development trend and has become one of the important trends in China's investment field. Over the past 10 years, the number of ESG reports disclosed in China's A-share market has increased year by year. Domestic ESG public offering funds began to accelerate their issuance in 2021, and continued a relatively good issuance trend in 2022 and 2023. The objectives of China's economic and social green transformation include improving environmental quality, optimizing industrial structure and helping to achieve the goal of "double carbon". The paper further elaborates three paths of ESG investment enabling economic and social green transformation: guiding green investment, reducing investment risk and promoting the construction of market environment. Finally, some suggestions are put forward, such as deepening the recognition of ESG concept, advocating long-term investment and optimizing rating methods, in order to guide and standardize ESG investment and promote its positive role in China's economic and social development.

Keywords: ESG, green transformation and development, economy and society

1 Introduction

The green symbolizes the backdrop for a superior lifestyle and is an essential requirement for enduring growth. Advocating for an all-encompassing shift to green practices in both economic and social spheres is a fundamental strategy to address issues related to resources, the environment, and ecological balance. It is imperative to maintain a comprehensive, harmonized, innovative, and secure transformation, with the "dual carbon" initiative as a guiding principle, to synchronize efforts in carbon emission reduction, pollution decrease, green space expansion, and economic growth, integrating the green growth philosophy throughout the entire process of economic and social progression. Achieving high-quality development stands as the paramount goal in the comprehensive construction of a modern socialist nation, with the advancement of a green and low-carbon economy and society being a pivotal step towards this end. In the face of escalating challenges posed by climate change, China's unwavering commitment to sustainable development sends a resounding message to the global community, advocating for a thorough green transformation in

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economic and social development [1]. The ESG (Environmental, Social, and Governance) framework promotes a multifaceted set of values, emphasizing the balanced growth of the economy, environment, and society, and encourages enterprises to seek the maximization of societal value beyond their own interests. This aligns closely with the ideas, visions, and ambitious goals set forth at the 20th National Congress of the Communist Party of China and has become a widely accepted consensus worldwide, playing a vital role in the journey towards Chinese-style modernization. Presently, ESG investment has become increasingly integral to green finance, facilitating the efficient distribution of resources and factors through market-driven approaches and providing critical financial support for corporate social responsibility and green transformation. This study will concentrate on the role of ESG investment in fostering green transformation and development within China's economy and society. Additionally, the paper will explore recommendations for China's green transformation of economic and social development through ESG investment, furthering the pursuit of a green and low-carbon path for economic and social advancement.

2 Concept and Practice of Esg Investment

2.1 Concept of ESG Investment

In essence, the ESG investment philosophy suggests that investors should not solely concentrate on a company's traditional profit margins and financial health but should also take into account the environmental, social, and corporate governance values that reflect the company's and society's broader impact during the decision-making process. The United Nations Global Compact initially introduced the ESG concept in 2004, and UN PRI subsequently integrated corporate governance with environmental and social responsibilities in 2006, formally establishing the three core components of ESG investing. Since then, the ESG concept has been further developed, with the refinement of assessment benchmarks and investment products, and a growing number of entities, including sovereign wealth funds and pension funds, have increasingly embraced and started to implement the ESG investment philosophy.

2.2 Practice of ESG Investment

Since 2023, 1,714 A-share listed companies have issued ESG reports for 2022, an increase of 285 over the previous year, accounting for 32.9% of the total number of A-share listed companies, an increase of 20% over the previous year. Among them, there are 959 listed companies on the Shanghai Stock Exchange (accounting for 43.2% of the total number of listed companies on the Shanghai Stock Exchange), 752 listed companies on the Shenzhen Stock Exchange (accounting for 26.9% of the total number of listed companies on the Shenzhen Stock Exchange), and 3 listed companies on the Beijing Stock Exchange (accounting for 1.5% of the total number of listed companies on the Beijing Stock Exchange). Data show that 2099 companies disclosed ESG reports in 2023, and the overall number exceeded 2022. The number and growth rate of ESG reports released by A-share listed companies are shown in Figure 1.

