

Study on Corporate Financing Constraints Based on ESG Practice and Digital Transformation

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Keywords: ESG Practice, Digital Transformation, Enterprise financing constraints

Abstract: With the transformation of global economy to sustainable development, the business model of enterprises is undergoing profound changes. ESG practice has gradually become an important standard to measure corporate social responsibility and sustainable development ability, while digital transformation promotes enterprises to enhance market competitiveness by improving information transparency and management efficiency. In today's rapidly developing era, enterprises not only need to focus on their own sustainable development, but also keep up with the wave of digitalization. This article aims to discuss how companies can use digital transformation to address their financial concerns while pursuing environmental, social, and governance goals. We conducted in-depth research on the challenges faced by businesses in pursuing these two goals, and how these challenges affect their financing. Finally, we also provided some improvement suggestions from the perspectives of the government and enterprises.

1. Introduction

In the process of sustainable development of the global economy, the business model of enterprises is gradually transforming, and the traditional financial orientation has been unable to meet the expectations of the market and society for corporate responsibility. Environmental, Social and Governance (ESG) practices have become an important criterion to measure the sustainability of enterprises, while digital transformation has become a key factor in the competitiveness of enterprises because of its advantages in improving operational efficiency and information transparency.

2. Overview of ESG Practice and Digital Transformation

2.1. ESG

ESG is taken from the initials of Environment, Social and Governance. ESG is a sustainable development concept that encourages enterprises to break through only focusing on financial performance and pay more attention to the comprehensive performance of environment, society and governance, and it is also a criterion for investors to judge the sustainability of enterprises [1]. In this definition, environmental responsibility (E) means that enterprises should strive to improve the environmental performance of production and operation, reduce the environmental burden per unit

of output, and minimize the negative impact on the environment [2]. This means that companies should avoid pursuing economic growth at the expense of ecology, increase investment in research and development of environmentally friendly technologies, and optimize the efficiency of resource use. Social responsibility (S) means that the company should strengthen the construction of business ethics and social ethics, attach importance to the rights of people, the interests of stakeholders and the improvement of industry ecology, and achieve a harmonious win-win situation with all stakeholders. Corporate governance responsibility (G) means that the company should improve the modern enterprise system from development strategy to specific actions [3].

At present, all ESG rating agencies evaluate the ESG performance of enterprises from the three aspects of environment, society and governance, but there may be some differences in the classification indicators and weights. The mainstream ESG rating agencies in the world include MSCI, Dow Jones, Thomson Reuters and Moody's. On the basis of drawing lessons from foreign rating systems and integrating Chinese characteristics, domestic rating agencies are also building ESG rating systems suitable for Chinese enterprises, and many rating agencies have emerged. In recent years, different scholars have used different measurement methods in the empirical research of ESG performance.

2.2. Digital Transformation

With the continuous development and maturity of the new generation of digital technology, digital transformation has become an inevitable requirement for the transformation and upgrading of enterprises. Scholars at home and abroad have also carried out research on digital transformation, and the definition of the concept of digital transformation is also different, but gradually clear. By combing the literature, it is found that the definition of digital transformation has also changed from the perspective of technology application to the perspective of deep-seated management. At first, we took technology as the starting point to understand the digital transformation [4]. The digital transformation of enterprises is regarded as the introduction of a series of digital technologies. Digital transformation refers to the application of digital technology in the production and operation process of enterprises. Enterprise digital transformation is the process of introducing digital technology into the production, operation and service process of enterprises, reducing human labor by means of its automation work, or the process of upgrading data technology. Digital transformation focuses on a series of digital capital investment around data purchase, introduction of scene data software and hardware, and employment of digital technicians.

In fact, with the advancement of digital transformation, scholars have deepened their understanding of digital transformation, which is not only the application of technology and the introduction of equipment, but also the overall transformation of enterprises in all directions and processes. Digital transformation is a comprehensive reflection of the structure, practice, values and beliefs brought about by digital technology. These changes will trigger profound changes in enterprise strategy, which will change the core competence of enterprises. Digital transformation is a process that uses the combination of information, computing, communication and connectivity technologies to trigger major changes in enterprises and break the "data gap" between different departments, so as to improve organizational performance. For example, the renewal of business model, the optimization of customer experience such as products and services, the improvement of enterprise production and operation process and decision-making process, and the transformation of enterprise personnel and organization.

