

Research on the Impact of Social Responsibility of Listed Dairy Companies on Financial Performance in China

Shijie Li

MingZhuYiPin, HePing Road, LiXia District, Jinan, Shandong Province, China lishijie2@yeah.net

Keywords: dairy products, social responsibility, financial performance

Abstract. China's economy has achieved rapid development over the years. However, the constant change in the domestic and international environment has also brought many challenges to the sustainable growth of China's economy. Corporate social responsibility issues such as environmental pollution and product safety are increasingly plagued. At present, China is in the transition period of social economy, coupled with the existence of a series of factors such as unregulated system and imperfect system, which makes social contradictions prominent and complicates various social problems, and has aroused widespread concern from all walks of life. How to properly correct the over-emphasis on the traditional enterprise management concept that pursues the maximization of corporate profits and the interests of shareholders, so as to establish a set of theories and systems suitable for the actual development of Chinese enterprises, and strengthen corporate social responsibility (CSR) has become an imminent challenge. The main chapters of this paper are divided into five parts. The first part is based on the research literature review, analyzing the research background and significance, research framework, research methods. The second part is about China's dairy enterprises. The status quo, characteristics and necessity of fulfilling social responsibility are expounded. The third part focuses on the analysis of the relevant theories and measurement methods of the impact of social responsibility of dairy enterprises on financial performance and proposes the theoretical hypothesis of this paper according to its influence, which is the empirical analysis below, and lay a good foundation for theoretical hypothesis; the fourth part is based on the theoretical foundation of the previous article and the implementation of social responsibility of dairy enterprises, through the construction and analysis of regression equations, the empirical study on the financial performance of dairy companies in fulfilling their social responsibilities, initially concluded that the two are positively related. The fifth part draws conclusions based on the results of empirical research and proposes corresponding recommendations in light of the current environment. It is expected that this paper will provide a feasible suggestion for dairy companies to actively fulfill their social responsibilities.

1. Introduction

1.1 Research Background and Significance

1.1.1 Research Background

For a long time, the traditional business ideas have had continuous impacts on Chinese enterprises, leading to the consequence that maximizing the companies' profits has become an exclusive purpose. Thus, the business ethics, supposed to be maintained by enterprises, has been ignored, which exerts detrimental influences on the society.

Since the Anhui Fuyang milk powder case occurred in 2004, Sanlu Group was exposed that the products added with melamine five years later and Beinmei was exposed in the list of fake milk powder. All these things revealed that some enterprises reduced their cost through Industry Hidden Rules, and there was a serious lack of effective industry supervision, which is also the consequence of maximizing the interests of the enterprise and shareholders for the enterprise operational purposes, showing the unprecedented challenges faced by Chinese dairy enterprises.

In the wake of the environment of deepening international economic globalization, corporate social responsibility has increasingly become the focus of international attention. Since China became

a member of WTO, more and more domestic enterprises went overseas, however, the quality issues that existed for many years also brought risks to the sustainable development of enterprises.

In the process of domestic enterprises venturing overseas, the domestic market has slowly realized that it is one of the serious trading barriers to enter the global market that enterprises hardly fulfill the social responsibility. Meanwhile, there have been some companies become the pioneers of undertaking social responsibility, such as China's national brand Wang Laoji, which donated 100 million yuan after Wenchuan earthquake happened, creating a miracle both in reputation and profit.

In view of this, in this environment, corporate social responsibility will not make trouble for companies' sustainable development, but can become the power of company's sustained and healthy development. How to eliminate the limitation of hidden rules in the industry, how should the relevant department and industry association in China supervise the production and management of dairy products, how the government, companies, society, and industry groups coordinate activities in this process, etc., these questions should be explored deeply in order to provide theoretical basis and practical basis for establishing supervision and management system which is suited with Chinese enterprises' sustainable and healthy development.

1.1.2 Research Significance

1.1.2.1 The Theoretical Significance of Research

The study of corporate social responsibility has been explored and analyzed by many foreign scholars, and they putted forward different concepts from various perspectives, even though the definitions and the industry objects of study are diverse from each other, the basic elements of these concepts are the same. Nonetheless, since these theories lack research on specific country or regional industries, such as there were many challenges faced by China dairy enterprises and China dairy industry in the developing process, the significance of conducting research and analysis on fulfilling social responsibility has been emerged.

1.1.2.2 The Practical Significance of Research

At present, the development prospects of China's dairy products have encountered a serious crisis of confidence. With the deepening economic globalization and the strong consumption power of the Chinese market, foreign dairy enterprises have been into the Chinese market, having essential impacts on domestic dairy enterprises, which makes exploring China dairy enterprises fulfill social responsibility become very practical. This research is beneficial to help Chinese dairy companies to realize their social responsibility correctly. Therefore, the commercial behaviors are able to be regulated and the ethics can be improved. Besides, this research will provide supports to the decision of sustainable development of China's dairy industry while further enhancing the core competitiveness of China's dairy enterprises. In addition, via this research, there will be more and more stakeholders involving in monitoring China's dairy enterprises take social responsibility, resulting a more effective supervision system.

