Abstract. With the advent of globalization, modern enterprises, as crucial pillars of socio-economic development, directly influence their own economic benefits and societal stability. In an increasingly competitive market, enterprises should not only pursue the maximization of economic benefits but also fulfill their social responsibilities, thereby shaping a positive social impact and gaining wide recognition across various sectors. Thus, the concept of corporate social responsibility has emerged, becoming an indispensable part of corporate development strategies. Concurrently, total factor productivity, as a key indicator of enterprise production efficiency, is crucial for long-term development. Improvements in total factor productivity not only enhance a company’s competitiveness but also drive overall socio-economic progress. Therefore, exploring the impact of corporate social responsibility on total factor productivity not only helps to understand the intrinsic connection between the two but also provides strong theoretical support and practical guidance for achieving sustainable development.

Keywords: Corporate Social Responsibility, Total Factor Productivity, Key Indicator.

1. Introduction

In the rapidly changing business environment, the fulfillment of corporate social responsibility has become an essential indicator of sustainable development and long-term competitiveness. Viewing the current development scenario, corporate social responsibility is highly valued by all sectors of society, and more enterprises are realizing that fulfilling social responsibilities is not only a contribution to society but also a vital way to drive innovation and enhance total factor productivity. Total factor productivity is a key metric for measuring enterprise production efficiency, directly reflecting the comprehensive performance of a company in resource utilization, technological innovation, and management efficiency. The fulfillment of corporate social responsibility, by improving relationships with stakeholders such as employees, consumers, and communities and optimizing resource allocation, fosters technological innovation, thereby enhancing an enterprise’s total factor productivity[1-3]. An integrated analysis of the impact of corporate social responsibility on total factor productivity clarifies the intrinsic connection between the two, providing theoretical support and guidance for enterprises to develop more scientific and reasonable social responsibility strategies.

2. Overview of Corporate Social Responsibility and Total Factor Productivity

2.1. Definition and Content of Corporate Social Responsibility

Corporate social responsibility is not a simple concept; it includes enterprises reflecting on the consequences of their actions and the responsibilities they should bear. As market competition intensifies, enterprises habitually prioritize maximizing economic benefits, but truly successful companies do not merely focus on this. They also proactively assume responsibilities and obligations towards all stakeholders. This responsibility is first reflected in the care for employees; enterprises should ensure the legal rights of employees, provide a safe and healthy work environment, and promote personal growth and development. Furthermore, enterprises need to be responsible to consumers by offering high-quality, safe products and services that meet consumer needs. Additionally, enterprises should focus on environmental protection by adopting eco-friendly
measures, reducing pollution and waste during production, and protecting natural resources. In the community, enterprises should actively participate in community development and contribute to its progress. The proposal of corporate social responsibility stems from ethical and moral concerns over corporate behavior, aiming to achieve a win-win situation for both economic and social benefits[4-6].

2.2. Definition and Calculation of Total Factor Productivity

Total factor productivity is a comprehensive production efficiency evaluation metric that deeply analyzes the use of various elements in the production process and their relationship with the final output. This indicator is not merely limited to the input-output ratio but is a comprehensive consideration of a company’s production efficiency, resource management capability, and innovation ability. When total factor productivity is enhanced, it reflects significant progress in multiple aspects of a company. This indicates that a company has improved resource utilization efficiency, enabling more effective use of each resource input, thereby reducing waste and lowering costs. Additionally, it also means that the company has achieved breakthroughs in technological innovation by introducing new technologies and improving production processes, thus enhancing production efficiency and further strengthening market competitiveness. Therefore, the improvement of total factor productivity is of great significance for the long-term development of enterprises.

3. Mechanism of Impact of Corporate Social Responsibility on Total Factor Productivity

3.1. Direct Impact

3.1.1. Enhanced Resource Utilization Rate

In the context of increasingly scarce global resources and prominent environmental issues, enterprises, as important components of society, should actively fulfill their social responsibilities to meet the demands of sustainable development. For example, during its development, a manufacturing company’s leaders and staff deeply recognized the importance of improving resource utilization efficiency and put it into practice (Figure 1). On one hand, optimizing the energy structure by introducing clean energy to replace traditional energy sources significantly reduced energy consumption and greenhouse gas emissions. On the other hand, promoting green production technologies, such as circular economy models and waste resource utilization, effectively processed waste produced during production and transformed it into new resources. These measures have enhanced the enterprise's resource utilization efficiency, reduced waste and pollution, and established industry benchmarks, leading the trend of green development.