Digital technology is integrated into all aspects of enterprises, from the highest level of enterprise strategy to every business process and operation link. This change has subverted the strategic deployment, the whole process of production, the full circulation of internal and external

information, the management mode, the business mode and the employment mode of enterprises, and more reflects the process of management and strategic transformation of enterprises relying on digital technology [5]. This study holds that the digital transformation of enterprises is based on the Internet, cloud computing, cloud storage, artificial intelligence, etc. Finally, it is a comprehensive means of change to improve the efficiency of enterprise operation and enhance the sustainable development ability and competitive advantage of enterprises. With regard to the empirical research of digital transformation, the current mainstream measurement method is to build a digital transformation thesaurus, count the word frequency of "enterprise digital transformation" in the annual reports of listed companies with the help of text mining technology, and use the word frequency as a proxy index to measure the degree of enterprise digital transformation.

3. Impacts of ESG Practice and Digital Transformation on Enterprises

3.1. Impact of ESG Practice on Enterprises

Corporate participation in corporate social responsibility activities can reduce the risk of corporate system and enhance corporate value. Most domestic scholars believe that ESG performance can have a positive impact on the value of enterprises, and improving the ESG performance of enterprises can help reduce financing costs. In the existing research, the promotion of ESG performance to enterprise value is mainly realized through two paths: one is that ESG performance will release favorable information to external stakeholders and other market players, gain market attention and reduce the degree of information asymmetry, thus enhancing enterprise value; Second, ESG performance requires enterprises to carry out green business activities, improve the internal restraint mechanism and operation system, and enhance the value of enterprises. Good ESG performance can enhance the market value of enterprises by reducing the information asymmetry between stakeholders and enterprises. Companies incorporate a good reputation and a "good citizen" image into their marketing strategies to help them gain sustainable competitive advantage and strengthen their relationships with stakeholders.

As a kind of non-financial information, ESG can better convey the quantity and quality of information about enterprises, and provide investors with more comprehensive and diversified enterprise information. Good ESG performance can convey good signals to the market and positive information to information users, thus gaining the recognition of market investors. In addition, the disclosure of ESG information can reduce the information asymmetry between enterprises and stakeholders, attract the attention of market investors, enhance the investment confidence of investors, reduce financing costs, improve the efficiency of enterprise investment, and thus improve the value of enterprises. The signaling theory would make it easier for ESG enterprises with good performance to get the attention of institutional investors and even international investors, while small and medium-sized investors, out of their "hitchhiking" mentality and trust in institutional investors, followed the choice of institutional investors and strengthened the market's attention to ESG enterprises with good performance.

As a key external entity promoting ESG practices, the government should continue to deepen its understanding of ESG concepts, accelerate the dissemination and influence of ESG concepts, and guide enterprises to integrate ESG concepts into all aspects of their business. Strengthening the social resources and financing support that ESG brings to enterprises through government means, enhancing the driving force of digital technology for enterprises to carry out ESG practices, and achieving a symbiotic win-win situation between digitalization and ESG.

In addition, good ESG performance can form its own competitive advantage by meeting the needs of stakeholders and obtaining the resources needed by enterprises from the external environment, such as government policy preferences, bank loans, customer loyalty and scarce

resources, thus improving the value of enterprises. As the ESG concept goes deep into enterprises and more non-state-owned enterprises are guided to join the ESG practice, we can consider forcing listed companies to disclose more abundant ESG information in the future, so that ESG information reports and financial reports can go hand in hand, so as to standardize the activities of enterprises towards the coordinated development of economy, society and ecology, and achieve high-quality development goals.

3.2. Impact of Digital Transformation on Enterprises

Commercial arbitration has a good foundation for cooperation and development, and the civil and autonomous nature of arbitration can avoid the sensitive topic of judicial power; the internationalization of arbitration is in line with the development direction of internationalization of business environment; the arbitration procedure is flexible, focusing on party autonomy and confidentiality, as well as adequate judicial protection, which meets the needs of commercial subjects for effective and efficient dispute resolution. Therefore, commercial arbitration should be identified as the core mechanism of commercial dispute resolution, and commercial arbitration cooperation should be innovated from two aspects of arbitration legislation docking and arbitration judicial protection, with the institutional guarantee shared by the arbitration service market as the fulcrum. The people's courts have continuously improved the review procedures of arbitration judicial review cases from the institutional level, reflecting the equal emphasis on judicial support and supervision of arbitration, and providing more intimate and meticulous legal services for market participants.