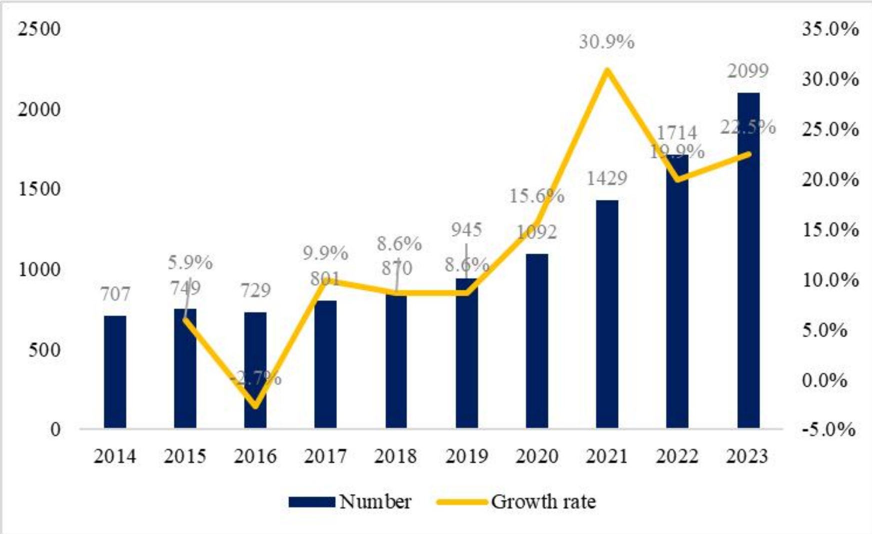

Fig. 1. Number and growth rate of ESG reports released by A-share listed companies (figure credit: original)

Following over two decades of growth, by the conclusion of September 2023, the public funds in China have amassed an asset management scale surpassing 27.6 trillion yuan, with a total of 166 public fund managers operating within the country. The sector of public funds has emerged as a vital catalyst for the advancement of both economic and social spheres. Within this sector, almost 55% of the public fund managers are engaged with and have taken an interest in equity ESG public fund investments, launching and managing 270 ESG-oriented public funds in China's market, amassing a combined asset management scale exceeding 260 billion yuan. The cultivation of ESG investment capabilities stands as a pivotal element for the prospective success of the asset management industry. In recent years, there has been a growing emphasis on environmental considerations, social responsibilities, and corporate governance within investment decisions by public funds, propelling the industry towards a trajectory of high-quality development.

As depicted in Figure 2, the launch of domestic ESG public funds has picked up pace since the year 2021, and this positive trend has persisted into 2022 and 2023. Despite this, the asset management scale of ESG public funds saw a decrease from 2022 to 2023, attributable to the softening A-share market and a reduction in the net asset value of the funds. In 2022, there was a sustained robust growth in domestic ESG public funds, with 69 new ESG public funds introduced over the course of the year, culminating in an asset management scale of approximately 290 billion yuan by year-end. During 2022, there was a year-on-year increase in the number of new offerings, contrasted with a year-on-year decrease in the asset management scale. Moving into 2023, the release of new domestic ESG public funds maintained its steadiness, with 47 new ESG public funds launched in the third quarter of the year, amassing a cumulative asset management scale of 265 billion yuan. In 2023, the quantity of new products was largely consistent with the corresponding period of the previous year, while there was a slight reduction in the asset management scale.

