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# FINANCE AND ACCOUNTING RESEARCH

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We grudge no man a fortune which represents his own power and sagacity exercised with entire regard to the welfare of his fellows.

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# JOURNAL OF FINANCE RESEARCH

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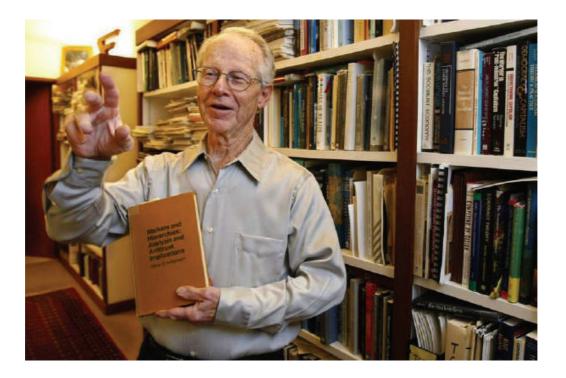
# JOURNAL OF FINANCE RESEARCH

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*Oliver Eaton Williamson* is an American economist, a professor at the University of California, Berkeley, and recipient of the 2009 Nobel Memorial Prize in Economic Sciences.

Williamson attended Central High School in Superior, Wisconsin. He received his B.S. in management from the MIT Sloan School of Management in 1955, MBA from Stanford University in 1960, and his Ph.D. from Carnegie Mellon University in 1963. From 1965 to 1983 he was a professor at the University of Pennsylvania and from 1983 to 1988, Gordon B. Tweedy Professor of Economics of Law and Organization at Yale University. He has held professorships in business administration, economics, and law at the University of California, Berkeley since 1988 and is the Edgar F. Kaiser Professor Emeritus at the Haas School of Business. As a Fulbright Distinguished Chair, in 1999 he taught Economics at the University of Siena.

Found to be one of the most cited authors in the social sciences, in 2009, he was awarded the Nobel Memorial Prize in Economics for "his analysis of economic governance, especially the boundaries of the firm", sharing it with Elinor Ostrom.



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### Study on the Influence of Network Economy on International Economy and Trade

#### **Xiaodong Lv**

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**Abstract:** Research and development and popularization of the internet and other information technologies have accelerated the development rate of Chinese e-commerce industry while at the same time, bringing forward the arrival of the network economy era. Therefore, a study on the economy and trade model under the network economy era shall be conducted for a higher level of Chinese international economy and trade. In view of this, this paper mainly provides a brief overview of the network economy, and deeply analyzes both the positive and negative impacts of the network economy on the international economy and trade. Thus, on this basis, a deep study on specific ways of optimizing the international economy and trade under the background of the network economy has been carried out to further raise the development level of Chinese international economy and trade with the development guarantee for Chinese national economy.

Keywords: Network economy; International economy and trade; E-Commerce

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The rapid economic development has greatly promoted the research and development of advanced information technologies. Under such environment, the world economic model also changes virtually. At present, the e-commerce, based on the internet and various network techniques, has gradually turned into a main model of the economy and trade under the current era. Nowadays, a large part of volume of transaction of Chinese international trade has been achieved through e-commerce. Accordingly, under the era of network economy, the Internet has become an indispensable part among people's daily life and trade transactions. In most cases, people are more inclined to use e-commerce, a convenient and fast trading mode, to obtain various resources necessary in living and production, which makes a great impact on traditional economy and trade model while giving it a new era characteristics on account of the existence of the network economy. Therefore, a further research on the impact of network economy on the international economy and trade has a fundamental practical significance.

#### 1. Overview of the Network Economy

The informatization of the national economy is the basic

guarantee of the survival and development of the network economy. From this point of view, the network economy is not a single type of economic model. The network economy means that the Internet and various advanced network technique are the main means for the firms to obtain necessary economic information resources. In the network economy, specific business activities still depend on the information network inside and outside the firms<sup>[1]</sup>. For example, research and development of new products, product sales and product line management, etc. In addition, the network economy relies on not only the network, but also certain logistics, capital flow and information flow. So far as the status, the emergence and development of the network economy make a great impact on the traditional economy. While on the whole point of view, the essence of the network economy is an industrial group as its basic elements still telecommunications, electricity, energy and other traditional industries; in terms of the actual situation, the network economy is also an industry group around network, computer and a variety of information resources. With a relatively high development level of network technique, the network economy during actual development process is beyond the nation and embedded in the international economy and trade areas. Specifically, the network economy is composed of the relationship between economic behaviors and the subjects. In other words, economic subjects and economic behaviors, due to a common purpose, form an economic link as the realization foundation of the network economy. Compared to the traditional economic model, the network economy owns stronger openness and freedom. It is noteworthy that the various economic entities of the network economy not always necessarily belong to the same area as it can also be cross-sectoral economic subjects.

### 2. Positive Effects of Network Economy on International Economy and Trade

### 2.1 Promote the Emergence of a New Economic Model

The popularization of the internet as well as the R&D and application of various advanced information technologies gives a huge transformation of the ways of people's production and lifestyle. Under the influence of such change, the traditional economy and trade mode are gradually being eliminated and replaced by the new economic model of more energy and innovation. For example, the emergence of flexible firms. A flexible firm is a product brought about in modern economic mode, and even a new mode for people to pursue and perfect the active marketing. By aiming at the demands of the consumers, some firms package the products with advanced science and technologies and organize a flexible firm restructuring in order to integrate excellent human, financial and information resources under the premise of the market dynamic detection. This is the main reason of the formation of flexible firms. As it were, owing to the impact of the network economy on international economy and trade, more firms, under the background of e-commerce, change ideas and innovate thoughts while turning the rigid traditional economic mode into a more flexible and positive mode so as to promote the firm development.

#### **2.2 Improve the International Economy and Trade Efficiency and Cost Reduction**

The emergence of network economy has greatly reduced the production cost of the international trade. A product in traditional international trade circulates through a number of links starting from the manufacturer, resulting in a higher cost of trade. In this case, consumers at the end of the circulation chain will be in an extremely passive situation as the capital consumption can be cut down only by reducing the measure of consumption. It can be seen that the traditional international trade is not only of a high cost, but also with relatively low efficiency. The emergence and popularity of the network economy allows direct communication between firms as well as firms and consumers through the e-commerce platform and in turn, changes the trade chain into a "two-point" form by reducing the intermediate links and the trade costs, achieving mutual benefits of both sides of the trade.

