



# A Comparative Study of Financing in China and the US Based on ESG Concepts

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**Abstract.** This paper, guided by the concept of ESG (Environmental, Social, Governance), presents a comparative analysis of the current financing landscape in China and the United States. By selecting representative companies for case studies, the research explores the differences in financing models, including variations in financing entities, capital flows, and development factors. The analysis highlights the divergent characteristics and influences of these factors on ESG financing in both countries. Through the comparison of ESG financing practices between China and the U.S., the study provides insights and valuable lessons for the development of China's ESG financing market. The findings aim to contribute to a deeper understanding of how different financing approaches can support sustainable development and corporate governance improvements, while offering recommendations for policymakers and industry leaders in China to enhance the growth and effectiveness of ESG-focused financial markets. This research serves as a reference point for fostering innovation in ESG financing models and advancing the sustainable finance agenda in China.

**Keywords:** Financing Model, Sustainable Development, ESG.

## 1 Introduction

ESG (Environmental, Social, Governance) represents a framework encompassing three critical components: environmental protection, social responsibility, and corporate governance. At its core, ESG reflects a company's pursuit of profit maximization while taking responsibility for its environmental and societal impact. The environmental aspect focuses on how businesses manage and minimize their operations' negative environmental effects, such as energy consumption, waste management, and climate change mitigation. The social dimension considers how companies manage relationships with key stakeholders, including employees, customers, suppliers, and the broader community. This includes policies on human resources, health and safety, corporate citizenship, and product responsibility. The governance component emphasizes the structures and processes that shape corporate leadership, such as board composition, executive remuneration, auditing, and internal controls [1].

The ESG investment philosophy, rooted in ethical investing, originated in the 1920s through religious institutions. Over time, it evolved into modern socially responsible investing (SRI), influenced by movements advocating for human rights, environmental protection, and anti-apartheid. Today, ESG investments are rapidly expanding, with 4,030 organizations adhering to the United Nations Principles for Responsible Investment (UNPRI) by May 2021. In 2020, the U.S. became the largest ESG investment market [2].

In China, ESG investments have surged since the launch of its first ESG-themed fund in 2013, with policy support, the push for carbon neutrality, and increasing environmental concerns driving growth. By 2021, new ESG-themed fund releases increased by 75%, reflecting the rising prominence of ESG in China's investment landscape.

Globally, the size of ESG funds has surpassed \$3 trillion, with the U.S. market alone reaching \$17.08 trillion in 2020, accounting for nearly 48% of global ESG investments. China's ESG development, while more nascent, is guided by the goal of ecological civilization and has seen progress in voluntary environmental disclosures and system development. By mid-2023, over 1,700 listed companies in China voluntarily disclosed ESG information, though ESG funds still represented just 2% of the total public fund market by 2022.

## **2 Current ESG Situation in China and the US**

### **2.1 ESG-Related Policies in China**

Currently, China's ESG-related policies are mainly focused on promoting sustainable development, environmental protection, social responsibility and optimization of corporate governance structure [3]. The following are some of the specific policies: First, environmental protection policies. The Chinese Government has put forward the concept that 'green water and green mountains are golden mountains' and has taken relevant actions. For example, China has implemented the Outline for the Implementation of Ecological Civilization, thereby promoting the construction and improvement of the carbon emissions trading market, and has issued the Opinions on Comprehensively Strengthening Ecological Environmental Protection and Resolutely Fighting the Battle of Pollution Prevention and Control to promote the implementation of policies. Secondly, the social responsibility policy. The Chinese Government attaches importance to the fulfilment of corporate social responsibility and has issued documents such as the Guidelines for the Preparation of Corporate Social Responsibility Reports, encouraging enterprises to disclose information on their social responsibility. Third, corporate governance policies, the China Securities Regulatory Commission and other regulatory bodies have issued a series of policies to regulate corporate governance, such as the Opinions on Further Improving the Quality of Listed Companies, etc., which have effectively improved the governance level of listed companies and further protected the rights and interests of investors. Fourth, green development policies; the Chinese Government has put forward the core objective of 'carbon peaking and carbon neutrality' and issued policies such as the

‘14th Five-Year Plan for Ecological and Environmental Protection’ to promote the green transformation and upgrading of traditional industries. Last, on ESG information disclosure. The China Securities Regulatory Commission (CSRC) and various exchanges have promoted the standardization and standardization of ESG disclosure. For example, both the Shanghai and Shenzhen Stock Exchanges have issued relevant ESG disclosure guidelines to encourage and require it.