1.2 Literature Review

At the beginning of last century, more and more foreign scholars began to focus on and study the related issues of corporate social responsibility. In the process of research and analysis, they found that there is inevitable connection between corporate social responsibility and the financial performance. Then they did some systematic research, although the consequences of the researches are different, they came up with some theories which are worth to be learned by us. Comparing with foreign countries, our country's research of corporate social responsibility is relatively slow and late, which only last about 10 years, so the theories are relatively few. However, the domestic enterprises are more and more, stronger and stronger, I believe that our research will definitely catch up with or even surpass western countries. This paper will introduce domestic and foreign scholars' research of corporate social responsibility, through the reading and summarizing of relevant documents, trying to take the essence and form my own opinion, laying a good foundation for the latter research works. *1.2.1 Research on Stakeholder Documentation*

The document research on stakeholder dates back to Friedman's book Strategic Management: Analysis of stakeholder management, published in 1984 and first introduced the theory about stakeholder. Friedman believes that the development of enterprise should focus on the benefits of all stakeholders rather than on single one. Then Clarkson (1994) hold an opinion that specific investment can be introduced into stakeholders in order to enrich the concept of stakeholders, and the contends and definition of stakeholders can be more abundant and specific. Our domestic scholars took the existed theories of stakeholders as basis, and extended the scope of the definition of stakeholders, in which Jia Shenghua, Chen Honghui(2002) explained that stakeholders are individuals and groups who undertook some risks and invested in enterprises' activities. In turn, whether company achieves goals or the process of achieving goals is smooth will affect the investment decisions of stakeholders. Zhang Jinfa(2012), from the view of stakeholder, studied the enterprises' behaviors of fulfilling social responsibility.

Although the definitions of enterprises stakeholders have different emphasis, most theories pay attention to enterprises' activities and contends that stakeholders can have an impact or be an impact on the enterprises' production activities, and decision-making of enterprises should take into account the influences of different stakeholder groups.

1.2.2 Research on CSR Literature

The Philosophy of Management, presumably the first book referring to the concept of stakeholder, is written by Oliver Shelton, a famous English scholar, who explains in his book that not only should the business manager and the stakeholder inside and outside the industry be linked so as to consider the corporate social responsibility, but also the community where enterprise is located should be taken into account. Since these theories explained by Shelton, scholars all over the world began to accept and approve a term Corporate Social Responsibility. However, in that era, many western scholars hardly reach in a consensus whether company should fulfill social responsibility. It can be said that it is Shelton's theories that makes western scholars define various relevant contents of corporate social responsibility and promote the appearance of the definition of corporate social responsibility, among which Howard. R. Bowen and Japanese scholar Jin Zeliangxiong and other scholars is worthy of our study, reference, and learning.

In Carroll's 1979 article, he argued that the specific survival environment of the enterprises gives them all sorts of social expectations by making rules and morality. These social expectations are the social responsibility that enterprises need to fulfill, including economic and legal regulation, ethical norm, and free decision-making (charitable organization). Carroll proposes that enterprise should respond to social expectation actively and fulfill its responsibility positively, such as financial responsibility, legal responsibility, ethical responsibility, and charitable responsibility. In the development process, enterprise is supposed to create corresponding return to the society in compliance with various laws and help more people in need as much as possible to get recognition from society. With the development of the times, the original theory of Carroll has gradually become Carroll's Pyramid of Corporate Social Responsibility, which still has significant influence today.

Li Youhuan(2007) claims that the body of the corporate social responsibility refers to some responsibility related to stakeholder, such as law, society, morality, and charity, in a certain stage of social development. In the consequence of the domestic research on corporate social responsibility, Corporate Social Responsibility Triangle Theory illustrated by Chen Zhiang and Lu Wei has an important significance. The CSR triangle theory, based on intentions of fulfilling social responsibility, classified corporate social responsibility into three dimensions: legal level, standard level, moral and strategic level, while emphasizing that any enterprises should be positive to take social responsibility in the process of pursuing the maximization of own value. Meng Fanfu(2012), from a consumer perspective, analyzed corporate social responsibility. He holds an opinion that corporate social responsibility is all activities carried out by enterprises, and enterprises should fulfill necessary social responsibility to all stakeholders who interactionally affect enterprises' behaviors of assuming social responsibility.

Because the objects of study and analysis are diverse, and there is an contradiction between indicators of social responsibility and financial performance, with the addition of difference between the way of constructing model and empirical analysis, in our country, the analysis conclusion of the



connection between company's financial performance and corporate social responsibility has produced three different results, that is, corporate social responsibility is positively, negatively correlated or irrelevant to financial performance.

1.2.3 Corporate Social Responsibility Standards - ISO26000

International standard organization has analyzed and demonstrated the international standard of the possibility of corporate social responsibility from 2001, and officially published ISO26000 in November 1, 2010.

Research and dissemination on ISO26000 is a very complex and long process. Because of the complexity of the participants during the period of ISO26000's development, and the sophistication of relevant topic and review and revision process, the research and introduction of this standard naturally has following characteristics:

1.2.3.1 Wide Applicability

For all sorts of enterprises or organizations, ISO26000 standard is appropriate for all public or private departments whether in developed or developing countries. It has three main characteristics: 1, ISO26000 is only a guiding document; 2, ISO26000 is not suitable for third-party authentication; 3, ISO26000 is not a management system. Unlike ISO9001 and ISO14001 used to authenticate, ISO26000 is only a decision-making guidance when enterprise is taking social responsibility rather than a necessary standard or requirement of management system.