### **2.3 Boost the Development of Chinese Trade in Services**

In the context of the network economy, Chinese e-commerce industry, with a rapid development, has tremendously boosted the development Chinese trade in services industry. Especially in recent years, Chinese firms actively and flexibly take advantage of the network economy under continuous innovation while reducing the trade costs and the economic losses caused by geographical problems as much as possible and enhancing the efficiency of cross-regional, cross-industry cooperation trade as well as the competitiveness of Chinese trade in services firms in the international market in a real sense<sup>[2]</sup>. Precisely because of the significant technological advantage of the e-commerce, most of Chinese commercial and trade firms have been actively integrated internet technologies to expand the scope of application of the e-commerce in firms containing large industries and tourism services. Meanwhile, they promote further generalization of innovative firms including network purchasing and sales and further put the rapid development of Chinese trade in services in motion.

# **3. Negative Effects of Network Economy on International Economy and Trade**

#### 3.1 Increase Security Risks in International Trade

The popularity of the internet and the development of network technique, bringing convenience in the international trade and economy development, also expose a lot of hidden loopholes at the same time. In recent years, on the basis of the Internet, the network attacks against international economy and trade have become increasingly frequent, making the current transactions of international economy and trade faced with serious threat of security. In case of some flaws, this will lead to irreparable economic loss. Many criminals use the Internet to intercept the financial fund in the various transactions of economy and trade, and commit crimes on counterfeiting in terms of transaction mode, payment method, and quality of products. As a result, international trade transactions are faced with great risks of security.

#### **3.2 The Lack of Logistics Development in China**

The logistics industry, which is strong and reliable, represents not only the basis for sustained development of economy and trade in various countries, but also the fundamental guarantee for business expansion. At present, under the influence of the rapid development of the trade industry, China's logistics industry has made great progress. However, compared with the logistics industry in the developed countries and the practical reality of the current domestic market circulation, China's logistics industry at this stage remains at a low level, which cannot fully meet the need of the domestic market, and also limits the full development of international economy and trade. This has greatly limited the advance of e-commerce. It can be concluded that on the one hand, network economy has exerted positive influence on the international economy and trade, and on the other hand, China's logistics industry is still plagued by the lack of driving force.

## **3.3** The Shortage of Professionally Trained Personnel in E-Commerce in China

In order to ensure that e-commerce activities in various enterprises are carried out in a more orderly and efficient manner, the related operational personnel, proficient in the Internet information technologies, should be armed with rich knowledge on market-economy operating, in order to, in the process of actual operation, constantly well integrate information technologies and business-trade theories, and to optimize the actual operation of e-commerce<sup>[3]</sup>. However, currently, the rate of college graduates employment in China is about 50%, while the rate in terms of e-commerce is only 18%. A conclusion can be made that China's e-commerce industry at this stage, which is plagued by the lack of professionals, cannot meet the current need of the development of the network economy.

#### 4. In the Context of Network Economy, the Specific Methods to Optimize the International Economy and Trade

#### 4.1 Promote the Huge Popularity of the Internet-Related Knowledge

At present, China's economic entities are still dominated by private enterprises. However, private enterprises have neither fostered a scientific awareness of nor recognized the importance of e-commerce, and besides, they often have a low sensitivity of market demand. As a result, e-commerce among private enterprises is far from developed. In order to improve this situation, governments at all levels and the related departments, from the macro perspective, must take some controlling measures, and coordinate various publicity activities of the Internet-related knowledge, in order to enhance the people's awareness of the Internet. Besides, something should be done to create a favorable environment where more private enterprises participate in the competition of network economy, and come to realize the shortcomings of the traditional business and trade model.

## **4.2 Facilitate the Industrial Upgrading and Speed up the Technological Innovation**

Under the influence of network economy, the international trade model has undergone great changes, which makes most of the enterprises faced with more daunting challenges. In order to get enough market shares in the new market competition, enterprises must carry out the projects of industrial restructuring and upgrade. In particular, as for those products characterized by backward process, complicated and cumbersome structure, heavy pollution, and monotonous function, efforts should be made in R&D of products featuring light pattern, less pollution, multi-function, and vast market potential. At the same time, in the context of network economy, enterprises should pay more attention to advanced network techniques, and give full play to the advantages of such technologies; besides, they should combine their own industrial strength and advanced science and technologies, and, fuelled by cutting-edge technologies, constantly enhance the overall comprehensive strength, thus promoting the optimization and upgrading of industrial structure. In this process, the related government departments, which play a macro-guiding role, should also conduct a reasonable forecast and intervention as for the resource allocation in the network economy, in order to make pioneering efforts in obtaining various knowledge resources beneficial to technological innovation.

# **4.3 Improve the Infrastructure and Optimize the Operating Environment of the Internet**

Due to various objective limitations, the Internet and information technologies, albeit widely used in China, are still plagued by the lack of market competitiveness. What is the most obvious is the underdeveloped IT-application infrastructure. As is known to all, the network environment is based on the Internet and a variety of information technologies. Therefore, in order to strengthen the development of international economy and trade in the era of network information, effective measures should be taken to improve the construction of IT-application infrastructure and to optimize the operating environment of the Internet. To be specific, first, special efforts should be made to integrate various resource advantages, so as to establish a large backbone network; second, as for the entrance and exit of the international network, a reasonable, scientific planning should be conducted, and renewed efforts should

be made to improve the related structure in the future; third, something should be done to make full use of the advantages of the Internet, in order to constantly enhance the capacity of the Internet, and to speed up the network transmission; finally, for a bigger picture, special efforts should be made to increase the coverage of the Internet, and to achieve the full network coverage and service in both urban and rural areas, thus laying a solid foundation for the future progress of the era of network economy.

#### 4.4 Eliminate the Monopoly of Telecommunications and Tap the Vast Potential of the Domestic Network Market

With the sustained economic development and the ever-changing market economic system, currently, the monopoly of traditional telecommunication market is incompatible with the era of Internet economy with more emphasis on openness and inclusiveness; the monopoly has greatly hindered the development of network economy in China. In this case, the government sectors must get a truthful and detailed picture of the current situation, advance with the times, and take substantial measures in the light of market changes. Besides, a reasonable system featuring telecommunication reform, which is suitable for China's national conditions, should be established, in order to break the vicious circle of the monopoly of telecommunication market, reduce the access threshold as much as possible, and tighten the enforcement of the concept of three networks combined. At the same time, governments at all levels should also actively coordinate various publicity activities, encourage and guide enterprises in different sectors to invest in the telecommunication market, set forth preferential policies, and facilitate the industrial restructuring with various types of asset, so as to break the traditional monopoly of telecommunication market, and strive for the balance of telecommunication industry in the true sense. All these measures will enhance the quality of telecommunication industry in China, and provide strong guarantee to the rapid development of network economy.