3.3. Strengthen Diversified Cooperation

Hypocrisy theory holds that in order to present stakeholders with good economic performance and a responsible image of taking the initiative to assume social responsibility, enterprises will actively disclose information related to digital transformation when they carry out digital transformation or plan to carry out digital transformation, and the application of digital technology greatly improves information. Therefore, it has a superimposed effect on establishing a good corporate image. As the digital transformation is highly consistent with China's policies, when an enterprise discloses the contents related to the digital transformation in its annual report or other documents, it will arouse media attention and release positive signals, which will help to enhance the image of the enterprise in the minds of investors and win the favor of investors, thus improving investor's expectations for the future development of the enterprise. It also helps to obtain government subsidies and preferential policies, and ultimately achieves the goal of reducing the financing cost of enterprises. Moreover, the digital transformation of enterprises will not only improve the transparency of their financial information, but also facilitate the supervision of the regulatory authorities, improve their credit rating, alleviate the difficulty and high cost of financing, and achieve the ultimate goal of enhancing the value of enterprises.

In addition, when enterprises disclose information about their digital transformation to the outside world, in order to achieve "consistency of words and deeds", enterprises will increase their investment in research and development innovation, indirectly exert external pressure on enterprise innovation, and improve enterprise innovation output, which will attract more market investors and form themselves in the capital market. So as to enhance the stock liquidity of enterprises. Digital transformation can improve the ability of enterprises to collect, integrate and output information, so as to provide structured and standardized information to the market, improve the availability of enterprise information, speed up the flow of information within the enterprise, improve the communication efficiency of employees, promote the development of enterprise organizational

structure to "flat", and improve the flexibility of enterprises to cope with complex environments.

Digital transformation helps to improve the transparency of internal information, reduce the supervision cost of shareholders to management and management to subordinates, effectively curb the opportunistic behavior of management, and reduce the real earnings management of enterprises. By tracing the internal decision-making and behavior of enterprises, we can improve the accuracy of enterprise decision-making and reduce the decision-making errors of management. While harvesting economic benefits with the help of digital transformation, we also need to focus on the coordination of economic and social benefits in the digital economy era, explore multiple mechanisms of ESG practice of digital transformation enabling enterprises, and gradually strengthen the positive impact on the economy, society and environment.

4. Conclusion

The combination of ESG practice and digital transformation provides an effective means for enterprises to break through financing constraints while achieving sustainable development goals. The application of digital technology enhances the information transparency and internal control ability of enterprises, enables enterprises to better meet the expectations of stakeholders, and thus gains more attention and support in the capital market. At the same time, good ESG performance helps to reduce the financing cost of enterprises and strengthen the social image and competitive advantage of enterprises. In the future, enterprises should continue to promote the deep integration of ESG and digital technology, and make full use of government policy support to achieve win-win economic, social and environmental benefits, so as to help enterprises develop steadily.

References

- [1] Yang P, Hao X, Wang L, et al: *Moving toward sustainable development: the influence of digital transformation on corporate ESG performance*, *Kybernetes*, Vol. 53 (2024) No.5: 669-687.
- [2] Kwilinski A, Lyulyov O, Pimonenko T: *Unlocking sustainable value through digital transformation: An examination of ESG performance*, *Information*, Vol. 14 (2023) No.8: 444.
- [3] Wang J, Song Z, Xue L: *Digital technology for good: path and influence—based on the study of ESG performance of listed companies in China*, *Applied Sciences*, Vol. 13 (2023) No.5: 2862.
- [4] Liu Z, Chen Z, Hu L: *Can enterprise digital transformation improve ESG performance*, *Managerial and Decision Economics*, Vol. 45 (2024) No.7: 5088-5103.
- [5] Haijun W, Songzheng W, Chen Z, et al: *Does digital transformation improve ESG responsibility performance? Empirical research based on MSCI index*, *Foreign Economics & Management*, Vol. 45 (2024) No.6: 19-35.