International Journal of Finance and Investment
ISSN: 3078-6002 (Print), ISSN: 3078-2295 (Online) | Vol. 4, No. 3, 2025

Practice and Application of ESG Investment Concept in China Market

Yanyan Chen

Commerce, The University of New South Wales, Sydney, Australia, 2052

Abstract: ESG investment philosophy focuses on environment (E), society (S) and corporate governance (G), emphasizing the unity of economic benefits and sustainable development. In recent years, the ESG concept has been gradually promoted in China's capital market, and policies, institutions and investors have collaborated to promote the construction of the ESG system. On the basis of sorting out ESG theoretical basis and international development experience, this paper systematically analyzes the practical status and market performance of ESG investment in China, and puts forward some suggestions on perfecting ESG investment system in China, so as to provide reference for the high-quality development of capital market.

Keywords: ESG Investment, Sustainable Finance, Corporate Social Responsibility, Information Disclosure, Green Development.

1. Introduction

The rise of ESG investment concept is an important symbol of the transformation of global financial system, reflecting the extension of investment logic from single economic income to comprehensive social value. In recent years, China government attaches great importance to green finance and sustainable development, ESG investment has gradually become a new direction to guide capital allocation. With the continuous improvement of policy system, evaluation standards and investment tools, ESG concept is deeply influencing corporate governance and investment decisions in China. However, compared with the mature international market, China ESG investment is still in its infancy, with imperfect information disclosure and inconsistent standard system. This paper aims to reveal the practical characteristics and development path of ESG concept in China market through theoretical analysis and empirical discussion.

2. Theoretical Basis and International Development Pattern of ESG Investment Concept

2.1. Connotation and Theoretical Basis of ESG Investment Concept

ESG is the abbreviation of Environment, Society and Governance, emphasizing that enterprises should give consideration to environmental protection, social responsibility and governance structure optimization while pursuing economic benefits to realize sustainable development. ESG concept originated from socially responsible investment in 1960s, and later promoted by UN Principles for Responsible Investment (UN PRI), it became an important value orientation of global financial system. Its theoretical basis mainly includes sustainable development theory, stakeholder theory and information asymmetry theory. The former establishes the goal of coordinated development of economy and ecology, the latter emphasizes that enterprises should balance multi-interests and enhance long-term governance value, while the information asymmetry theory points out that ESG information disclosure helps to reduce investment risk and enhance market trust. ESG investment is therefore not only a value-oriented, but also an institutional arrangement for risk management and long-term returns [1].

2.2. Evolution Path and Main Mode of International ESG Investment

International ESG investment has experienced a development process from moral screening to systematic integration. In the early stage, it mainly eliminated high-pollution and high-risk industries, but in recent years, ESG indicators were embedded in traditional financial analysis to realize quantitative management and risk identification. The main models currently include:

Negative screening-eliminating enterprises that do not meet social responsibility standards;

Active screening-prioritizing investments in companies with excellent ESG performance; Integrated investment-incorporating ESG elements into the investment evaluation system;

Thematic investment-focus on green energy, low-carbon economy and other fields.

European and American countries have formed mature ESG rating systems, such as MSCI and Sustainalytics, which promote ESG to become an important standard for measuring enterprise competitiveness. European policy guidance is prominent, the United States has a high degree of marketization, Asian countries gradually improve the information disclosure mechanism, forming a diversified development pattern.

2.3. Introduction of ESG Investment Concept and Policy Environment in China

ESG investment in China started late, but developed rapidly. Since the issuance of the Guiding Opinions on the Construction of Green Financial System in 2016, the regulatory authorities have continuously improved the policy system, and the Exchange has successively issued ESG disclosure guidelines. The market has gradually formed a pattern of policy promotion, institutional participation and product innovation [2]. At present, ESG funds, green bonds and other products continue to increase, rating agencies and information platforms gradually establish localization standards. However, China ESG investment still has some problems such as inconsistent disclosure standards, poor data comparability and insufficient investor cognition. In the future, we should continue to improve the unified disclosure standards, strengthen policy coordination and promote scientific and technological empowerment, so as to build an ESG investment system conforming to China's national conditions.