#### **5.** Conclusion

This paper, with a brief introduction of network economy, illustrates the positive impact of network economy on the international economy and trade: to promote the emergence of a new economic model; to improve the efficiency of international economy and trade and to reduce costs; to fuel the development of China's trade services, and the negative impact: to increase the security risk of international trade; to show the shortcomings of the logistics industry and the lack of professionals in e-commerce in China. On this basis, this paper puts forward some specific methods to optimize the international economy and trade in the background of network economy: to promote the huge popularity of the Internet-related knowledge; to promote the industrial upgrading the technological innovation; to improve the infrastructure and to optimize the operating environment of the Internet; to break the monopoly of telecommunication market and to tap the vast potential of the domestic network market. In summary, in order to create favorable conditions for international economy and trade, the opportunities brought by network economy must be seized, and a lot of substantial measures should be taken, in order to continuously improve trade efficiency and reduce costs.

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### **Research on the Policies and Means Changes of Macro Regulation and Control of Chinese and Foreign Governments**

#### **Chengrong Cai**

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Abstract: In the process of economic development, government uses the "visible hand" to achieve macroeconomic regulation and control for "market failure", which has been common knowledge among people after World War II. Comparing policy and means adopted by Chinese and foreign governments in macro regulation and control, we can see that the choice is different in different historical periods and the change of emphasis in macro regulation and control policy and means has the convergence tendency. We can make the following conclusion from research of the change rules of macro regulation and control means in the market economic condition of Chinese and foreign governments: supply-side structural reform in China complies with the basic rules of development of market economy.

Keywords: Macroeconomic regulation and control; Policy means; Laws of economics

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omparing the change rules of macro regulation and control's emphasis of Chinese and foreign governments in the condition of market economy is of great meaning for having a correct understanding of the nature of supply-side structural reform in China and deepening the reform.

#### **1. Relative Theory and Practice of Western Countries' Macro Regulation and Control**

#### 1.1 Adam Smith and Say's Theories Emphasize Economic Freedom

At the end of the 18th century, inspired by Rousseau, Montesquieu, Voltaire and other bourgeoisie enlightenment thinkers, Adam Smith put forward the hypothesis of "economic man" on the basis of disclosing the human's self-interest nature in order to change the disadvantages of the natural economic system of self-sufficient in violating human nature and freedom and failing to arouse human's enthusiasm that are bad for the development of productivity. A market economy system of free competition that can fully arouse human's enthusiasm was also established based on the hypothesis. One of the core arguments in the Wealth of Nations by Adam Smith is: in this economic system, the market can allocate resources freely because production and consumption on the free market are guided by an "invisible hand", which is the price decided by supply-demand relationship. He thinks that the "market economy is effective". Although everyone seeks their own interest, the mutual interaction in the market will inevitably bring about social benefit.

In 1803, French economist Jean Batiste Say put forward the theory of supply creating its needs in his work A Treatise on Political Economy. This theory was called Say's Law, which is the main academic argument of the supply-side economics.

Adam Smith and Jean Batiste Say claim that economic development should take the policy of allowing unrestrained freedom and markets should deploy and produce various necessary resources, and define the government in the market economy system of free competition as the "night watchman", whose deputy is defined as maintaining the stability of political power, security of the nation, security of society and construction and maintenance of some public utilities.

After the market economy of free competition has effectively pushed the prosperous development of economy for a century, the "invisible hand" fails, and the Say's Law no longer exists. The serious supply over demand eventually induced the 1929-1933 economic crisis that spreads over the whole world.

#### **1.2 Keynes's State Intervention Theory Claims to Correct Shortcomings of Free Competition from the Demand-Side**

Keynesianism, blossomed in the 1930s, uses the theory of "three psychological rules leading to the insufficiency of effective needs" <sup>(1)</sup> to explain that the "invisible hand" leading to the market failure is the root of the failure of say's rules and the world economic crisis. Thus, Keynes proposed to take the government as the third subject (or department) in the national economic circulation in the market economy condition <sup>(2)</sup>, defining the government as the macro-regulator in the economic operation and development and the subject in the secondary income distribution, using the "visible hand" of government to intervene through financial policy and monetary policy, in order to solve the problem of insufficient need that the "visible hand" of market alone cannot handle.

After World War II, with the establishment of the system of the state intervening in the market economy, western countries stepped out of economic crisis and achieved economic prosperity for continuous 20 years. At the end of 1960s, economic conditions of several countries begun to worsen, which eventually turn into the phenomena of "double-high stagflation" <sup>®</sup> spreading over western countries in the whole 1970s. Keynesianism cannot explain the reason that causes the phenomena of "double-high stagflation", and cannot put forward the solution, thus losing its dominant position in the theoretical cycle of economics.

#### **1.3 Supply-Side Economics Puts Emphasis on Pushing Forward Economic Development from Supply-Side**

Supply-side economics is an economic school emerging in America in the middle of 1970s. This school is against Keynesianism's unbalanced stress on the needs management, advocating that the supply management that takes the tax reduction as the core should replace the needs management of Keynesianism. This school holds the opinion that: the growth of the economy depends on the supply and effective utilization of production factors, claiming to achieve economic growth through stimulating supply and production. Individuals and enterprises provide production factors and engage in operation activities in order for earning rewards. The stimulation of rewards can affect people's economic behaviors. Free markets can regulate the supply and utilization of production factors automatically. Factors hindering market regulation should be eliminated. Main representative of supply schools Arthur Laffer explains that supply-side economics provides an analysis structure based on the stimulation of individual and enterprises. People will change behavior with the stimulation. He thinks that government's task in this structure is to change the stimulation and affect social behavior through the role of its deputy and function. In other words, supply school claims that government can regulate the disposition of supply-side factors through the comprehensive utilization of various macroeconomic policies, making the supply match the constantly changing needs perfectly.