1.2.3.2 Comprehensive Content

The principles of ISO26000 standard mostly covers five dimensions: 1, emphasis on following the law; 2, emphasis on stakeholder's attention; 3, emphasis on the improvement of enterprise's transparency. 4, emphasis on enterprise' sustainable development; 5, emphasis on concern for human rights and its diversity.

Overall, ISO26000 standard is a highly feasible and comprehensive international social responsibility standard. This standard combined with Global Reporting Initiative (GRI), relevant United Nations departments, and other global authority, developed and published in the International Organization for Standardization (ISO). Therefore, the advantage of this standard is highly inclusive, and widely collecting the opinions and suggestions of experts and scholars from a variety of countries, and on this basis, taking into account the differences between ideal and reality of developed and developing countries. Thus, this standard is paramount in promoting corporate social responsibility in various countries and covering more complex and higher-level decision-making standard of diverse organizations comprehensively.

2. Current Situation Evaluation of Corporate Social Responsibility Fulfillment in China's Dairy Industry

2.1 Achievements and Problems in the Implementation of Social Responsibility by China's Dairy Enterprises

2.1.1 Achievements in Fulfilling Social Responsibility of China's Dairy Enterprises

After more than 10 years development, China's dairy enterprises have achieved extraordinary results. At present, China's dairy enterprises have become highly modern food manufacturers, having advanced production equipment and technology, certain production scope, and relatively abundant products.

I. Dairy Production Doubled

The numbers of China's dairy products have increased obviously, the per capita share of dairy products as doubled, and the innovation of products is vigorous at the same time. Dairy products have been an indispensable part of people's daily life, in addition to grain, oil, seafood, meat, and egg. With the rapid development of dairy industry, feed production, dairy-farming, and many other related industries have been arisen, thus it can be seen that the prosperity of dairy industry brought many farmers out of poverty, which plays a significant role in solving the Chinese "three rural" problems, particularly.

II. Further Improvement of Production Facilities and Technology

Through expanding and technological change, China's dairy industry's production equipment and technology made rapid progress. In the past, China's dairy enterprises' facilities and technology were outdated. At the same time, due to the update of the equipment and technology, the quality of the products has been improved.

III. The Production Scale of Dairy Enterprises Expanded Rapidly

China's dairy industry entered the golden age of development era in 2000, and made great achievements in this process, realized transition from "weak industry" to "sunrise industry". Also, China stands among the world's largest countries, only behind India, United States, and the European Union. In this process, there are numbers of large-scale, high output, large market share, and high reputation enterprises born.

IV. The Improvement of Dairy Products' Quality

Compared with last century, the quality of China's dairy products has been greatly improved, the most fundamental change is the improvement of the raw milk. According to the State Administration for Market, in the 10 spot checks of China's infant milk powder, added up to 2546 cases, during the period of January between November last year, there were only six cases of unqualified products, the percent of pass was 99.8%.

V. Significant Improvements of Dairy Product Structure

In the past, the main body of products was whole milk powder with sugar, and the main body of the structure has changed incredibly after the product structure was improved. Nowadays, the formula milk powder, the main body of product structure, surpass 60% of total production of the dairy products, and meets every groups' certain nutritional requirements.

2.1.2 The Problems of Fulfilling Social Responsibility with China's Dairy Enterprises.

I. Production and Operation in Violation of Laws and Regulations.

The health, sustainability and steadiness of developments should build on the actions of compliance with laws and regulations. However, in some enterprises' process of production, breaking the relevant laws and regulations to obtain immediate profits is pervasive, and some companies even ignored the laws and used harmful additive in order to reduce the production costs and leaded themselves into grave inevitably.

II. Regular Product's Safety Issues

Today most residents have cultivated a good habit of drinking milk or eating dairy products, which accelerate the prosperity of dairy products consumer market. Nevertheless, the frequent problems of dairy products quality and safety cause a serious crisis of confidence in Chinese dairy product brands and relevant supervision departments for dairy production and circulation and the reliability of associations. Therefore, it is an essential issue to be solved that how the China's dairy industry and relevant departments win back the confidence of Chinese residences. From the early important quality safety events, such as the fake milk powder in Fuyang, Anhui Province, the exceeding iodine of Nestle milk powder, and Sanlu Group "melamine" incident, as well as the Mengniu Dairy aflatoxin exceeded the standard in 2011, all of above events illustrate a serious problem of Chinese dairy products' quality safety.

III. The Problem of Environmental Pollution

In recent years, China's dairy industry has been developing in a surprising pace, which has beneficial influence on industry's development and residents' health. However, if we look at the environment, we will find the different consequence. The white pollution caused by dairy industry should not be ignored, and it is contrary to the sustainable development and threatens the development and prosperity of the dairy industry. Hence, each dairy enterprise ought to pay attention to the social responsibility of environmental pollution.

IV. The Lack of Co-prosperity and Community Service Concept

In the short period of several decades of China's dairy industry's rapid prosperity, many famous companies were born, such as Mengniu Dairy, Yili Milk, YinQiao Dairy. However, the huge expansion of China's dairy industry also caused many problems. The high profitability of dairy industry attracts too much funds, but the consuming requirement of dairy products can hardly catch up with the speed of production increase and brand expansion, which lead to a fierce price war

between dairy enterprises. Since there is no vertical integration of industrial chain, dairy companies and dairy farmers do not belong to a same unit of value distribution and sharing. Thus, most dairy enterprises squeeze down the scale of purchasing raw milk or reduce the buying price of raw milk, which cannot guarantee dairy famers' profits and causes a conflict of interest between the two parties.

