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The Impact of Fintech on Company Valuation: The Case of Hundsun Technologies Inc.

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Abstract: Given the growing global concern about climate change, nations have set goals to reach the highest level of carbon emissions and achieve carbon neutrality in order to reduce greenhouse gas emissions. Fintech, with its distinctive value, plays a crucial role in implementing the "carbon neutral" approach. This article uses Hundsun Technologies Inc. as a case study to conduct a SWOT analysis, investigating how the firm utilizes Fintech to further its "carbon neutral" agenda. The study's findings demonstrate that Hundsun Technologies Inc.'s use of financial technology to improve carbon emissions monitoring and management and engage in ecological construction through extensive collaboration not only enhances its sense of social responsibility and market competitiveness, but also holds immense value for industry enterprises. Fintech will remain significant in the context of the global push for carbon neutrality, but it must also enhance its oversight and regulation to maintain long-term growth and maximize societal advantages.

Keywords: Fintech, Carbon Neutral, Company Valuation, Hundsun Technologies Inc.

1. Introduction

Countries have established carbon peaking and carbon neutrality objectives to cut greenhouse gas emissions and address climate change as global concern grows. China, a major carbon emitter, wants a carbon peak by 2030 and carbon neutrality by 2060. China achieved this target thanks to the fourth industrial revolution, which is transforming the world. Fintech's unique value improves green financial product transparency and efficiency, optimizes resource allocation, and facilitates environmental protection project investment and financing. Financial technology startup Hundsun Technologies Inc., which aims to "making finance simple," has always prioritized Corporation Social Responsibility (CSR) and Environmental, Social, and Governance (ESG). Hundsun Technologies Inc. empowers the carbon trading market and green financial services through Fintech to actively respond to the country's dual-carbon goal. It implements low-carbon measures in its own operations and helps its customers and supply chain transition to a low-carbon future using blockchain technology.

Not only are companies increasingly focusing on strategic policies related to carbon neutrality, but a growing number of researchers and scholars in the academic community are also beginning to conduct extensive academic research on carbon neutrality and Fintech. Academic research on Fintech covers the relationship between Fintech and financial innovation, social impacts, regulatory issues, application prospects, and philosophical inquiries. Wei uses case study analysis to explore how

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Fintech carries out a technology-driven innovation approach [1]. Liu takes Fintech as the research object and explores the impact of Fintech on financial stability and its potential risks through macro-analysis and micro-analysis [2]. Drawing on ideas from environmental science and resource use, Fang studies how the pathway of reducing carbon emissions and improving carbon sinks affects the ecosystem's ability to store carbon [3]. Deng, on the other hand, examines the formulation and implementation of the carbon offset standard, as well as the degree of standardization of the global carbon market, using the observational research method [4].

Fintech and carbon neutrality research mostly focuses on macroeconomics and basic theoretical inquiry, seldom addressing microlevel issues or combining other fields. This paper addresses this research gap by integrating Fintech and carbon neutrality, applying the research perspective to company valuation, and using Hundsun Technology Inc. as an example to study how Fintech helps carbon neutrality and how its company valuation will change. Exploring the impact of Fintech on company valuation can help enterprises and investors understand the potential value and risk of Fintech; exploring the impact mechanism of Fintech application can help enterprises better understand Fintech, so as to enhance their innovation and competitiveness; and at the macro level, researching this area of Fintech not only helps in

This paper uses Hundsun Technology Inc. to analyze Fintech's influence on company valuation. Literature is searched using fintech, firm valuation, and carbon neutrality. The literature research and summary are combined with the carbon neutrality strategy and phenomena to do a SWOT analysis.

2. Literature Review

2.1. Definition

Fintech mainly refers to low-cost, easy-to-use, and effective financial products and services developed with the support of modern technologies such as big data, cloud computing, artificial intelligence, and blockchain [5]. Fintech has had a profound impact on all aspects of the financial industry, including artificial intelligence, blockchain, big data, cloud computing, digital technology, financial data governance, and financial regulatory technology.

The concept of carbon neutrality is internationally divided into two broad and narrow senses. In a narrow sense, carbon neutrality refers only to carbon dioxide neutrality, whereas in a broad sense, it includes a collective term for carbon dioxide neutrality, greenhouse gas neutrality, climate neutrality, net-zero carbon dioxide emissions, net-zero greenhouse gas emissions, and other related concepts [6]. This suggests that carbon neutrality not only focuses on carbon dioxide, but also covers the emission and absorption of other greenhouse gases in order to achieve overall climate neutrality. In order to be carbon neutral, new energy sources must be found and used, as well as carbon capture and storage technologies, microalgae biotechnology, renewable energy multi-energy complementary models, the use of hydrogen energy, new fossil energy use technologies, zero-negative carbon technologies, energy metering data, decarbonization programming, and green carbon emission reduction pathways.