In 1981, new president Regan put forward "Economic Recovery Plan" and claimed that his plan broke completely with policies of former American government and adopted the demand school as guiding idea, based on the supply school theory instead. The main contents of Regan's economics are to reduce the inflation rate through decreasing government expenditure and controlling growth of the monetary supply; provide a loose environment and policy space of free market competition for enterprise operators through reducing taxes, accelerating depreciation of enterprises, and reforming a series of regulations that hinder production, arousing the enthusiasm of enterprise operator and investors and all other parties, promoting stability and development of economy. In theory and practices Regan's economics is against intervention, while in reality it isn't. In order to get out of economic troubles, he applied the Keynesianism's policies of regulating total social demand through the change of government expenditure, supply-side economics' policies of stimulating the increase of supply through reducing taxes and relaxing intervention of economy, and monetary school's stable monetary policies of controlling the increase of monetary supply comprehensively into government's macro-regulations, which leads to the realization of economic target of getting rid of the phenomena of "double-high stagflation" in some degree. Regan's economics enabled the full play of government's role of macro regulator in the supply-side regulation.

#### 2. The Practice of Chinese Government's Macro Regulation and Control and the Exploration of Supply-Side Reform

## 2.1 Macro Regulation in the First 30 Years of the Reform and Opening-Up Policy

Under the planned economic system, China had confused macro with micro economy in theory and practice. The whole nation was a big factory. The government directly arranged the human, money, material and production, supply and sale in the factory. In 1984, we had figured out the difference between the concepts in theory, but the government didn't practice the macro regulation as a macro regulator.

In 1997, a financial crisis broke out in Southeast Asia. In order to maintain the growth rate of 8%, Rongji Zhu government begun to use the financial policies and monetary policies to regulate the operation of macro-economy, leading China to the road of Keynesianism's state intervention, stimulating and promoting economic growth through "three carriages".

In 2008, American financial crisis broke out. In order to cope with crisis, Jiabao Wen government implemented the recovery plan valued RMB 4,000 billion, with the loan of RMB 9,700 billion distributed to bank. Huge amount of funds was concentrated in the construction of "railway, highway and airport", providing guarantee to prevent China's economy from falling into the abyss of the crisis. This is classical Keynesianism, which uses pump-priming policy to make demand management. 4,000 billion plan relieves the pressure of Chinese economic growth, but at the same time it causes problems of high leverage ratio, excess production capacity and serious pollution.

# 2.2 Chinese Scholars' Exploration of Supply-Side Reform

After this financial crisis, reflection of practical experience of macro regulation centering on "demand management" inducing many Chinese scholars' innovation of theory of "new supply economics" and unprecedented attention on "supply management".

On November 2012, president of Westbro Institute for Economic Research, Tai Teng published Declaration of New Supplierism, putting forward macro policy of "downplaying total demands management, promoting reform from supply-side" in China for the first time. Meanwhile, "new supply-side economics research group" consisting of 7 people and led by Kang Jia, president of the Institute of Research of Fiscal Science of financial department published New Supply-side Economics of Chinese Style, putting forward the policy claim with the core of eight pairs <sup>④</sup>. On March 2, 2013, "new supply-side economics research group" held the second meeting, specially inviting Tai Teng and other people to attend the meeting, where they proposed to set up Huaxia New Supply Research Institute, with this, two supply schools with similar value beginning to merge. On September 22, 2013, Huaxia New Supply Economics Research Institute, a civil think-tank organization approved by Beijing Municipal Bureau of Civil Affairs, led by Kang Jia, initiated and set up by Kang Jia, Chong'en Bai and 12 other scholars, was established formally. This institute is aimed to research the new supply economics with the core of reform from supply-side.

#### 2.3 Proposition and Practice of Reform from Supply-Side

On November 10, 2015, on the 11th meeting of the Central Leading Group on Financial and Economic, the idea of "reform from supply-side" was put forward by Jinping Xi for the first time, which is to push forward structure adjustment with reform, to correct twisted factors allocation, to increase effective supply, supply structure's adaptability and flexibility towards demand change, improve production rate of all factors, to better satisfy needs of broad masses of the people, to accelerate sustainable and healthy development of economic society on the basis of improving the quality of supply.

The China's Central Economic Working Conference held at the end of 2015 put forward that the emphasis of development of economic society in 2016 is to make great efforts to realize five reforms of supply-side, which are cutting overcapacity, destocking, deleverage, lowering the cost, and improving weaknesses. With the organization and strong support from central government, structural reform of supply-side in China in 2016 was conducted in full swing from entry point of arithmetic operation <sup>5</sup>. On January 22, 2017, the Political Bureau of the Central Committee centered on the 38th collective learning about deepening structural reform of supply-side and put forward that we must handle properly four important relations<sup>®</sup> Premier Kegiang Li declared in Government Work Report the specific arrangement of deepening the five underlying points in the structural reform of supply-side  $^{\odot}$ . A year and half practice of structural reform of supply-side in China has showed that the emphasis shift of macro regulation means of government has achieved the expected effects.

#### **3.** Conclusion

Western country's government has changed from an outsider in economic development to the foreground, turning from demand management to supply management, eventually to the current state of co-functioning of demand and supply management; Chinese government gradually faded from the sole subject of economic development, returning the control of resources allocation to market, turning from single demand management to the dual emphasis of demand and supply management. We can see that the spontaneously similar choices of Chinese and foreign governments on macro regulation policy and means comply with the basic economic rules of development of market economy. Chinese government has exhibited good performance in the regulation of the macro-economy.

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#### Commentaries

- ① Theory of insufficient effective demand of Keynes means that three psychological rules of human lead to the insufficiency of effective demand: law of diminishing marginal propensity to consume leads to the insufficiency of consuming demand, while law of declining marginal efficiency of capital leading to the insufficiency of investing demand, trap of flexible preference leading to insufficiency of both consuming and investing demand.
- ② In the competitive market economy, circulation of national economy happens between two subjects (or parts) of enterprise and family and be realized through factors, products and financial markets. In the market economy of state intervention, national economy circulation changes from the circulation of two subjects (or parts) and three markets into four subjects (or parts) (enterprise, family, government and foreign country) and three markets.
- ③ Phenomena of "double-high stagflation" refer to the economic situation of co-existence of high unemployment and prices.
- ④ Specific contents of Eight Doubles: No.1 Double Innovations, to be innovative country and encourage starting business; No.2 Double Promotions, to promote new urbanization and industrial optimization; No.3 Double Recuctions, to accelerate the implementation of reduction of tax taking structural tax reduction as the major task and reduction of

administrative approvals; No.4 Doubel Expansions, to expand the fusion of Asia, Africa, Latin America and China, and expand investment scale based on quality and structure in terms of growth; No.5 Double Transformations, to implement transformation from "one-child" policy within the urban system to appropriately encourage fertility regarding national population policy, and implement transformation from the state-owned assets and stock returns to the social security and public services; No.6 Double Improvements, to realize harmonious and simultaneous improvements of both state-owned economy and non-state-owned economy by taking their own advantages; No.7 Double Implementations, to implement the effects of both government and market, realize positive interations, complementation and cooperation between them; No.8 Double Matchings, to implement a new round of matching reform of "price, tax and finance", and proaictively and substantially carry out the financial matching reform.