Besides, due to the impacts of foreign dairy brands, China's dairy enterprises are facing with severe dangers. Therefore, China's dairy enterprises began to take self-help measures that is to limit the acquisition of local raw milk, leading to the decrease of domestic dairy farmers' profits. Furthermore, the serious threats faced by China's dairy enterprises with stressful competition restrict the acquisition scale and the price of raw milk, further reducing the income of dairy farmers.

Overall, during the current period in China, most companies' strategies focus on achieving success rapidly and making direct profits. Some enterprises even refuse to be responsible for financial, legal, and moral responsibility. Few companies volunteer to positively fulfill corporate social responsibility. For more than a decade, China's dairy industry has boomed rapidly, many dairy enterprises are enthusiastic about competing for market share. However, they neglect the management of source of milk which they depend on and the quality and quantity of the raw milk, which is also a lack of social responsibility management philosophy, thus, the issues of quality and safety of dairy products will be an inevitable crisis, light will influence enterprises' continuous production and the development of dairy industry, while causing dairy industry crisis of confidence and irreparable damage to the society. In view of this, China's dairy enterprises need to face up to and fulfill their social responsibility positively.

2.2 The Reasons for the Lack of Corporate Social Responsibility in China's Dairy Industry

Chinese enterprises lack of corporate social responsibility in the production process for different reasons. Due to the uncompleted development of China's financial market and regulations, the fraudulent and illegal activities in the process of China's enterprises' production and management have not been duly published, and the effects of supervision system are limited. Whether from a theorical perspective or a practical perspective, China's enterprise management philosophy of awareness and performance of corporate social responsibility is still stagnant in early stage. This chapter will focus on three dimensions of enterprises themselves, government supervision, and social oversight to analyze the factors that causes the lower level of China's dairy enterprises' corporate social responsibility.

2.2.1 Enterprises 'Own Reasons

The companies' awareness of fulfilling social responsibility is insufficient, and they concentrate on maximizing the short-term profits, leading to the lack of attention of corporate social responsibility. Moreover, the lack of motivation which encourages the dairy companies to fulfill social responsibility is also caused by the problem of management structure with their inner organization.

2.2.2. Government Supervision Lag

The existed laws published by government and used to regulate the market action provide a significant guarantee for the sustainable and healthy development of finance, and companies' business behaviors should operate within the law. However, China's relevant legal norms are not perfect at present, and local government attaches more importance to the enterprises' profits and tax revenues rather than the legality of corporate behaviors, which causes the lack of government supervision. In addition, some local governments and relevant departments, whether from a theorical point of view or from practice, realize little about corporate social responsibility, even loose the constrain in order to promote short-term fiscal revenue, and lack of correct and objective understanding of the long-term impacts.

2.2.3 Inadequate Social Supervision

To promote the sustainable and healthy development of China's dairy industry, not only should government publish related laws and regulations, but also the social supervision is an indispensable part. In some cases, it is more effective for some industry associations, civil society organizations, and news medias to oversight the corporate social responsibility. Therefore, the insufficiency of corporate social responsibility is caused by the inadequate social supervision system to some extent.



2.2.4 The Weak Consumers' Consciousness of Maintaining Rights

The social responsibility that needed to be fulfilled with enterprises is based on the social expectation which comes from consumers. Regarding the protection of consumers' rights and interests, China has published specific ways and means, but the cost of maintaining rights is huge, the awareness of protecting rights is weak, the protection ability of rights is insufficient. Especially, if the office workers face up with extremely huge cost of time when protecting rights, they will have a negative attitude to the issues of rights protection.

At the same time, China's Consumer Rights protection law has not found a way to eliminate illegal business, most of the regulations are compensatory, which, in fact, reduces the enterprises' costs of illegal production.

In conclusion, many enterprises are not able to fulfill their social responsibility, resulting a severe damage to consumers' legitimate rights. Therefore, we must take virous measures to strengthen the awareness of corporate social responsibility, and guide enterprises into the track of social expectation.

3. Theoretical Analysis and Research Hypothesis

3.1 Definition and Measurement of Social Responsibility

At present, there are hundreds of relevant theorical definitions related to corporate social responsibility, among which the definition, that corporate social responsibility is divided into four aspects, published by World Economic Forum in Davos is widely recognized:

3.1.1 Moral Standard.

Enterprises should comply with the national laws and follow the common rules and standards set by industry, strictly prevent corruption, otherwise they will be published by law.

3.1.2 Company Employee

Mainly includes on-time safety training and education for employees, each stuff should have equal work opportunities so that every employee can be enthusiastic about work.

3.1.3 Environmental Protection

Environmental protection is one of the most significant issues in our daily life. To address this issue, we must start with the basics, protect our surrounding environment, use green energy resource as much as possible, face up with increasingly deteriorating ecological environment together. No matter it is in the past, now, or the future, no matter it is in family, country, or the whole world, we are closely associated with the environment. Thus, protecting environment is protecting ourselves.