Figure 1. Social Responsibility Actions

3.1.2. Promoting Technological Innovation

As society increasingly focuses on sustainable development and environmental protection, fulfilling social responsibility has become a trend. This trend requires enterprises to consider social issues and needs while pursuing economic benefits, contributing to societal progress and development. In this context, enterprises begin to integrate social responsibility into their own business philosophies and practices, focusing on social issues and needs, thereby stimulating corporate innovation spirit and
R&D motivation. By deeply understanding social needs and challenges, enterprises can discover new business opportunities and growth points, driving technological progress and industrial upgrading. This innovation model, oriented by social responsibility, helps enterprises enhance their competitiveness and market position, promoting sustainable development of society and improving total factor productivity.

### 3.1.3. Improved Corporate Image

In an increasingly competitive business environment, the image of a company has become a key factor in determining its success. Today's consumers pay more attention to corporate ethics and social responsibility. When fulfilling social responsibilities, enterprises are not merely engaged in simple charity and public welfare activities but are making strategic choices for long-term development. Currently, more and more enterprises are paying attention to and actively fulfilling their social responsibilities by participating in public welfare activities, promoting environmental protection, and supporting education, actively responding to societal expectations and needs. Such practices help enterprises establish a good social image, enhance consumer trust and support, and thereby build a strong brand effect. When consumers trust and favor a company's products and services, they are more willing to choose and support these enterprises, thereby expanding the company's market share and enhancing profitability. These positive changes lay a solid foundation for the improvement of total factor productivity.

### 3.2. Indirect Impact

#### 3.2.1. Easing Financing Constraints

In today's financial market, financing constraints are a common challenge in enterprise development. Due to factors such as information asymmetry and market fluctuations, enterprises struggle to obtain sufficient financial support to drive their business expansion and technological innovation. In this context, fulfilling social responsibility has become an important strategic choice, helping to ease financing constraints and providing strong support for enterprise development. By fulfilling social responsibilities, enterprises indicate that while pursuing economic benefits, they also actively focus on social issues and assume corresponding responsibilities and obligations (Figure 2). Such behavior helps enterprises establish a good reputation and credit system in society, increasing the trust of investors and financial institutions. When enterprises are seen as trustworthy partners, their financing costs tend to decrease because investors and financial institutions are more willing to invest in such enterprises.

![Figure 2. Significance of Corporate Fulfillment of Social Responsibilities](image-url)
3.2.2. Optimizing Human Resources

As society progresses and the economy develops, employees' expectations for their work environment, benefits, and personal development continually increase. Therefore, in fulfilling corporate social responsibility, enterprises should focus on employee welfare and development opportunities, which will become crucial in attracting and retaining top talent. Firstly, by providing a good work environment, generous benefits, and abundant training and development opportunities, companies can attract more talented and ambitious professionals. Secondly, focusing on employee welfare and development opportunities also enhances employees' enthusiasm and creativity. When employees feel cared for and respected by the company, they are more likely to develop a sense of belonging and responsibility, thus engaging more actively in their work. Finally, having a team of outstanding talent is vital for improving an enterprise's total factor productivity. These talented individuals possess high quality and capability, enabling them to better utilize their potential and create more value for the company. Moreover, they can lead other employees in mutual growth, fostering a culture of healthy competition and collaboration, and further enhancing the company's overall competitiveness.

3.2.3. Enhancing Corporate Competitiveness

For modern enterprises to thrive amid fierce industry competition, they should proactively fulfill their social responsibilities. By fulfilling social responsibilities, such as focusing on employee welfare and promoting environmental causes, enterprises can establish a positive social image and brand effect, thereby enhancing consumers' trust and favor. This helps enterprises develop a unique brand image in the minds of consumers. Taking Henan's "Pang Dong Lai" as an example, this enterprise has consistently focused on fulfilling social responsibilities, attending to employee welfare and consumer needs. While providing high-quality goods and services, they actively participate in social welfare activities, winning the affection and support of many consumers. This positive social image and brand effect have enabled Pang Dong Lai to stand out in fierce market competition, gaining more market share and resource advantages. Ultimately, these market share and resource advantages provide Pang Dong Lai with more development opportunities and financial support, enabling continuous investment in R&D and enhancing production efficiency and service quality. These efforts not only enhance Pang Dong Lai's overall competitiveness but also provide strong support for the improvement of total factor productivity.