- (5) Addition puts emphasis on improving weaknesses and benefiting people's life, increasing effective supply at the same time, developing strategic newly-emerging industries, increasing new motivation and energy in the economic development; subtraction means that the government streamlines administration and delegates power to the lower levels, enterprises remove overcapacity the society lowers cost for enterprises, reduces bond and load on the enterprises, activating energy of micro economy; multiplication meams that explore new motivation for economic development with innovative development idea, expand new space, raise "multiplication factors" of economic development, pushing forward economic development with geometric growth in emerging industries; division means that clear the obstacles on the path of economic development, removing difficulties to enable the smooth marching of chariot of the Chinese economy.
- (6) We should handle properly the relationship between government and market, short-term and long-term, subtraction and addition, supply and demand.
- ⑦ The first is to put efforts on innovating system supply, optimizing resources allocation; the second are to put efforts on innovation-driven, revitalizing the real economy; the third is to put efforts on increasing effective demand, stabilizing macro environment; the fourth is to put efforts on preventing potential risks, insisting on the bottom line; the fifth is to put efforts on improving people's life, increasing peoples' sense of gain.

### Study on the Impacts of Japanese Positive List System on the Chinese Frozen Vegetable Exportation

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**Abstract:** This paper mainly studies the Japanese policy, especially the Positive List System and Health Quarantine System, on the Chinese agricultural products exports, taking the frozen vegetable for example. The authors carry out studies on the related polices, consider the non-policy factors, making comparative analysis among the three countries: China, the USA and Thailand, utilizing trade gravity model. Finally the authors present suggestions to the breaking of the trade barriers.

Keywords: Green trade barrier; Japanese positive list system; Frozen vegetable export; Gravity model; Agricultural product trade

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#### **1. Introduction**

ecause Japan is close to China, it is convenient to fresh transport, and Japan has large demand for agricultural products import. Japan has been the biggest market of Chinese agricultural product export. From 2004-2006, China is exporting more agricultural product, but in 2007 and 2008, the amount of agricultural products exporting declined. The reason behind is, Chinese agricultural product exporting was affected by Japan's positive list system in 2006. After 2009, the exporting amount rose to former level. Frozen vegetables, as a branch of vegetable agricultural product, from 2004 to 2014, took up 7.29% agricultural product import weight of Japan on average, while the inferior weight took up 12.09%. Though the portion of frozen vegetables is not big, the inferior of frozen vegetables ranked the second. These years, Chinese agricultural product and food is affected by a series of quality safety events (example: "poison dumplings", McDonald's used rotted chicken of Shanghai Fuxi), Japan shows less trust in Chinese agricultural product. Thus, Japanese government department and enterprises set up stricter quality control examination criteria. Japan examined 20% of Chinese agricultural product in 2009 and 2010.

#### **2. Japanese Eamination Policy of Import** Food

Japan has strict rules and sophisticated policies for agricultural products and food import. In order to specify the effect of green trade barrier to Chinese agricultural products, we will introduce two strong-related policies to agricultural products export.

Positive List System is a new system in Japan to reinforce management of chemical leftover in foods. The Positive List System's greatest influence on agricultural products export of China is "homogeneous criteria". This "criteria" set an widely-applying amount of maximum leftover under 0.01 ppm in over 700 types of pesticides, animal drugs and feed additives. But international acknowledged measure is on the basis of toxicology evaluation, taking "acceptable daily intake (ADI)" and "Good Agricultural Practices (GAP)" into consideration to make different pesticide leftover criteria. Different pesticides have different ADI; different food has different contributions to ADI with different pesticides exposure amount and safety risks. Japan made homogeneous criteria for various foods is not according with present international acknowledged principle, as well as not conforming to actual application condition. The criteria, whose conduction seriously worsens regular agricultural products, trade between China and Japan.

Concluded from The Risk Evaluation Report on Chinese agricultural products export to Japan, Chinese export in meat, vegetables, fruits and processed fruits, aquatic product, edible mushrooms, tea and grains are the strongest influenced categories. In 2014, large amount of China-produced food was detained, returned or destroyed by Japan for not according with "Positive List". There were 202 batches; up to 1788 tons China-produced food was detained. The amount of Chinese agricultural products export which was inferior ranked the first among all agricultural products exported to Japan.

#### 3. Chinese Frozen Vegetables Export Analysis

Frozen vegetables is a kind of frozen food. (like broccoli, spinach and soybean) After selecting, cutting out inapplicable parts, cleaning and boiling, they are frozen in packages. This processing method makes water in vegetables quickly crystallize in tiny and systematic water drops but it does not destruct vegetables tissue. Because of frozen process, germs cannot survive. Comparing with fresh vegetables, frozen vegetables can be stored for long time and keep good quality.

#### 3.1 Regulations on Frozen Vegetables

The reason for frozen vegetables pesticide leftover examination, reported by Renmin Net.com, that Japan decided to list exporting frozen vegetables to pesticide leftover examination scale on March 20th, 2002. Ministry of Health, Labor and Welfare pointed out that frozen food belongs to processing food, it does not have a pesticide leftover criteria like fresh vegetables, so frozen vegetables are listed out of the examination list previously. Besides, many of frozen vegetables get packed only after boiling; it is not sure whether these products can meet sanitation criteria, nonetheless, Japan decided to make examinations on them in quarantine office. The examination targets at spinach, taro and green soy bean that manufacturers boils them once and then pack them, including 18 types of products. Ministry of Health, Labor and Welfare also claimed that if they are only boiled once, products above can be qualified to pass fresh vegetables pesticide leftover criteria, according to food hygiene law, frozen vegetables should be examined as fresh vegetables.

Concern about frozen vegetables storage temperature, out of long-term storage safety, food hygiene law rules that frozen vegetables should be kept under-15  $^{\circ}$ C. To reserve good quality, AS law ruled that frozen vegetables should be kept under -18  $^{\circ}$ C. Codex Aliment Arius(CAC) issued 'Fast frozen food chemical process and production

international applicable criteria 'in 1976 mentioned that frozen vegetables should be stored under -18  $^{\circ}$ C . Most frozen vegetables have an expiration date in 1 year to 2 years.