3.1.4 Social Development

Today, social development cannot be separated from enterprises, and enterprises cannot be further successful without social support and recognition. More and more enterprises participate in the activities of contributing to community, in which some enterprises provide necessary life supplies and establish schools for poor mountainous areas, and they organized stuffs to join rural activities, training and guiding farmers, etc. (some enterprises providing students in poor areas with nutrition lunch is a specific example). This contribution will certainly help community develop better and faster. Many domestic and foreign scholars in the analysis of corporate social responsibility impacts on financial performance, on the aspect of measuring the fulfillment of social responsibility, adopt reputation index, TRI method, corporate reputation rating method and KLD method, etc.

At present, many scholars did research after connecting stakeholder theory and corporate social responsibility's impacts on the financial performance, the focus of their research shifted to the influence of enterprises' social responsibility fulfillment including responsibility of community, consumers, employees, stakeholders, government and other stakeholders on financial performance. Therefore, when achieving benefits, enterprises also should consider stakeholders' interests, so that enterprises can be more united. Nowadays, as time and economy continue to progress with lightning speed, the relationship between society and enterprises is like fish and water, who cannot survive without each other. Only when the enterprises make corresponding contribution to society can they receive supports and recognition from society, and become better and stronger, also the society can be more harmonious. Only by combining both perfectly enterprises and society can well develop



together. Thus, the indicators used in this paper to measure the performance of dairy enterprises' social responsibility are multi-dimensional social responsibility indicators based on the theory of stakeholder.

3.2 Definition and Measurement of Financial Performance

The concept of financial performance is usually measured by companies' business efficiency or managers' business performance during a specific period. Generally, asset management capacity, development capacity, solvency, risk resistance capacity, profitability, and other aspects reflect the companies' business efficiency. The enterprises' ability of controlling costs, the efficiency of asset management, resource allocation, and return on equity are all reflected in financial performance.

At this present stage, there are two indicators of financial performance, the one is market indicator based on capital data, the other is accounting indicator based on financial statement data. The research on financial performance and derived issues has always focus on how to evaluate financial reports' data. Since the operation of China's market economy is in the initial stage, there are some issues, like the lack of authenticity of market indicator, the instability of stock market price, so this paper chooses accounting indicators as a measure standard of enterprises' financial performance.

3.3 Theoretical Analysis and Research Hypothesis on the Corporate Responsibility's Impacts on Financial Performance

3.3.1 Stakeholder Theory

Stakeholder theory means that the management decision and activities in the process of enterprises' production is based on meeting the interests of shareholders, creditors, employees, consumers, suppliers, government, and other stakeholders. The stakeholder theory is about profits of an interest group, compared with other single interest theories, this theory recognizes that the attitude of shareholders, creditors, employees, consumers, suppliers, government, and other stakeholders is a significant factor of enterprises' development.

The impact of stakeholder theory on financial performance has not been clear. For this impact, scholars' opinions are diversity, but the theory of stakeholder influence and promote the business objective of enterprises, improves the enterprises' internal policy, enables enterprises to consider relevant stakeholder's interests more comprehensively when conducting commercial activities, which further decrease the business risk of enterprises, so that enterprises can understand more clearly about the benefits of fulfilling social responsibility.

3.3.2 Sustainable Development Theory

The ultimate expectation of sustainable development theory is achieving sustainable of social development, that is, to meet current needs without affect future needs of development. The principle of equal, the principle of commonality, and the principle of sustainability are three principles which must be obeyed in order to realize the sustainable development. It should be noted that the sustainable development does not refer to ignore economic growth for the reason to protect environment, instead, it encourages the economic growth. Since the economic development directly reflect comprehensive national strength and social wealth, the sustainable development theory has high quality and quantity requirement of economic growth.

3.3.3 Research Hypothesis

In the empirical process, this paper analyzes the hypothesis of correlation between corporate social responsibility and financial performance, accordingly, obtains the concrete results of the impact of corporate social responsibility on financial performance.

(1) The impact of corporate social responsibility to shareholders and creditors on financial performance.

It is widely acknowledged that the attitude of shareholders and creditors to enterprises has important significance of improving enterprises' financial performance. Thus, enterprises should bear social responsibility actively in order to maintain the relationship between shareholders and creditors. For enterprises, whether they can handle with the relationship between shareholders and creditors directly or indirectly affect enterprises' financial performance. If enterprises can win the trust of shareholders and creditors to the development prospect to enhance the financial support, it is not only conducive to enlarge the scale of enterprises development, but also it is beneficial to improve enterprises sustainable and healthy development. Therefore, the importance of improving shareholders and creditors is self-evident.

Based on this, the hypothesis H1 is proposed: There is a positive correlation between the social responsibility of dairy enterprises to shareholders and financial performance.

Hypothesis H2: There is a positive correlation between the social responsibility of dairy enterprises to creditors and financial performance.

(2) The impact of corporate social responsibility to employees on financial performance.

Human resources in the new era as the most important intellectual resources for the development of enterprises, it can be said that who occupied many excellent talents will have the first opportunity to succeed. To attract outstanding and retrain excellent talents, enterprises must actively assume the social responsibility to their employees. If an enterprise can provide good welfare treatment, perfect promotion channel, humanized management system, relaxing working environment, what employees will return to the enterprise is the positive attitude of fully playing their dynamic role to work. Only when they have a great sense of mission, can they complete works effectively, which is beneficial to improve the financial performance of the enterprise.

Based on this, Hypothesis H3: There is a positive correlation between the social responsibility of dairy enterprises to employees and financial performance.

(3) The impact of corporate social responsibility to consumer on financial performance.