## **2.2 ESG-Related Policies in the US**

Several government agencies and departments, such as the U.S. Environmental Protection Agency (EPA), the Department of Labor (DOL) and the Securities and Exchange Commission (SEC), are responsible for ESG oversight and enforcement. These agencies play a key role in developing and enforcing regulations, promoting transparency, and protecting stakeholders. A number of key U.S. laws and regulations directly address ESG issues, such as the SEC's disclosure requirements, the Sustainability Accounting Standards Board (SASB) standards, the Clean Air Act (CAA) and the Clean Water Act (CWA).

## **2.3 Comparison**

There are significant differences in the laws and regulations on ESG and green financing between China and the United States. In China, the development of ESG is closely related to national policies. The Chinese government has issued a series of policy documents to promote the development of ESG, so that the development of ESG in China is closely aligned with the national strategy [4]. In contrast, the development of ESG in the U.S. shows a different trend. Some states in the U.S. are skeptical about ESG, and there is even a so-called ‘anti-ESG movement’. For example, as of 2023, there are already 14 states in the United States with laws restricting the consideration of ESG factors in public investment and procurement. This trend is related to the political system and social governance mechanisms in the United States, but there is a clear difference in the attitudes of Democrats and Republicans towards ESG. The ‘anti-ESG movement’ in the United States reflects the controversy and disagreement over ESG concepts.

# **3 Comparison of Financing Models in China and the United States**

## **3.1 Identification of Green Standards in ESG in China and the US**

Firstly, there is a clear difference in focus between China and the United States. China prioritizes "ecological civilization building" and "dual-carbon" goals, promoting social harmony, sustainable development, and regulating the governance structures of listed companies, with an emphasis on internal controls and transparency. The United States, on the other hand, focuses on investor-driven aspects of how companies can

enhance long-term value through ESG practices [5]. These include, but are not limited to, climate change, diversity, inclusiveness, employee welfare, and disclosure as well as board structure in terms of governance.

Secondly, the two countries also differ significantly in policy practices. China emphasizes policy guidance and strict control of national standards under mandatory requirements, whereas the U.S. tends to rely on market-driven and investor-led initiatives for disclosures and practices.

### **3.2 ESG Participating Entities in China and the US**

The structure of ESG participating bodies in China and the US is similar, but the specific participating bodies are different. Both are composed of government, financial institutions, enterprises and social organizations.

The Chinese government plays an important role in promoting ESG development. For example, the Shanghai, the Shenzhen and the Beijing Stock Exchange issued a consultation draft of sustainability reporting guidelines in the first quarter of 2024 to guide A-share listed companies to publish ESG or sustainability reports. For the U.S., its federal government is involved in ESG finance under certain circumstances, such as through legislation or executive orders to promote sustainable finance policies. However, this involvement can be influenced by different political affiliations, leading to changes in policy direction and focus from one administration to the next. And since only 14 states look to implement ESG-related policies, it suggests that state governments are more conservative in their approach to ESG financing, which may limit the growth of ESG financing.

So far many financial institutions in both China and the U.S. have integrated ESG. banks and investment firms in the U.S., such as JP Morgan, Goldman Sachs, and Blackstone, play an important role in ESG financing, offering products such as green bonds and ESG investment funds; pension funds and insurance institutions: such as the California Public Employees' Retirement Fund (CalPERS) and New York Life, are institutional investors who are paying increasing attention to ESG factors and incorporate them into their investment decisions. Nowadays, Chinese commercial banks play an important role in ESG financing, such as Industrial and Commercial Bank of China (ICBC) and China Construction Bank (CCB), which provide products such as green credit and green bonds; securities companies such as CITIC Securities and Guotai Junan, which participate in the issuance of green bonds and provide services such as ESG investment consulting; and insurance companies such as China Life and Ping An support ESG financing by investing in green projects.