4. Recommendations

4.1. Corporate Level

Enterprises are no longer isolated economic entities; they are communities closely connected with society, the environment, employees, and consumers. In actively fulfilling social responsibilities, enterprises should consider the needs and interests of these stakeholders, which is a necessary condition for business development and a vital way to achieve sustainable development (Table 1). Essentially, employees are the core driving force behind enterprise development. By focusing on employee welfare and development opportunities, enterprises can enhance employees' sense of belonging and work motivation, thus improving the overall operational efficiency of the enterprise. Consumers are the final recipients of enterprise products and services. By focusing on consumer needs and expectations, enterprises can offer products and services that better meet market demands, winning consumer trust and loyalty. The environment is the foundation upon which enterprises rely for survival and development [7-8]. By focusing on environmental protection and sustainable development, enterprises can reduce their negative environmental impact, leaving more living space for society and future generations.
Table 1. Stakeholders and Their Needs

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<th>Stakeholders</th>
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<td>Employees</td>
<td>Fair pay</td>
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<td>Good working environment</td>
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<td>Career development and promotion</td>
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<td>Training and skill upgrading</td>
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<td>Job stability and security</td>
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<td>Consumers</td>
<td>High quality products and services</td>
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<td>Good after-sales service</td>
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<td>Easy way to buy and deliver</td>
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4.2. Government Level

When conducting economic activities, enterprises should consider the impact on society, the environment, and other aspects, in addition to pursuing economic benefits. The government, as the main body of social management and supervision, should strengthen the supervision and guidance of corporate social responsibility. To this end, the government enacts and implements relevant laws and regulations, clarifying the social norms enterprises should follow and penalizing violations. This provides clear guidance for enterprises to fulfill their social responsibilities and establishes a baseline for their behavior. Additionally, the government uses incentives such as tax benefits, subsidies, and government procurement to encourage enterprises to actively fulfill their social responsibilities, creating a positive atmosphere for corporate social responsibility and enabling enterprises to recognize the importance of fulfilling social responsibilities and take on corresponding responsibilities proactively. Finally, the government should promote the establishment of a comprehensive social responsibility management system within enterprises. By introducing advanced international management experiences and models, enterprises can better regulate their social responsibility behaviors, ensuring that they consider the impact on society and the environment while pursuing economic benefits.

4.3. Societal Level

Enterprises are not only the main economic agents in modern society but also bearers of social responsibilities. To promote social harmony and progress, all sectors of society should actively strengthen the promotion and popularization of corporate social responsibility. Essentially, corporate social responsibility covers multiple aspects such as environmental protection, employee welfare, and consumer protection. It concerns the reputation and image of enterprises and reflects their contributions to society and the environment. All sectors of society need to deeply popularize the concept of corporate social responsibility, allowing the public to more clearly recognize the significant role of enterprises in social development. To help enterprises create a favorable social atmosphere and public opinion environment, the value of promotion and popularization should be clearly communicated. When the public gains a deeper understanding and awareness of corporate social responsibility, they will pay more attention to and support those enterprises that actively fulfill their social responsibilities. This positive social atmosphere and public opinion environment will motivate more enterprises to join the ranks of fulfilling social responsibilities. The joint efforts of all sectors of society are important forces in promoting the development of corporate social responsibility [9-10]. Governments, media, social organizations, and other parties should work together to promote the popularization and practice of corporate social responsibility. Through promotion and popularization, more people will understand and pay attention to corporate social responsibility, collectively advancing social progress and development.
5. Conclusion

In summary, in the current social context and amid the rapid development of the global economy, corporate social responsibility has increasingly become an indispensable part of enterprise development strategies. As market competition intensifies and consumer expectations for corporate behavior rise, enterprises must not only pursue economic benefits but also actively fulfill social responsibilities to shape a positive corporate image. Through long-term practice, it is clear that fulfilling corporate social responsibility has a significant positive impact on total factor productivity. Fulfilling corporate social responsibility can enhance total factor productivity in multiple ways, helping to improve resource utilization efficiency, optimize resource allocation, reduce waste, and lower production costs, thereby enhancing production efficiency. Promoting technological innovation and R&D, through investment in R&D funds and human resources, drives technological progress and thereby enhances total factor productivity. It is noteworthy that the impact of fulfilling various dimensions of social responsibility on total factor productivity varies. Employees are an important asset of the enterprise; by focusing on employee welfare and rights, enterprises can stimulate employees' work enthusiasm and creativity, thereby enhancing production efficiency and meeting the demands of sustainable development.

References