As we all know, the truth that consumer is God has been regarded as standard by various enterprises in the fierce market competition. Therefore, to stand out in the complex environment of market competition, enterprises must actively take the social responsibility to consumer, in order to win consumers' recognition of the enterprises. For instance, when dairy enterprises increase their investment of product development, a wide variety can accurately meet consumers' needs and win their preference.

Based on this, Hypothesis H4: There is a positive correlation between the social responsibility of dairy enterprises to consumer and financial performance.

(4) The impact of corporate social responsibility to the community / government on financial performance.

The philosophy that there is a universal connection between things also applies to the market economy. The establishment, development, and expansion of enterprises are inseparable from the community and policy environment. The impacts of enterprises on their communities and policies are just like the positive and negative side of the coin, which exerts both positive effects and negative effects. Only when enterprises actively fulfill the social responsibility to community and the government can their financial performance be improved, and sustainable development be achieved.

Based on this, Hypothesis H5: There is a positive correlation between the social responsibility of dairy enterprises to the community / government and financial performance.

4. Research Design and Empirical Analysis

4.1 Research Design

4.1.1 Variable Selection and Definition

(1) Variable Selection and Principles

(1) Scientific principles. When measuring the social responsibility of dairy companies, the selection and determination of indicators in the empirical process and the collection and selection of data must be scientific.

(2) Principle of representation. Due to the limitation of time and methods, it is impossible to complete the selection of indicators and the collection of data in the empirical process. Therefore, the representativeness has become the key to the research. For the dairy companies studied in this paper, the selection of their indicators must meet the characteristics them and be corresponding to the actual situation of dairy enterprises.

③ Independence principle. Independence means that the different indicators used are not related



to each other, so that the accuracy of the description of the indicators and the results of the empirical analysis is strongly guaranteed.

④ Operational principle. When constructing an index system to measure the dairy company's social responsibility, it is necessary to give attention to the operability and availability of the index to ensure that empirical analysis activities can be carried out.

- (2) Variable Selection
- 1) Choice of explanatory variables.

The operating resources of an enterprise can be simply divided into capital resources, human resources, and social resources, then linking with stakeholder theories and research assumptions, five indicators are selected as explanatory variable, which are the corporate social responsibility to shareholders, creditors, employees, consumers, and the community / government, and are measured by dividends per share (after-tax), 1-asset-liability ratio, employee payable rate, R & D expenditure as a percentage of operating income, and non-operating expenditure as a proportion of operating income.

② Choice of explained variables.

Today, there are two main measures of business performance: market performance indicators and financial performance indicators. Through a comprehensive comparison of these two financial measures, this paper selects the return on equity (ROE) as an indicator to measure the effectiveness of corporate social responsibility performance. (Calculation method: ROE = Net profit in the reporting period * 2 / (net assets at the beginning of the year + net assets at the end of the year))

Variable Name	Financial Indicator	Variable Symbol	Calculation Process
Financial performance indicators	ROE	Y	Net profit for the reporting period * 2 / (net assets at the beginning of the year + net assets at the end of the year
Shareholder evaluation	EPS	X_1	(Gross profit for the period-Preferred stock dividends) / Total equity at the end of the period
Creditor evaluation	1- asset-liability ratio	X_2	1-Total Liabilities / Total Assets
Staff evaluation	Payroll payable rate	X_3	Payable employees / operating income
Consumer evaluation	R & D expenditure ratio	X_4	R & D expenditure / operating income
Community / Government Evaluation	Non-operating expenses ratio	X_5	Non-operating expenses / operating income

Fable 4-1	Variable	Selection List
Fable 4-1	Variable	Selection List

4.1.2 Model Design

The above has introduced in detail the aspects in which dairy companies in China should actively implement their social responsibilities in accordance with the perspectives of stakeholders, and how the stakeholder group has an impact on the financial performance of the company's operations. On this basis, the explanatory variables, the explained variables, and their meaning used in empirical research has been introduced briefly. At the same time, the empirical research method used in this paper is multivariate logarithmic linear regression analysis to explore the elastic contribution of listed companies' social responsibility to changes of financial performance, and a corresponding regression model is designed:

$$lnY = lnC + \beta_1 lnX_1 + \beta_2 lnX_2 + \beta_3 lnX_3 + \beta_4 lnX_4 + \beta_5 lnX_5 + u$$
 (1)

Where β_i (i = 1,2,3,4,5) is the coefficient of the explanatory variable, u is the random interference term, and *lnC* is the constant term.



4.2 Empirical Analysis

4.2.1 Sample Selection and Data Source

As of 2018, there are 21 listed dairy companies in China.

Among them, as there are ten dairy companies listed on the Hong Kong Stock Exchange, they are ZhongDi Dairy, YuanShengTai Dairy Farm, Yashili, Ausnutria, China Shengmu Organic Milk, Modern Farming, Mengniu Dairy, Huishan Dairy, Natural Dairy, ZhuangYuan pasture, etc. Therefore, their financial statements are different from the items covered by the companies listed on the Shanghai Stock Exchange and the Shenzhen Stock Exchange. They cannot be compared uniformly, so they cannot be used as research objects. Among the dairy companies listed on the Shanghai and Shenzhen stock markets, the listing time of ZhuangYuan pasture was 2017, the listing time of Kedi Dairy was 2015, and the listing time of Yantang Dairy was 2014. These three dairy companies offered stock to public late, and the data is insufficient, so it cannot be used as a research object. In addition to the above dairy companies, Beinmei suspended its trading for one month in July 2017, so it was not included in the study.