3. Practice Status and Performance Analysis of ESG Investment in China Market

3.1. Main Practice Areas and Market Characteristics of ESG Investment

In recent years, with the implementation of the "double-carbon" strategy and the improvement of the green financial policy system, ESG investment has become an important trend in China's capital market [3]. At present, the main practical fields of ESG investment in China focus on public offering fund, insurance fund, bank financing and enterprise social responsibility investment. The field of public funds is the most active, with many fund companies launching products with the themes of "ESG", "Green Development" and "Sustainable Growth", focusing on new energy, clean energy, energy conservation and environmental protection, digital governance and other fields. With its long-term investment characteristics, insurance funds incorporate ESG risks of enterprises into investment evaluation system, paying attention to corporate governance robustness and sustainable return ability. The banking system guides social capital to low-carbon industries through green credit, green bonds and loans linked to sustainable development [4].

From the overall characteristics, China ESG investment presents the pattern of "policy-driven, institution-led and industry agglomeration." Government policies provide clear guidance, institutional investors become the main driving force, ESG investment is mostly concentrated in new energy, materials, manufacturing and other strategic emerging industries. However, at present, the participation of individual investors is still low, the penetration rate of ESG investment products is limited, and the investment depth and market capacity need to be further expanded.

3.2. Correlation Between ESG Performance and Market Performance

A large number of studies show that there is a significant positive correlation between ESG performance and market performance. Companies with high ESG scores generally have a more stable revenue structure and lower systemic risk, which stems from their good environmental management, social responsibility performance and governance mechanism optimization [5]. Enterprises with excellent ESG performance are more likely to gain recognition from the capital market, with relatively low financing costs and high investor trust. Empirical research shows that listed companies with high ESG rating in A-share market perform well in stock price stability, long-term return rate and brand reputation. For example, leading enterprises in new energy, medicine and high-end manufacturing industries not only obtain more green financing opportunities by improving ESG management system, but also realize valuation premium in capital market.

However, ESG practice in China still faces several constraints. Firstly, the quality of information disclosed by enterprises is uneven, and some enterprises tend to be "formalized" and "propagandized"; secondly, the evaluation standards of different rating agencies lack uniformity, which leads to large differences in ESG scoring results, affecting investors 'judgment; thirdly, some investors lack understanding of ESG value, and the short-term income orientation is still obvious. In order to realize the effective linkage between ESG performance and market value, it is necessary to improve the data disclosure system, construct an authoritative and unified evaluation framework, and enhance the transparency and comparability of information.

This paper selects Chinese A-share listed companies with ESG rating data on the SynTao Green Finance Platform of the Wind database from 2015 to 2020 as the research sample. After screening, a total of 2,676 observations are finally obtained, forming an unbalanced panel data. Among them, the core explanatory variable, ESG performance, directly adopts the rating data of SynTao Green Finance. The ratings are assigned scores from 4 to 1 in sequence according to the levels (A, B, C, D), with a higher score representing better ESG performance. The explained variable, financial performance, is measured by Return on Assets (ROA), which is widely used in academic research and can comprehensively reflect a company's profitability. The corporate financial data and control variables (such as firm size, financial leverage, etc.) are all from the China Stock Market & Accounting Research (CSMAR) database, and the internal control data is obtained from the DIB database. To mitigate the impact of outliers, all continuous variables are winsorized at the upper and lower 1%.

Table 1 reports the descriptive statistical results of the main variables. As can be seen from Table 1, the mean of the Return on Assets (ROA) of all sample enterprises is 0.064, and the standard deviation is 0.058, indicating that there are certain differences in the profitability of the sample enterprises. The mean of the core explanatory variable, ESG performance, is 2.823, which is between level C and level B. This shows that there is still much room for improvement in the overall ESG level of listed companies in China. Moreover, its standard deviation is 0.425, reflecting that the ESG performance of different enterprises varies greatly. In addition, the distributions of control variables such as firm size (SIZE), financial leverage (LEV), and growth (GROWTH) also show sufficient variability, laying the foundation for the subsequent regression analysis.