2.2. The Impact of Fintech on Company Valuations

Innovation in technology is the main factor affecting Fintech companies' valuations, and different levels of technological production can have different impacts on company valuations. Fintech can increase the efficiency and quality of financial services by introducing new technologies, thereby increasing the firm's market value. Santos studied 97 information technology (IT) investments in the financial and manufacturing industries and used case study analysis to explore the impact of innovative and non-innovative IT investments on firm valuation [7]. The results showed that innovative IT investments increased the value of the firm [7]. Sriram conducted empirical analyses on the market value of a group of companies in the financial services industry to investigate the

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relationship between firm valuation and IT investments [8]. He found a positive relationship between IT investments and market value [8].

The power of Fintech has transformed the structure and function of the capital market, resulting in enhanced corporate financing issues, which in turn impact company valuation. Han Li, focusing on the stable and healthy development of micro and small enterprises, investigates how Fintech implements specific strategies to enhance their financial capabilities [9]. This is achieved through research methods such as literature data measurement, visual data analysis, and related literature research [9]. The findings demonstrate that Fintech contributes to the healthy and sustainable development of micro and small enterprises by innovating the financial service model, which in turn accelerates the development of regulatory technology and credit systems [9]. Beaumont conducted an empirical analysis to examine the function of Fintech loans in the SME credit market [10]. He discovered that these loans serve as a complement to bank loans, expanding corporate financing channels [10]. This, in turn, aids the company in growing its scale and sales, leading to an increase in its valuation [10].

Carbon emission disclosure is an important indicator for achieving carbon neutrality, and different degrees of disclosure have a significant impact on a company's investor return and corporate image. Shen Hongbo used the PSM paired-sample method to study the relationship between the degree of carbon disclosure and investor returns, and she found that companies that voluntarily disclose carbon information have higher stock returns and lower stock volatility [11]. Through empirical analysis, Huiyun Li investigates the relationship between carbon information disclosure and the corporate value of listed companies and finds that companies are able to convey favorable carbon emission management information to external stakeholders, establish a favorable corporate image, and attract investors [12].

The carbon emissions trading mechanism also impacts the company's value. Shen Hongtao used empirical analyses to study the impact of carbon emissions trading rights on corporate value, and the study showed that for low-carbon intensity enterprises, carbon emissions trading mechanisms can also increase the company's short-term value [13]. Hu Yufeng also used empirical analysis to explore whether carbon trading can take into account corporate benefits and green efficiency, as well as corporate carbon reduction optimization strategies, for example, in listed companies [14]. The results show that carbon trading policies can promote the improvement of corporate total factor productivity, thus enhancing long-term corporate value [14].

2.3. Summary

In summary, Fintech generally has a positive impact on company valuation. To varying degrees, the adoption of different technologies and business models in different industries will promote company valuation. The degree of a company's carbon emission disclosure influences investor valuation fluctuations. Fintech's possible future research directions on company valuation include various dimensions such as the regulatory environment, factors affecting enterprise value, financing constraints, technological innovation, and market information efficiency. Technological innovation has contributed to firm value growth in the Fintech sector through a number of mechanisms, such as providing financial support, alleviating information asymmetry, enhancing innovation capability, optimizing the market and regulatory environment, expanding diversified financing channels, and improving corporate governance.

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3. Method

3.1. Research Design

Academic firm valuation research includes the asset value technique, the Discounted Cash Flow (DCF) model and its variations, the market method, etc. This article utilizes SWOT analysis to study how Fintech and carbon neutrality affect firm valuation. Adjusting and optimizing it for application with the present development trend allows it to design a better development strategy. Fintech and carbon neutrality accelerate high-quality financial development, business model innovation, and corporate transformation. As technology and demand expand, economic organizations have realized that Fintech is a trend in green transformation. Many companies are implementing Fintech and carbon neutrality into their development strategy. Fintech and carbon neutrality are promising commercial trends for study. Thus, SWOT analysis may help Hundsun Technology Inc. create realistic project plans, comprehend the competitive market, and develop successful competitive strategies.