Seeing from selective content, mainly including pesticide leftover, transenosis, colibacillus and germ quantity. Referring to statistics of April -December, 2015 and November-March, 2016, coli bacillus exceeding shows the most probability, it was 12 times. Pesticide leftover ranks the second, and the most serious one is difenoconazole leftover, for 5 times. Germ exceeding occurred 3 times and transenosis papaya utilization for once. Judging from reasons collection, colibacillus exceeding mostly contributes to bad sanitation condition, severe pollution and non-periodical cleaning of equipment or production staff that have bad sanitation standard. Contamination in packaging process is one of the reasons of colibacillus and germs infection. Pesticide leftover is for pesticide floating pollution of the nearby farmland, which indicates that farmland is near to other farmland and nonstandard pesticide application in nearby farmlands.

Table 1. Inferior Reason of Frozen Vegetables in April,2015-March, 2016

Inferior reason	Inferior events
Bad sanitation management	6
Packing process pollution	3
Nearby environment contamination	8

Source: Inferior Events Monthly Summary of Japanese Ministry of Health, Labor and Welfare

Table 2. Pesticide Leftover of Frozen vegetables in April,2015-March, 2016

Examination		Inferior event
content		
Pesticide leftover	Difenoconazole	5
	Thiamethoxam	2
	Haloxyfop	1
	Triazophos	1
Colibacillus	Colibacillus	12
Transgenosis	Transgenosis	1
Germ quantity	Germ quantity	3

Source: Inferior Events Monthly Summary of Japanese Ministry of Health, Labor and Welfare

Non-Policy Factors of Chinese Frozen Vegetables Expor:

Shandong Province keeps the largest exporter title to Japan in all export areas, totally exporting frozen vegetables to Japan for 27,992 tons, which created 29,85 millon dollars export volume, showed an increase of 2%. Zhejiang and Fujian ranked the second.

Analyzing by export types, in reference for study results published by agriculture and stock farming boosting organization, China mainly export frozen soybean, frozen spinach, frozen taro and frozen broccoli. Because of the integration of frozen vegetables export provinces, if Shandong Province, as a big exporter, encounters with very bad weather or get severe contamination of water and soil, will make fatal collapse of the total export of China.

Frozen vegetables declined after frozen spinach pesticide leftover, luckily, with a series of negotiation and field work, the situation is much better. Ample harvest and inexpensive price have effect on export in some way, export exhibit a trend of rising. Under the influence of positive list system and planting base record and supervision system changes made by State general administration of quality supervision, inspection and quarantine(CIQ), domestic frozen vegetables has better quality.

Affected by a great many of negative events of quality, China and Japan reach a agreement. China-produced and export raw materials of frozen potherb to Japan should come from authorized farms of CIQ or contracted farms. On the other hand, depreciation of Yens and Increasing cost of Chinese manufacturing industry, and export price climbing also effect export in recent years. Some enterprises produced with higher cost but did not raise selling price, while some enterprises cut down their cost by cooperating with Japanese demanders, they improve the degree of mechanization in factories to gain better efficiency. Concluded from collected data and the study of Li Xiaozhong, the economy crisis in 2008 impacted frozen vegetables export as well.

#### 3.2 Frozen Vegetables Export Analysis

Having a glance at export volume pie chart, China is the main frozen vegetables import source of Japan. The export volume from China to Japan took up half of the world export to Japan. The followers are the USA (13.08%), Thailand (8.33%), New Zealand (4.64%).Product trade database of the UN analyzed that other countries hold their export volume at 1% or under, which manifests that Japan widely import frozen vegetables from all parts of the world. Not only promotes vegetables abundance, but also reduces negative factors risk like national policy and environment contamination of frozen vegetables import, they had given us a nice example. However, if Japan changes frozen vegetables import policy, there will be a universal effect on international frozen vegetables industry, such as positive list system policy will increase export cost of other countries when they export frozen vegetables.

# **3.3 Problems in Chinese Frozen Vegetables Export**

# **3.3.1** Chinese Exporters are Insensitive to Japanese Policy Changes

After analysis above, every change in Japanese frozen vegetables policy made great impact on Chinese export, and the negative effect has longer duration of other countries (always above 2 years), however, policy change has slight effect on other countries. China got little preparation of policy change and response to these changes slowly.

### **3.3.2** China is under Political Suppress of Japanese Government Policy

From the line chart of export volume, frozen vegetable export volume has reached a top and then a big dive. It is very likely that Japanese government change policy on purpose of suppressing Chinese frozen vegetables export increasing. According to examination condition of China, the USA and Thailand, Japan set very unfair examination proportion of China. Besides, Japan is very sensitive to Chinese inferior agriculture products news, in 2008, China occurred poison dumplings events, Japan raised China-produced frozen vegetables examination rate greatly increased (from 26% to 40%). World Journal of Thailand reported that the European Union banned to import vegetables from Thailand on 1st, February, 2011, because of Thailand vegetables has pests. At the same time, Japanese government did not intensify examination on Thailand produced frozen vegetables. Under this condition, He Xiurong and Chen Yongfu thought that the direct blasting fuse of trade disputes between China and Japan is lack of competitiveness. Their study mentioned that the cost differentiation gap, Japanese agriculture policy and internal factors and exploding Chinese vegetables export and Chinese marketization are the long-term factors of vegetables trade dispute between Japan and China.

#### 4. Advice for China

# 4.1 China Should Reinforce Publication of All Alarming Information

Concluded from Analysis above, China has low ability to face Japanese policies and regulations, with weak acceptance of Positive List System. Japan quickly updates policies and regulations on pesticide leftover and food additive, and China should collect and summarize relevant messages on time and inform of relative departments. China could learn from examples of Japanese agriculture and stock farming promotion organization (AUC) and Japanese frozen food association (JFFA), utilizing industry association as messages conduction center, to diffuse alarming information to each industry association. Industry associations would remind involved food export enterprises, which have better communication to foreign demander, dealing with changes as early as possible.

Associations in China are China Chamber of Commerce for Import & Export of Foodstuffs mainly. Looking through the front page of this chamber we found that, at some extent, they expose export and import policy changes all the time, publicizing export and import quantity and total amount as well as foreign cooperation opportunities each month. However, if you want to glace at market analysis and export and import trend graph, you needs to register as a member. Chinese associations pay more attention on commercial information spreading; Comparing with AUC and JFFA, Chinese association lacks district market dynamics, all types of vegetable production location information and direction on domestic agriculture production. In addition, China Chamber of Commerce for Import & Export of Foodstuffs gathers articles on food analysis in universities and hospitals, including health, consumption, category and the newest information in technology, provide academic support.