Table 1. Descriptive Statistics of Variables

Variable	Number of Observations	Mean	Standard Deviation	Minimum	Median	Maximum
ROA	2676	0.064	0.058	-0.072	0.047	0.257
ESG	2676	2.823	0.425	2	3	4
SIZE	2676	24.08	1.32	21.82	23.85	27.93
LEV	2676	0.487	0.199	0.077	0.502	0.925
GROWTH	2676	0.181	0.402	-0.493	0.112	2.783
IC	2676	6.514	0.139	5.791	6.532	6.76
DUAL	2676	0.229	0.42	0	0	1
FCF	2676	0.018	0.087	-0.281	0.022	0.264

This paper conducts regression analysis using the fixed-effects model to control for the estimation bias caused by individual heterogeneity that does not vary over time. The benchmark regression results are presented in Column 1 of Table 2. The coefficient of ESG performance is -0.010, which is significant at the 1% statistical level. This key quantitative finding indicates that, at the current stage, an improvement in a company's ESG performance has a significant negative impact on its short - term financial performance. Specifically, for each one - level increase in the ESG rating, the company's ROA will, on average, decrease by 0.01 units. This result suggests that the costs generated by current ESG investments may not yet be fully offset by the potential benefits they bring, or there may be a certain time lag in the market's recognition and reward of ESG value.

Table 2. Baseline Regression Results

Variable	Fixed Effects Model (FE)	Random Effects Model (RE)
ESG	-0.010***	-0.008***
	(-3.922)	(-3.543)
SIZE	-0.001	-0.001
	(-0.965)	(-1.644)
LEV	0.007	-0.002
	(1.452)	(-0.485)
GROWTH	0.012***	0.012***
	(5.038)	(5.027)
IC	0.073***	0.078***
	(6.912)	(7.973)
DUAL	-0.004	0.007**
	(-0.903)	(2.128)
FCF	0.045***	0.070***
	(3.487)	(5.777)
Constant	-0.371***	-0.394***
	(-5.290)	(-5.993)
Observations	2,676	2,676
R-squared	0.112	
Adjusted R-squared	0.110	
Hausman Test		233.52***

3.3. Trends in Investor Behavior and Market Perception

With the continuous advancement of national policies and the strengthening of public opinion, investors 'understanding of ESG concepts is gradually deepening. Institutional investors have become the main force in ESG investment, and many large public funds, insurance companies and sovereign wealth funds have incorporated ESG factors into investment access, risk assessment and post-investment management. For example, some fund companies set up independent ESG research departments to conduct long-term follow-up evaluation on enterprises through self-built databases and rating systems. At the same time, commercial banks and trust institutions are beginning to introduce ESG considerations into credit approvals and project financing to meet green credit and regulatory requirements.

In contrast, individual investors 'attention to ESG is still in its infancy, most investors' behavior is affected by short-term earnings expectations, and their recognition and recognition of ESG products are insufficient. However, in recent years, with the launch of ESG theme index, the popularization of green finance knowledge and the publicity of social media, the public's attention to sustainable investment has increased significantly, and the market atmosphere has gradually changed from "policy-driven" to "conceptual consensus".

4. Perfect Path and System Construction of ESG Investment System in China

4.1. Establish a Unified ESG Information Disclosure and Evaluation Standard System

The perfection of information disclosure system is the key link for the stable operation of ESG investment system. At present, ESG information disclosure of China enterprises is mostly voluntary behavior, with great differences in content and caliber, and lack of authoritative and unified evaluation standards. The problem of asymmetric information is still prominent, and it is difficult for investors to accurately judge the true sustainable development level of enterprises, which is also not conducive to the formation of a fair and transparent market competition environment.

The future reform direction should be promoted simultaneously at the three levels of system, technology and industry self-discipline. Institutionally, regulatory agencies should take the lead in establishing national unified disclosure norms and evaluation standards, and incorporate disclosure obligations into the information management system of listed companies. We can draw lessons from international mature experience, such as SFDR and IFRS, and combine China's industrial structure and regulatory needs to form an ESG evaluation framework with local characteristics.

At the technical level, the state can build a centralized ESG information platform, collect and dynamically update enterprise reports in a standardized manner, and realize automatic identification and comparison of information by using artificial intelligence, big data and other tools, so as to improve the authenticity of data from the source. At the same time, industry associations can formulate detailed disclosure rules for different industries, so that enterprises in different fields can maintain professional differences under unified standards and form a two-tier disclosure system of "national standards + industry rules". This not only enhances the comparability of information, but also enhances the pertinence and practicality of corporate disclosure.

4.2. Promoting ESG Financial Product Innovation and Diversification of Investment Instruments

Whether ESG concept can really be implemented depends on the innovation degree of financial products and investment instruments. At present, China ESG investment products are concentrated in public funds and green bonds, with a single type, and have not yet formed a multi-level structure covering bonds, stocks, derivatives, etc. In order to expand ESG funding sources and market depth, it is necessary to achieve multiple breakthroughs through product innovation, market mechanism improvement and policy incentives.