3.2. Hundsun Technologies Inc

Founded in 1995 and listed on the main board of the Shanghai Stock Exchange in 2003 (600570.SH), Hundsun Technologies Inc. is a financial technology company with the mission of "making finance simpler." Hundsun Technologies Inc. has maintained its listing for over 20 years and is a constituent of the CSI 300 Index. Focusing on the financial industry, Hundsun Technologies Inc. is committed to providing total solutions and services for securities, futures, funds, trusts, insurance, banks, exchanges, private equity, and other institutions. Hundsun Technologies Inc. has been included in the Fintech100 Global Fintech 100 list for 16 consecutive years and invests more than 35% of its annual operating revenue in R&D. In 2023, Hundsun Technologies Inc. will secure the 22nd rank, making it the top Asian company on the list.

Hundsun Technologies Inc. uses financial technology to help promote carbon neutrality, mainly through its local carbon account platform. The local carbon account platform primarily performs energy data collection and management, carbon emission testing and reporting, and carbon market trading.

During the platform's construction, Hundsun Technologies Inc. leveraged the advantages of Fintech to enhance resource allocation and operational efficiency. Hundsun Technologies Inc. has established a leading financial big data service platform in China, capable of processing and analyzing large amounts of data. In order to improve the transparency of projects and ensure the effective allocation of resources and timely completion of tasks, Hundsun Technologies Inc. has adopted the plan review technique and work breakdown structure diagram to optimize project management, with a view to improving the operational efficiency of the enterprise. In addition, Hundsun Technologies Inc. has acquired companies with extensive influence in the field of intelligent finance, such as Business Intelligence Divine, Triangle Beast, etc., which has broadened the layout of the field of intelligent finance and increased customer resources, laying a foundation for improving the company's competitiveness and market response speed.

3.3. SWOT analysis

3.3.1. Strength

Hundsun Technologies Inc., a leading financial technology company in China, has strong technical research and development capabilities, especially in artificial intelligence, blockchain, and other high-tech areas, providing many solutions for carbon neutrality and helping to realize carbon neutrality strategies in various ways.

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Hundsun Technologies Inc. and Guangzhou Carbon Emission Trading Center worked together to create a blockchain carbon neutral registration system. They also looked into how blockchain could be used in electronic deposit, supply chain finance, digital asset trading, and other areas. Their work passed the function special, security special, and deposit special tests, which paved the way for the national and local promotion of "dual carbon." These powerful functions lay an important foundation for national and regional "dual-carbon" promotion work.

In terms of artificial intelligence, the AI products launched by HSEC cover intelligent investment, intelligent supervision, intelligent customer service, and other financial fields. The total number of the company's financial AI products has reached 16, with 117 scenario landing cases. These AI products not only enhance the efficiency and quality of financial services but also help enterprises and institutions better understand and respond to carbon emissions through data analysis and forecasting problems. Meanwhile, it boosts Hundsun Technologies, Inc.'s profitability.

3.3.2. Weakness

ChatGPT, and other AI technologies have significantly impacted the financial sector with their big model technology in recent years, while Hundsun Technologies Inc. is still in its infancy, with its technical structure and maturity falling short of expectations. This puts it at a disadvantage in the competition and increases the likelihood of other enterprises surpassing it.

Hundsun Technologies Inc.'s revenue growth has slowed since 2023, AI investment earnings are in decline, and technological application maturity is poor. Wave Information's simple and safe technology development and AI infrastructure management help Hundsun Technologies Inc.'s huge financial model pre-train and fine-tune. Without self-developed large-model design solutions, Hundsun Technologies Inc. Hundsun Technologies, Inc. offers several commercial services. If financial institutions' technological needs are difficult to meet due to inadequate technological follow-up, Hundsun Technologies Inc. may miss valuable opportunities by not being able to accurately identify customers' asset status. Hundsun Technologies Inc. must also work on unified computing power management. Despite its unique advantages, home computer power is fragmented, inefficient, and requires large financial resources to develop and operate. Hundsun Technologies Inc. is still moving into a "big model," and its operating environment is poor, making it difficult to compete in the market. Hundsun Technologies Inc. is vulnerable to being overtaken due to market pressure and industry competitiveness in its imperfect ecosystem.

3.3.3. Opportunity

The state has implemented several favorable regulations about "carbon neutrality," which have provided Hundsun Technologies Inc with more prospects to advance its finance technology in support of promoting carbon neutrality.

The government is progressively advancing the "dual-carbon" approach, which involves utilizing the benefits of the Internet platform, establishing an equitable digital banking system for small and microgreen enterprises, aggressively investigating green investment opportunities, and directing the allocation of money towards low-carbon sectors. Because of government policies, more and more companies are turning their attention to environmentally friendly financial products like green credits, green bonds, and green funds. They do this to highlight the potential for growth in the carbon-neutral development plan. Hundsun Technologies Inc. is leveraging its extensive network resources to actively pursue the development of financial technology and carbon-neutral technologies, with the goal of simultaneously increasing profit margins.