Companies in both countries have similar paths to ESG development. China's state-owned enterprises (SOEs) play an important role in ESG financing, promoting green transformation in key sectors such as energy, transport and construction. Meanwhile, listed companies and SMEs are beginning to focus on ESG as regulatory requirements increase, and are raising ESG financing through the issuance of green bonds and other means. Similarly, listed companies in the U.S., especially those with good ESG performance, raise funds by issuing green bonds or participating in ESG-related financing programmes.

### 3.3 ESG Funding Flows Between China and the US

The flow of ESG funds in China follows the following path: funds first flow in from individual and institutional investors, for example, Chinese pension funds and insurance companies investing in ESG-related funds. These funds flow to fund management companies through the purchase of financial products such as the Harvest Environmental Protection Industry Equity Fund. The fund management companies then invest these funds in ESG-compliant companies, for example, in LONGi, a listed company dedicated to renewable energy. Ultimately, these companies generate profits through their business activities and return the earnings to investors in the form of dividends or capital appreciation.

The flow of ESG funds in the U.S. follows the following path: funds flow from individual and institutional investors to ETF issuers through the purchase of ETF shares, such as the Vanguard ESG US Stock ETF. The ETF issuer then uses the funds to purchase shares of ESG-compliant companies in the secondary market, for example, by investing in new energy car makers such as Tesla. Companies such as Tesla turn a profit through their environmentally friendly and sustainable business model, which in turn returns earnings to ETF holders in the form of dividends or share price increases, and ultimately the funds flow back to investors.

China's ESG financing market is currently in a growth trend, and the overall scale of China's ESG investment in 2023 continued the trend of high growth, with the total scale rising by 34.4% compared with 2022, hitting a new record high. ESG public fund products have been added year by year, and the overall stability is improving [6]. By the end of 2023, the total number of ESG public fund products in the whole market was 586, with a total scale reaching RMB 543.786 billion. The number of ESG public funds with excellent sustainable performance levels (AA and above) grows rapidly from 2021, reaching 27.13% in 2023. The U.S. ESG finance market continues to dominate the world's ESG market, with a global ESG investment management market size of \$30.3 trillion, with the U.S. market remaining relatively stable. The returns of ESG ETFs investing in the U.S. market improved in 2023, with 54% outperforming the S&P 500 Index, and a median return of 27.4%, higher than the 2022 performance.

Overall, both China and the United States emphasize the role of governments and financial institutions with regard to the flow of funds regarding ESG green financing, but there are differences in the specific implementation methods and focus areas. The United States focuses more on market-driven and innovative financial product development, while China focuses more on policy guidance and integration with national strategies.

## 4 ESG Financing Comparison: China Mobile vs. Verizon

### 4.1 ESG in China Mobile

China Mobile's practice on ESG financing is being improved year by year. The following will be illustrated by three aspects. First, in terms of environmental

responsibility: China Mobile has explored the path of energy saving and emission reduction, and has implemented the Green Action Plan for 14 years, with remarkable results in energy saving and emission reduction. The company supports biodiversity conservation by applying energy-saving grading standards and promoting green packaging, as well as utilizing innovative information technology solutions. Second, in terms of social responsibility: China Mobile actively fulfils its social responsibility in epidemic prevention and control, poverty alleviation and universal service. The company provides network protection for important hospitals, CDCs and government agencies, and offers special business services to the community, such as cloud video conferencing [7]. Thirdly, about ESG evaluation: China Mobile excelled in the ESG evaluation system, topping the Pioneer 100 list of China's ESG listed companies. This indicates that the company has achieved the highest rating in terms of ESG governance, practice and effectiveness.

## **4.2 ESG in Verizon**

Verizon is also active in the ESG market as a US communications service provider. The following will be illustrated by three aspects, the first is the environmental responsibility aspect: Verizon is committed to addressing the risks and opportunities associated with its core business strategy in relation to the environment and society through effective governance and management. The company has joined the RE100, which aims to bring together the world's most influential companies to commit to using 100 per cent renewable energy. In addition, Verizon has issued green bonds to support the promotion and use of renewable energy. Secondly, in terms of social responsibility: Verizon creates positive impact through the implementation of corporate social responsibility programmes based on sustainability, while fostering a culture based on integrity and respect. Verizon actively fulfils its social responsibility in the areas of epidemic prevention and control, network security, and ensuring the stable operation of critical infrastructure. Third, in terms of governance structure: Verizon has established a robust governance structure, including adherence to a strict code of ethics, a supplier code of conduct, a privacy policy and a global tax policy. The conduct of these policies has helped the company maintain high standards and transparency in ESG. The company's performance and progress on ESG can be known from the ESG reports that Verizon regularly publishes on its official platform. These reports cover various aspects such as greenhouse gas emissions, renewable energy use, fleet fuel efficiency, water management, waste disposal and carbon reduction.