At the product level, financial institutions should be encouraged to develop wealth management products, carbon neutral funds, green REIT and social impact investment projects linked to ESG performance. Commercial banks can link ESG performance with enterprises in loan interest rate, credit line and other links, while insurance institutions can incorporate ESG factors into long-term investment portfolio management to form long-term stable sustainable fund support. The capital market can also launch more ESG-based index funds and quantitative investment products to meet the investment needs of different risk preferences.

At the market level, a perfect ESG index system and derivatives market should be established to provide investors with reference and risk management tools. The construction of industry segmentation index, regional ESG index and comprehensive ESG index is helpful to realize differentiated evaluation of enterprises in different industries. At the same time, the introduction of derivatives such as futures and options can enable investors to realize flexible allocation while controlling risks, thus improving the market attraction of ESG investment.

At the incentive level, policy support is also indispensable. The government can encourage financial institutions to intensify ESG product innovation by means of tax preference, fiscal discount interest and risk compensation. For institutions with perfect information disclosure and outstanding investment performance, priority support can be given in green credit line, project approval and other aspects; for false disclosure and "greenwashing" behavior, disciplinary mechanism should be established to maintain market credibility.

4.3. Establish a Long-Term Governance Mechanism for Science and Technology Empowerment and Policy Synergy

The construction of ESG investment system is not only the perfection process of financial system, but also the systematic engineering of science and technology and policy coordination. Digital and intelligent means are becoming an important support for improving governance efficiency and enhancing market trust. At the heart of technology empowerment lies data. Through big data, artificial intelligence, blockchain and other technologies, an ESG intelligent management system covering the entire process of disclosure, analysis, and evaluation can be built. Artificial intelligence can mine text on a large number of enterprise reports to identify potential risk signals; blockchain technology can ensure information traceability and tamper-proof; big data platform can dynamically reflect the environmental performance and social contribution of enterprises, providing real-time reference for investors. With the intervention of science and technology, ESG analysis has shifted from static disclosure to dynamic monitoring, greatly improving decision-making efficiency and evaluation accuracy.

At the policy level, cross-sectoral coordination mechanisms are needed to bring together fiscal, financial, environmental and science and technology policies. Financial regulatory agencies are responsible for system design and market supervision, ecological environment departments provide carbon emission and environmental governance data support, and financial departments guide social capital to flow to green industries through special funds and subsidy policies. Policy coordination and information sharing among departments will promote ESG investment to form a virtuous circle from regulation to market. At the same time, the co-governance mechanism at the social level should also become an important part of ESG governance. Enterprises should truly incorporate sustainable development into business decision-making at the strategic level, investors should promote high-quality capital flow through rational choice, and media and the public should form public opinion pressure through supervision and evaluation, so as to construct a comprehensive governance pattern guided by the government, driven by the market and co-governed by the society.

5. Concluding Remarks

The promotion and practice of ESG investment concept is promoting the transformation of China capital market from pursuing short-term income to focusing on long-term value. By perfecting the information disclosure system, innovating the form of financial products, and strengthening the coordination between science and technology empowerment and policy, ESG investment in China is gradually forming an institutionalized and systematic development pattern. In the future, with the unification of standards and the maturity of the market, ESG investment will become an important force to guide high-quality capital flow, realize green transformation and sustainable social development.

References

[1] Zhao D: ESG risk management and compliance practices in China, Law and Economy, Vol. 1 (2022) No.4, p.27-32.

[2] Wang N, Pan H, Feng Y, et al: How do ESG practices create value for businesses? Research review and prospects, Sustainability Accounting, Management and Policy Journal, Vol. 15 (2024) No.5, p.1155-1177.

[3] Lombardi Netto A, Salomon V A P, Ortiz-Barrios M A: An environmental, social, and governance (ESG) model for multiple criteria analysis of investments, International Transactions in Operational Research, Vol. 33 (2026) No.1, p.489-506.

[4] Zhang A Y, Zhang J H: Renovation in environmental, social and governance (ESG) research: the application of machine learning, Asian Review of Accounting, Vol. 32 (2024) No.4, p.554-572.

[5] Marais F, van der Lugt C T, Mans-Kemp N: Mainstreaming environmental, social and governance integration in investment practices in South Africa: A proposed framework, Journal of Economic and Financial Sciences, Vol. 15 (2022) No.1, p.787.