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3.3.4. Threats

Imperfect information infrastructure is the biggest challenge to Hundsun Technologies Inc.'s carbon neutrality goal for diverse firms leveraging financial technology. The lack of a uniform and comprehensive information disclosure framework and accompanying procedures is the main cause of the faulty information infrastructure. Laws, rules, and policies change as part of the national "carbon neutral" agenda. Businesses must adapt to new rules based on profitability. Because the standards aren't obvious and there aren't enough full supporting measures for firms to change, corporate disclosure information isn't standardized, making it hard to promote the effort and creating an incomplete knowledge base. The lack of full supporting measures for company transformation creates an inadequate knowledge basis, hampering work promotion.

Hundsun Technologies Inc.'s operational management is hampered by poor information disclosure, carbon data accuracy, risk management orientation, and other challenges. The lack of common disclosure requirements means firms' data doesn't always reveal how much carbon they release, which can impact investors' and other stakeholders' decisions. Trading will slow down due to carbon data's unreliability. When firms make strategic decisions regarding "carbon neutrality," a lack of accurate, trustworthy, and clear information can hinder Hundsun Technologies Inc.' operations and management. When making strategic decisions on "carbon neutrality," a lack of complete knowledge and trustworthy data might lead to misjudgments, limiting long-term growth.

4. Results & Discussion

As a domestic financial technology leader, Hundsun Technologies Inc. not only provides solid technical support for the implementation of the "dual carbon" strategy in blockchain, deepens the application and value mining of carbon data, and strengthens the confidence of the market, but also improves the service effectiveness in the field of artificial intelligence and opens a variety of service channels to enhance its profitability. Despite holding the top spot, Hundsun Technologies Inc. continues to face obstacles such as slower revenue growth, the pressure of AI investment, and a lack of technological maturity.

Despite Hundsun Technologies Inc.'s significant achievements in the Fintech sector, the company continues to face shortcomings. As a result, this paper proposes the following recommendations:

First, carbon emission reduction monitoring and management must improve. Detecting and monitoring carbon emissions is unique and complicated. Second, carbon emission reduction monitoring, inspection, verification, and estimating technologies must be improved. This will improve carbon-neutral strategy management and formulation, setting the groundwork for a green transition and offering clients more professional carbon management services. Thirdly, to develop carbon management services, it is vital to engage in wide cooperation, eco-construction, and active collaboration with relevant firms and research institutes. This network should include funding, investment, and strategy-changing mechanisms to help more enterprises and groups go green. To achieve global carbon neutrality, Hundsun Technologies Inc. needs monitor abroad supply and demand while building its home market.

5. Conclusion

Global concern over climate change is deepening. To address these challenges, Fintech is important in improving the transparency and efficiency of green financial products, optimizing resource allocation, and facilitating investment and financing activities for environmental projects. Against this background, this paper summarizes the main functions of Fintech, highlights its significant position and influence in the industry, defines the concept of "carbon neutrality," and explains its application areas. Using Hundsun Technologies Inc. as the research object, this paper conducts a

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SWOT analysis to examine its achievements in Fintech and explore how it can contribute to becoming "carbon neutral." The study concludes that HSMC has significantly increased its company valuation by leveraging Fintech to achieve "carbon neutrality."

This paper theoretically suggests that Fintech can foster carbon neutrality by optimizing resource allocation, enhancing operational efficiency, and facilitating the creation of green financial products. These innovative applications not only help achieve the goal of carbon neutrality but also improve the efficiency and quality of financial services and promote sustainable economic development. Academically, this paper provides scholars and researchers in related fields with a new research perspective and ideas through in-depth analyses of the relationship between Fintech and carbon neutrality. The results of this research can not only enrich the theoretical system in the field of Fintech and carbon neutrality, but also provide powerful support and guidance for policy formulation and practical operation.

While the paper mentions the application of blockchain technology and big data service platforms for carbon neutrality, it doesn't provide a detailed comparison and evaluation. Furthermore, it doesn't delve into the potential applications or weigh the pros and cons of other Fintech methods like artificial intelligence and cloud computing for carbon neutrality. In this regard, a deeper exploration and comparison of the application and effects of various Fintech methods in carbon neutrality is necessary, along with a study of Fintech's role in the carbon trading market and its potential application in carbon financial product design and risk management.

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