## **4.3 Comparison**

China Mobile and Verizon have common goals and concepts in ESG financing, but in the specific practice and implementation process, due to the differences in the policy and market environment of the countries in which they are located, there are differences in their specific practice and focus on ESG financing.

According to their related development strategies and data reports, both China Mobile and Verizon emphasize the importance of ESG, which includes concern for the ESG. They also focus on sustainable development strategies, reduce environmental impacts through various measures, enhance social benefits, and strengthen corporate governance [8].

The main difference is that China Mobile's ESG practices are more focused on domestic market needs and policy orientations, such as achieving significant results in renewable energy use and environmental protection. In contrast, Verizon's ESG practices may be more focused on international market trends and standards, such as joining RE100 and issuing green bonds.

## **5 Prospects of ESG Financing**

### **5.1 ESG Rating**

Internationally, ESG ratings are mainly done independently by various market organizations such as Ming Sheng (MSCI), FTSE, Bloomberg, Thomson Reuters and others. These organizations score companies on their ESG performance and give them a rating. In China, ESG ratings are different from international standards such as the ISO14000 series, ISO26000, and SA8000. These international standards focus more on a company's internal environmental management organization and processes, whereas China's ESG ratings focus more on a company's disclosure of its social responsibility and market investment evaluation.

### **5.2 Differences in ESG Issues**

Currently, the United States is more concerned with topics such as climate change, labor market diversification, equity and inclusiveness. China, on the other hand, pays more attention to the stage of industrial development and the cultivation of regional competitiveness. In the author's opinion, due to the differences between China and the US in terms of policy background, regulatory standards, and evaluation systems, the policy orientation, development direction, and market demand for ESG in China and the US are not the same. China has used ESG as a tool for policy innovation, incorporated it into regional competitiveness cultivation, and introduced a series of policies to promote ESG development [9]. In contrast, ESG policies and practices in the United States are influenced by multiculturalism and political stances, and there are large internal differences. Therefore, the ESG differences between China and the US symbolize the differences in the three core elements of policy, culture and economy between the two countries, with China's ESG development being more closely aligned with the country's macro policies and economic goals, while the US's ESG development is influenced by its multicultural and political environment.

### 5.3 Comparison

In China, the development of ESG is strongly supported and promoted by the government. The Chinese government has issued a series of policy documents to promote ESG development, such as requiring listed companies to disclose ESG information and guiding companies to publish ESG or sustainability reports. In addition, China actively participates in the development of international environmental disclosure principles, frameworks and standards, such as the International Sustainability Standards Board (ISSB).

In the United States, the development of ESG has faced some challenges and controversies. An 'anti-ESG movement' has grown in the US, with some state governments passing legislation restricting the consideration of ESG factors in public investment and procurement [10]. In addition, interest in ESG funds has waned in the US market, and some investors and companies are skeptical about ESG practices.

## 6 Conclusion

The comparative study of ESG financing between China and the United States reveals that, despite shared goals and principles, there are significant differences in their practices and implementation. The Chinese government actively promotes ESG development through policy initiatives, while in the U.S., there is an anti-ESG movement, with some states enacting laws that restrict consideration of ESG factors in public investments and procurement. In terms of regulation and standards, China's ESG regulations are highly tailored to specific industries and types of enterprises, whereas the U.S. approach is influenced by diverse cultural and political perspectives. Additionally, China's ESG practices are more aligned with domestic market needs and policy directives, while U.S. practices tend to focus more on international market trends and standards. These differences reflect the distinct policy orientations, market environments, cultural contexts, and levels of economic development in the two countries. Therefore, when conducting comparative studies of ESG financing between China and the U.S., it is crucial to account for these differences in order to formulate financing strategies and policies that are suitable for each nation.

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