Therefore, the research objects selected in this paper are limited to seven dairy companies listed on the Shanghai Stock Exchange and Shenzhen Stock Exchange, including Western Animal Husbandry, Terun Dairy, Royal Group, Sanyuan, Bright Dairy & Food Dairy, Yili, and Maiquer.

Since the annual reports of companies listed on the Shanghai and Shenzhen Stock Exchanges are usually audited by third parties, the authority and objectivity of the disclosures of the annual reports is largely ensured. At the same time, because the listing dates of the eight dairy companies selected have a certain impact on data collection activities, after a comprehensive consideration, this paper uses the contents of the annual reports released by the eight dairy companies from 2012 to 2018 to display empirical research.

4.2.2 Descriptive Statistics

In the descriptive statistical analysis table of the data, the minimum return on equity of each company is less than -45%, and the highest is more than 35%, the difference is huge, showing the competitiveness and financial performance of dairy China's listed dairy companies are very different. Similar to this indicator; the range of enterprises' attention to creditors (measured by 1-asset-liability ratio) fluctuates from 29% to 83%, further revealing that there is a large gap in the attention of enterprises to creditors. Not only that, the standard deviation of the degree of attention an enterprise pays to creditors is also the largest of all indicators, indicating that the social responsibilities performed by various enterprises on creditors are uneven. And other indicators, such as the difference in social responsibility to shareholders, employees, consumers and communities / governments, are relatively small, and the trend of change is relatively stable.

	ROE	EPS	1-DA	Payroll Payable	R&D	Non-operating
	Ratio	Er5	Ratio	Ratio	Ratio	Expenses Ratio
Mean	8.3310	0.3550	55.5869	1.5959	0.8443	0.6627
Median	8.0500	0.2800	53.6400	1.0100	0.3000	0.2900
Max	35.3300	1.6500	83.1700	6.5000	3.8200	7.2400
Mini	-45.8100	-1.7400	29.5500	0.5100	0.0300	0.0200
Std. Dev.	13.9318	0.5140	14.6699	1.3447	1.0886	1.2400

Table 4-2 Descriptive Statistical Analysis Table

4.2.3 Empirical Analysis

According to the designed econometric analysis model, first take the logarithm of the original variables, delete the information bar where each variable is negative, and then conduct an empirical analysis of the elastic impact of corporate social responsibility on financial performance, and test its impact mode.

(1) Unit Root Test

Before the test begins, the stability of the data should be tested first to avoid the problem of spurious regression, and also to make the results of the empirical analysis more authoritative and accurate. For the test of data stability, the most commonly used method is the unit root test. The stability test results on each data show that under the confidence level of 15%, the P value of each

variable is less than the critical value. Therefore, we accept the original hypothesis that each variable sequence has no unit root.

Variable Symbol	ADF Test P Value	PP Test P Value
Y	0.0909	0.0872
X1	0.0804	0.0109
X2	0.0216	0.0028
X3	0.0243	0.0645
X4	0.0652	0.0443
X5	0.0177	0.0046

(2) Model Estimation

Using the model to carry out empirical analysis, the results are shown in the following figure:

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1?	0.856609	0. 082835	10. 34116	0
X2?	0.976227	0.285899	3. 414584	0.0014
X3?	0.267452	0.081527	3. 280552	0.002
X4?	0. 160625	0.067623	2.375286	0.022
X5?	-0.012646	0.076279	-0. 165791	0.08691
R-squared	0.802815	Mean deper	ndent var	-2.343416
Adjusted R-squared	0.784889	S.D. deper	ndent var	1.118023
S.E. of regression	0.51854	Akaike inf	o criterion	1.620852
Sum squared resid	11.83089	Schwarz cr	riterion	1.813895
Log likelihood	-34.71087	Hannan-Qui	nn criter.	1.694092
Durbin-Watson stat	0.885745			

Figure 4-1 Preliminary Regression Results

(3) Model Test

Test individual, time, mixed effects, and random and fixed effects of the model respectively, and the results are shown in the figures below:

Effects Test	Statistic	d. f.	Prob.	
Cross-section F	4. 079494	(6, 31)	0.004	
Cross-section Chi-square	28. 51705	6	0.0001	
Period F	0.673495	(6, 31)	0.6718	
Period Chi-square	6.004002	6	0. 4227	
Cross-Section/Period F	2. 487783	(12, 31)	0.0205	
Cross-Section/Period Chi-square	33. 049542	12	0.001	

Figure 4-2 Individual, Time, and Mixed Effect Tests

It can be seen that the P value of the time effect is too high, so there is no time effect, only an individual effect.