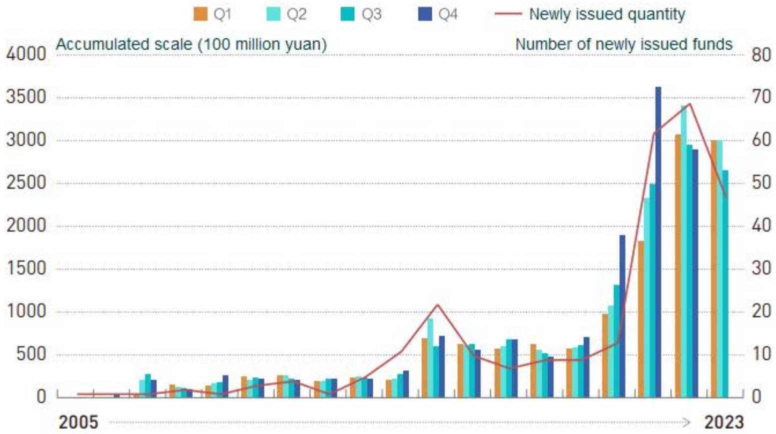

Fig. 2. Scale and number of ESG themed public funds in China (figure credit: *China ESG Development White Paper 2023*)

3 Goals of Green Transformation and Development of China's Economy and Society

3.1 Improve Environmental Quality

While the people are constantly satisfying their material life, their spiritual needs are gradually emerging, including the beautiful ecological needs of blue sky and green water and the entertainment and leisure needs of green water and green hills. The comprehensive green transformation of economic and social development requires efforts in the development mode and the use of renewable clean energy as far as possible in energy selection. Promote production methods with low energy consumption and less pollution, and vigorously support the cause of resource recovery. Integrate the concept of green management and operation into social development, and ultimately achieve the effect of efficient use of resources, and alleviate the current situation of low per capita resources in China from the level of resource consumption [2]. To improve the quality of ecological environment, we should not only deal with the environmental problems that have arisen, such as air pollution, water pollution and soil pollution, but also eliminate the pollution from the source, change the mode of production and lifestyle, realize the comprehensive green transformation of economic and social development, and achieve the synchronization of economic development and environmental protection. Promote the comprehensive green transformation of economic and social development, coordinate the development of the Chinese people themselves with the sustainable development of nature, make the sky bluer, the water greener, the trees greener, and maximize the use of natural resources. 3.2 Optimize Industrial Structure

To optimize the industrial structure, we need to adjust the industrial structure, eliminate several industries that do not meet the market demand and cause serious damage to the ecological environment, and optimize the existing industrial structure. In the adjustment of industrial structure, we should "accelerate the development of strategic emerging industries, high-tech industries and modern service industries". In the comprehensive green transformation of economic and social development, we will develop several new industries that use modern science and technology to lead the direction of industrial development. Increase investment in green science and technology, train professional and technical personnel, develop high-tech industries, and gradually realize the high-quality development of China's manufacturing industry [3]. Guided by the needs of the people, supported by modern technology and required by modern management concepts, we will develop a number of green and low-carbon modern service industries. In the comprehensive green transformation of economic and social development, through technological innovation, scientific and technological innovation and policy guidance, the green transformation of production and lifestyle gradually realizes the adjustment and optimization of industrial structure. Encourage and support the development of clean energy, energy conservation and environmental protection, green building, sustainable agriculture and other industries. Through policy guidance, financial subsidies, tax incentives and other measures, we will attract more investment to green industries and promote technological innovation and market expansion in these industries [4].

3.2 Help to Achieve “Double Carbon” Goal

China's measures to promote the comprehensive green transformation of economic and social development are not only to achieve high-quality economic development in China, but also to better protect the ecological environment. The earth is the common home of mankind and the only home of mankind so far. The earth is a complete ecosystem. The Chinese people's protection of China's natural environment is to protect the common home of mankind. Protecting China's ecological environment contributes to the protection of the global ecological environment. As the largest developing country, China has taken the initiative to "enhance the strength of national independent contribution" and set an example in carbon emissions. China will promote a comprehensive green transformation of economic and social development, formulate an action plan for carbon emissions peaking, reduce the use of fossil energy in energy selection, develop clean energy such as wind, solar and geothermal energy, and reduce the large amount of carbon dioxide produced by the combustion of fossil energy [5]. Carbon emissions should be gradually realized in different regions, and conditional regions should be encouraged to achieve the goal of carbon emissions as soon as possible to gradually achieve the goal of carbon neutralization of carbon emissions in China. After China's carbon emissions meet the standards, based on reducing carbon emissions, it will promote energy conservation and emission reduction in developing countries and promote carbon emissions in developed countries.