## 4.2 Sign up Mutual Trade Agreement, Boost Chinese and Japanese Food Safety

Japan shows little trust in Chinese vegetables export, examining large portion of Chinese products. Strengthening communication and promoting investigation will increase the acceptance of Chinese exporting vegetables of Japanese government and citizens. On May, 2010, Chinese and Japanese officials signed "Japan's health ministry and the state administration of quality supervision, inspection and quarantine of the People's Republic of China for the food safety promotion action memo". Since June, 2010, China and Japan held Ministry chief level meetings each year to communicate and investigate every aspect of their operation, removed intensifying examination order of some food. On 20th, July in 2006, the ministry of agriculture, the ministry of commerce and the general administration of quality control of China had a special meeting in Beijing to discuss the new trade obstacles that exporting laver met from China to Japan. For over a half year of negotiation, Japanese government abolished autonomous-examination of Chinese exporting laver on 16th, November, 2016, reducing prometryn leftover criteria from 0.01 ppm to 0.14-0.19 ppm, which cleared the block of large amount laver export of China.

Japan has low rate of agriculture self-sufficiency, and China is a giant of agriculture, it is mutual-beneficial to develop agriculture trade relationship between the two countries. China should communicate more with Japan, giving suggestions on making up agricultural product examination criteria. Advising and negotiating for unreasonable examination portion and quality control criteria had made stable foundation for Chinese agricultural product export.

#### 4.3 Maintain Sanitation Management, Control Food Origin

Frozen vegetables produced by China was destroyed and returned mostly for sanitation problems. Enterprises should control material resources that they should not utilize inferior or contaminated materials. Also, they should reinforce control of processing, preventing employees infected by colibacillus due to operating errors. Besides, enterprises can avoid hidden danger of management system with many ways, like printing processing staff number on packages, stricter rules for processing sanitation, processing staff health regulation, training processing staff and controlling on food additives and pesticide.

# 4.4 Enhance Quality Control, Optimize Handle System

In reference of examination reason given by the Ministry of Health, Labor and Welfare of Japan, pesticide problem of Chinese frozen vegetables should be attributed to floating contamination of farmland in the vicinity. Enterprises can construct some reservation devices that are close to this farmland in order to avoid pollution of nearby farmland. In China, human-operating shoulder sprayers are used to spray pesticides, which attach a hidden flaw that human operation could be inappropriate. Enterprises need to enhance training in pesticide spray to decrease pollution of nearby farmland. Enterprises involved should also intensify the capability of quality control, adding expense for examination as well as making exporting product quality check according to regulation and criteria, and, to guarantee exporting product meeting the requirements of importing country. Further, they can seek information or technology help of third-party examination organization and Entry-exit inspection and guarantine department, consulting and acquiring the latest examination criteria. If so, enterprises may deduce inevitable loss.

#### 4.5 Raise Agricultural Technology Research Fund, Promote Agricultural Technology Progress

To flourish agriculture technology and to boost agriculture technology progress are the best actions to break up green trade barrier. Chinese agriculture products exporting to Japan keeps a high inferior rate (inferior amount/total inferior amount), which remind China of improving production technique and moderating pesticide application. To accomplish the goal, China must strengthen agriculture study degree. Enterprises which exports frozen vegetables are mostly in middle-size, but their profitability depends that they cannot develop agriculture technology individually. Therefore, government should establish agriculture technology study team, and applies the results on assisting enterprises in improving agriculture technique, moderating agriculture drug utilization and deduce examination cost. It is not only beneficial to frozen vegetables export, but also does good to export on the whole. At present, Chinese agriculture technology input takes up about 0.49% of agriculture GDP of China. China still has to provide financial support for agriculture technology study when compares to 1% worldwide average and 2% developed countries average.

#### 4.6 Government Makes Assistant Policies, Lift Enterprises Export Rate

Governments could offer agriculture technology support and information support of relative export enterprises. In Fuxin, Liaoning province, the Inspection and Quarantine Bureau successfully helped Jinlilong Food Limited Corporation, Fuxin export frozen pumpkin and bean to Japan. It was the first time export of frozen vegetables produced in Fuxin. Fuxin Bureau voluntarily assists enterprise of knowing examination criteria, guiding enterprise to build up wide-range examination, raw material check, and production control and final-product examination system gradually. Also, the Bureau assisted enterprise did well in food export enterprise record and raw material farming base record, making risk analysis of frozen vegetables exporting to Japan. This is a nice example of government assisting enterprise in export, given valuable experience for other district frozen vegetables export. China plans to improve high-quality farmland construction to boom multiple production ability in the twelfth 5-year blueprint. The national finance invested 1211.51 billion RMB in land governance programs, mainly utilizing in reconstruct farmland and make high-quality farmland. Farmland quality promotion is good to agriculture product quality improvement. Enterprises should actively make use of government policy to have more frozen vegetables export.

Promoted agricultural technology level and optimized regulations cannot be attained in a night. Better communication and comprehension and more reasonable food safety control criteria will be greatly beneficial to trade cooperation and culture and economy exchange between China and Japan.

#### 5. Conclusions

Japan has insufficient agriculture supply, they must de-

pend on import. China is the closest big country to Japan with ample agriculture resources and various types, which should be one of the best choices to import agriculture products to Japan. Chinese agriculture products export still has many problems. Chinese agriculture staff has relatively lower ability, lower-level of pesticide application understanding and bad production sanitation, which lack a scientific and efficient management method. China invested relatively less money in agriculture, so it cannot go much further. Chinese agriculture products have difficulty in meeting high-level green quality control criteria, nevertheless, China stays in passive position to deal with green trade barrier.

To breakup Japanese green trade barrier, we need joint effort of government, industry association and enterprises. At present, government has weak ability in spreading policy, though every department publicize alarming information obeying the law, enterprises information still not the newest sometimes. Chinese industry association mostly dedicated in oversea negotiation, but did minor in assistance of technique promotion, industry and market dynamic information of enterprises. Industry association should provide technique messages to help enterprises adjusting to high green criteria, providing technology support and information-spreading service as well. Export enterprises has many problems which made them have difficulty in tackle high-criteria green trade barrier such as bad sanitation, pesticide abuse and low agriculture study degree. Government should enhance mutual trade barrier negotiation to push trade cooperation, helping enterprises standardizing pesticide utilization and intensifying sanitation inspection.