Correlated Random Effects - Hausman Test Pool: RUYE Test cross-section random effects								
Cross-section random		27, 148536			0,0001			

** WARNING: estimated cross-section random effects variance is zero.

Figure 4-3 Random and Fixed Effects Test

Because P < 0.05, this model is rejected as a random effect model. In summary, the model is an individual fixed effects model. The results of empirical calculations on the model are as follows:

Variable	Coefficient	Std.	Error	t-Statistic	Prob.
С	-3. 032596		1.158716	-2.617204	0. 01281
X1?	1.175164		0.089002	13. 20378	0
X2?	1.53041		0.322245	4.749208	0
X3?	0.111776		0.184001	0.607473	0.05472
X4?	0.028556		0.134076	0.212983	0.08325
X5?	-0.070705		0.088391	-0.799908	0.04289

Figure 4-4 Final Regression Results

From the data in Figure 4, the results of the model estimation can be written as:

 $lnY = -3.033 + 1.175 lnX_1 + 1.530 lnX_2 + 0.112 lnX_3 + 0.029 lnX_4 - 0.071 lnX_5$ (2) The model estimation results show that the enterprise's active implement to the social responsibilities of shareholders and creditors contributes significantly to the enterprise's operating performance. Specifically, in the case of other variables unchanged, each 1% increase in the evaluation of shareholders and creditors, the return on equity will increase by 1.175% and 1.530% respectively. At the same time, corporate social responsibility to employees and consumers has a positive impact on the financial performance of the enterprise, but the effect is not outstanding, and the elastic contributions to the financial performance of the enterprise are 0.112% and 0.029%, respectively. However, corporate social responsibility of the community / government has a certain degree of negative impact on the financial performance of the enterprise. For each 1% increase in the corporate community or government evaluation, the return on equity of the enterprise decreases by 0.071%.

5. Research Conclusions and Policy Recommendations

After studying the panel data analysis of social responsibility indicators and the resulting changes in financial performance, we can find that:

First off, there is an obvious positive correlation between social responsibility of dairy enterprises to shareholders and creditors and the financial performance of enterprises, while the impact of social responsibility of companies to employees and public on the financial performance is relatively low. It can explain the main factors that affect the goal of China's enterprises fulfilling social responsibility – the interests of shareholders and creditors of enterprises, to pay more attention to their interests, will increase the investment in the company, so as to achieve better corporate performance and achieve short-term performance plan of the enterprise.

Second, the concern of dairy enterprises for their employees and consumers can improve the financial performance of enterprises to a certain extent. Although the contribution of these two indicators to the financial performance is not obvious, it does not mean that these two stakeholder groups are not important. In contrast, the employees and consumers are two indispensable parts of an enterprises which can maintain the internal normal production operation and realize the value of products. Therefore, China's dairy enterprises must develop an appropriate human source strategy and system inside, and actively safeguard the legitimate rights and interests of consumers outside, spare no efforts to achieve the long-term goal of improving the health level of whole people.

Finally, the longer the companies are on the market, the more social responsibility to the community / government they should undertake, which is advantageous to achieve higher corporate financial performance. However, according to the analysis results of the chosen data of listed dairy enterprises, the impact of corporate social responsibility to the community / government on the improvement of financial performance is not only inelastic, but also it is contrary to the theory of improving enterprises' business performance. Enterprises serve the community through donations, fundraising and other forms of service, and assume tax responsibility, must have to occupy more resource which should have put into production activities. Moreover, from a short-term viewpoint, the marginal benefit of community / government responsibility is far less than that of production and operation, thus it is difficult to reflect a decent result in production and operation.

In addition to dairy companies actively taking social responsibility themselves, in order to maintain the sustainable and healthy development of dairy industry and even the whole market



economy, it is necessary to enhance the guidance and publicity of social responsibility of China's listed dairy enterprises, as well as shape the demands of residents for the social responsibility of dairy enterprises. Meanwhile, relevant departments are supposed to combine with enterprises to improve the awareness and willingness of enterprises to undertake social responsibility, encourage and guide enterprises to optimize their decision-making and management structure, strengthen the attention of enterprises on long-term goals, and incorporate the performance of corporate social responsibility into credit information system.

References

- [1] Zhu Jinfeng, Yang pengpeng, empirical test of the relationship between corporate social responsibility and financial performance [J]. Statistical decision, 2009 (7): 135-137
- [2] Ji Haitao, research on social responsibility of resource-based enterprises from the perspective of stakeholders [D]. Doctoral thesis of Liaoning University, 201
- [3] Wu Linfang, analysis of the relationship between corporate social responsibility and business performance [J]. Accounting communication, 2010 (21): 7-10
- [4] Zhang Zhaoguo, Yin Kaiguo, Li gengqin, research on the relationship between corporate social responsibility and financial performance: Based on stakeholder theory [J], 2011
- [5] Ruan banying, research on the evaluation system of corporate social responsibility based on the scientific outlook on Development [J]. Accounting innovation, 2010 (3): 32
- [6] Meng Fanfu. Research on corporate social responsibility from the perspective of consumers [D]. Shandong University, 2012
- [7] Hao Wenwen, research on the main characteristics of social responsibility performance and financial performance -- Taking Shanghai Stock social responsibility index company as an example [D]. Master's thesis of Taiyuan University of technology, 2012
- [8] Zhang Jinfa. Research on corporate social responsibility management based on stakeholder theory
 [D]. Nankai University, 2012
- [9] Jiang Yun, impact of corporate social responsibility performance on financial performance [D], master's thesis of Jiangxi University of Finance and economics, 2013 [10] Sun Yichi, financial performance evaluation of listed companies and its influencing factors, Liaoning University, June 2011
- [11] Li Ji, research on the relationship between corporate social performance and corporate performance, master's thesis of Fudan University, 2008, 4
- [12] Sun Yichi, financial performance evaluation of listed companies and its influencing factors, Liaoning University, June 2011