4 Paths of Green Transformation and Development Based on Esg4.1 Guide Green Investment

ESG investment promotes the inclination of resources to environment-friendly and socially responsible enterprises through the guiding role of capital. Through ESG investment, investors can encourage enterprises to improve environmental performance, fulfill social responsibility and optimize governance structure through their own investment behavior, thus promoting enterprises to move towards a more sustainable development direction. The promotion of ESG investment not only stays at the capital level, but also affects the optimization of the whole industrial structure to a certain extent. Enterprises that value environmental protection, social responsibility and good governance tend to be more competitive and more likely to win the favor of investors. Therefore, in order to attract more funds, enterprises have to increase the research and development and application of green production mode, strengthen the fulfillment of social responsibility, improve the governance structure, and gradually transform into a more sustainable enterprise model. This change is not only beneficial to the development of enterprises themselves, but also conducive to the upgrading and optimization of the entire industrial structure [6].

4.1 Reduce Investment Risk

In ESG investment, the results of environmental risk assessment will directly affect investor’s investment decisions on enterprises, thus guiding enterprises to develop in a more environmentally friendly and sustainable direction. Social risk management can not only enhance the reputation of enterprises, but also reduce the negative impact of potential social disputes and legal proceedings, and provide investors with a more stable investment environment. Governance risk also plays an important role in ESG investment. The governance structure and decision-making mechanism of enterprises are directly related to the operational efficiency and transparency of enterprises. Investors can understand the governance risk of enterprises by evaluating the governance mechanism, the independence of the board of directors and information disclosure. By assessing and managing the environmental risk, social risk and governance risk of enterprises, ESG investment helps to reduce the overall risk of the portfolio and achieve long-term capital preservation and appreciation [7]. When investors invest in ESG, they can not only get considerable economic returns, but also promote enterprises to develop in a more sustainable and responsible direction to achieve a win-win situation of economic and social benefits.

4.2 Promote Market Environment Construction

With the popularization and promotion of ESG investment concept, governments and regulators pay more and more attention to the role of ESG factors in economic development. The government may promote the development of ESG investment by introducing more policies and measures to support green economy and sustainable development. These policies may include tax incentives for enterprises that meet ESG standards, or financial subsidies and support for enterprises that carry out environmental protection projects. In addition, the government may also promote green credit in the banking sector and encourage financial institutions to increase financing support for projects and enterprises that meet ESG standards. These policy measures will help to reduce the cost of ESG investment and improve its return rate, thus attracting more capital into this field [8]. The government can also establish a unified ESG evaluation standard and rating system to provide reliable reference for investors, help them better identify investment targets that meet ESG standards, and reduce investment risks. These measures will help to establish a healthier and more standardized ESG investment market, enhance investor confidence, and promote the long-term development of ESG investment.

5 Guidance and Regulation of Esg Investment

5.1 Deepen Esg Recognition

The development of ESG investment in China is generally backward in developed economies, and its disadvantage is reflected in the lack of in-depth social awareness of the concept of ESG. Therefore, efforts should be made to popularize and publicize the ESG concept so that more investors can understand the meaning and value of the ESG concept. We will use government initiatives to build strong authorities, executive bodies, regulatory bodies and research institutions, strengthen the synergy and coupling between organizations, make multi-dimensional efforts, promote systematically, and lead the development of ESG investment. At present, domestic ESG investment is mainly based on institutional funds, which is in the stage of trial and exploration. Because ESG investment is based on profound sustainable development concepts and values, it requires considerable knowledge reserves to understand, which also forms a cognitive barrier and makes it difficult for retail investors to integrate. We should promote the application of ESG evaluation results in fundamental research, quantitative screening and risk management, expand the application scenarios of ESG evaluation results, provide education on ESG investment, and cultivate investor's awareness of ESG investment [9]. By practicing the ESG concept, we can guide institutions to build a good relationship with society, customers and employees, which is conducive to preventing social risks. Factors such as environment and climate change have increasingly become hard constraints to promote high-quality economic development. By improving the ESG investment strategy and incorporating environmental and climate risk management into a comprehensive risk management system, it is conducive to avoiding the risks arising from climate change and green development and reducing the risk exposure caused by carbon emission reduction and environmental protection policies.

5.2 Advocate Long-Term Investment

Drawing lessons from overseas experience, long-term funds naturally have the advantage of investing in low-liquidity assets, and asset owners pay more attention to sustainable development. Therefore, the government should guide long-term funds with certain social attributes, such as funds, pensions, insurance, and social security, to enter the ESG investment market, promote the combination of ESG investment and fixed income products, and enrich the application of ESG investment. At present, common ESG strategies include negative elimination strategy, positive screening strategy, integration strategy, sustainable theme investment strategy and so on. Among them, negative screening and ESG integration strategies are widely used. The negative elimination strategy mainly refers to the elimination of industries or businesses that do not conform to the ESG concept when building the portfolio. ESG integration strategy refers to the incorporation of environmental, social and governance factors into financial analysis, which takes ESG as a source of risk and return, and identifies whether ESG factors have a substantial impact on enterprises. From the perspective of investment practice, the portfolio incorporating ESG strategy shows a better risk-return ratio. ESG investment is more suitable for the allocation of long-term institutions. For Chinese institutions, whether they can have a more mature asset allocation framework and internal performance appraisal system, so that asset allocation can achieve cross-cycle is a key [10]. In short, ESG brings a new tool to investors who pay more attention to long-term value and sustainable development, screens companies that are more in line with long-term doctrine and value investment, and allows the market to reduce the financing costs of these companies, change the understanding of the company, and thus enhance the value of the company.

5.3 Optimize Rating Method

ESG ratings focus on the environmental, social and corporate governance performance of enterprises and are designed to help investors assess the sustainability and long-term value of enterprises. It is essential for investors to understand the methodology and metrics of ESG ratings, which will help them make more informed investment decisions. Different institutions may adopt different assessment methods. The main ESG rating methods include top-down and bottom-up. The top-down approach is based primarily on a company's overall performance, which is evaluated by rating agencies based on publicly available information and disclosure reports. Bottom-up methods focus more on the internal details of the company, usually requiring enterprises to respond to a series of questionnaires on environmental, social and governance issues. Combining the rating results of the two methods, a relatively comprehensive and objective ESG rating can be obtained. Companies should not use announcements as “advertisements” and ESG disclosure as a means of brand marketing to mislead investors by providing inaccurate information through excessive packaging of ESG. Establish its own full-process ESG rating system to comprehensively evaluate the ESG performance of investment targets from the three dimensions of fund companies, fund managers and underlying assets. Through this method, institutions can screen out the targets that truly conform to ESG investment principles and avoid being misled by “pseudo-ESG”. Before making investment decisions, investment institutions should conduct adequate due diligence to understand the actual operation, environmental and social impact of the investment target. This helps to identify potential “greenwashing” risks and take appropriate preventive measures.

6 Conclusions

As a novel investment paradigm, ESG investment is instrumental in driving the eco-friendly transformation and growth of China's economic and social landscape. By steering capital towards environmentally friendly sectors, mitigating investment hazards, and fostering the development of a market environment, ESG investment aids in enhancing and advancing the industrial structure. Furthermore, it offers substantial backing for the attainment of the “dual carbon” objectives. In light of the current state and challenges of ESG investment in China, it is crucial to intensify the awareness of this concept, champion long-term investment strategies, and refine evaluation techniques. It is anticipated that the implementation of ESG investment will foster harmonious progress in the economy, environment, and society, thereby achieving the ambitious targets of high-quality and sustainable development.

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