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### The Impact of BW Emotional Index on China's A - Share Market Returns

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**Abstract:** Investor sentiment has its characteristics of the inherent complexity and changing. In this paper, through the analysis of the "investor sentiment and cross-sectional data on the impact of stock returns"<sup>[1]</sup> published by Baker and others in 2006, combining with the specific situation of China's securities market, and basing on the BW model to select Shanghai and Shenzhen 300 index turnover rate and other 5 emotional indices, and using the principal component analysis to build a monthly investor sentiment index of China's securities market. The principal component analysis of residual that calculated by a regression of emotional indicators and macroeconomic data is carried out, to get macroscopical emotional indicators that removes macro factors. Finally, OLS regression analysis is carried out with the Shanghai Composite Index and Shenzhen Component Index to find that the constructed emotional index has a significant effect on the yield of China's stock market, thus verifying the validity of the emotional index.

Keywords: Emotional index; Sentiment indicators that removal of macro factors; Principal component analysis

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#### **1. Introduction**

lassical financial theory, with rational human assumptions, thinks that the behavior of investors will comply with the expected utility maximization rules, thus ignoring the impact of investor sentiment and other subjective factors on asset pricing and market. Behavioral finance theory thinks that people are bounded rational, the investor's cognitive bias, emotions and preferences affect asset pricing, and that makes the asset prices deviate from the normal level. The study shows that investor sentiment not only affects investors' decision-making behavior, to make the asset prices deviate, but also in many stock market bubbles and financial crisis, investor sentiment undoubtedly playing the role of fueling in the asset securities market irrational prosperity and panic down. Behavioral finance called the investor' expectations on future securities market with a systematic bias investor sentiment, and that reflects the investor's willingness to invest or the prevailing market sentiment. In the past two decades, it has been recognized by domestic and foreign scholars whether investor sentiment affects asset pricing and market volatility. Moreover, China's securities market is an emerging market driven by government-led institutional innovation and market development. China's securities market investor sentiment has more significant volatility than the western mature market, and has bigger influence in the securities market. Therefore, the study of China's securities market investor sentiment on the market rate of return has not only become an important issue, but also guides investors to invest in rational and make the financial market stable.

#### 2. Data and variables

This paper chooses the logarithm of monthly turnover rate in Shanghai and Shenzhen 300 Index, dividend premium, IPO Initial Return, IPO number, newly issued stock and closed-end fund discount rate as part of investor sentiment index; chooses manufacturing purchase managers' index (PMI), consumer price index (CPI), industrial producer price index (PPI), consensus index, urban commodity retail price index, total imports increased year on year as macroeconomic data analysis.

And, Newly issued shares = Total number of issued shares / (Total number of issued shares + Total issued long-term bonds) (1)

Dividend premium data and macroeconomic indicators data are from the Hang Seng Juyuan database, the Shanghai and Shenzhen 300 index turnover rate, IPO Initial Return, the IPO number and closed-end fund discount rate are from the CSMAR, the newly issued shares data is from WIND. Fama three-factor monthly data and the Shanghai Composite index, the Shenzhen Composite Index data are from the RESSET(see Table 1). The data for this paper is based on monthly data from 31 January 2005 to 31 March 2017.

#### 3. Empirical Analysis

# 3.1 An Analysis of Investors' Emotions in Shanghai Stock Index

After the principal component analysis of the selected

investor sentiment by using MATLAB software, the data of the first principal component is selected to form the new investor sentiment index (BW index). Taking the six macroeconomic variables as the independent variables, the regression analysis of six initial investor sentiment indicators is carried out, and the residuals are taken. The resulting six residuals form a macroscopic investor sentiment indicator. The principal component analysis is carried out to the macroscopic investor sentiment index, and the first principal component is selected to obtain the new macroscopic investor sentiment index (ABW index). The BW index, ABW index and fama three factors as the independent variable, and carry out the regression analysis on the Shanghai Composite Index monthly rate of return.

First of all, we use the BW indicator, Fama three-factors to carry out the regression analysis on Shanghai Composite Index monthly rate of return. And get the results are shown in Table 2 :

From Table 2, we can see that the effect of the Fama three-factors and the BW index on the yield of the Shanghai Composite Index is significant, and the effect of the BW index on the index yield is also significant. So we can get a simple regression equation:

Data	Variate	Source
Shanghai and Shenzhen 300 Index turnover rate (monthly)	NYSE (nature logarithmic of turnover rate)	CSMAR
Closed-end fund discount rate	CEFD	CSMAR
IPO number	IPOS	CSMAR
IPO Initial Return	RIPO	CSMAR
Dividend premium	PD/ND	Hang Seng Juyuan database
New issues	NIPO (formula - calculation)	WIND
Macroeconomic data	CPI, etc.	Hang Seng Juyuan database
Fama three-factor (monthly)	Fama three	RESSET
Shanghai Composite Index Yield (Monthly)	Index	RESSET
Shenzhen Composite Index yield (monthly)	Index2	RESSET

#### Table 1. Data Sources

15

Source Model Residual Total	St 1.0329 .06467 1.0976	93554 92538		df 4 141 145	MS .258233884 .00045867 .007569711	Number of obs = 147 $F(4, 141) = 563.01$ $Prob > F = 0.0000$ $R$ -squared = 0.9411 $Adj R$ -squared = 0.9394 $Root MSE = .02142$
index	Coef.	Std. E	rr.	t	P> t	[95% Conf. Interval]
fama1	.9286275	.02002	29	46.36	0.000	.8890316 .9682234
fama2	347538	.04387	95	-7.92	0.000	43428482607912
fama3	0331174	.05984	73	-0.55	0.581	1514314 .0851966
bw	.3358537	.0205	59	2.42	0.000	3532106 .4249181
_cons	.0105353	.01639	032	0.64	0.521	0218728 .0429435

Table 2. Regression Analysis of Monthly Yield of Shanghai Stock Index

Table 3. Regression Analysis Result of Monthly Yield of Shanghai Stock Index with ABW Index

Source	SS		d	f		MS	1	Number of $obs = 147$				
Model Residual	1.0329434		5		.206588694			F(5, 140) = 447.27 Prob > F = 0.0000				
Total	1.0976080									07569711	A	R-squared = 0.9411 dj R-squared = 0.9390 Root MSE = .02149
index	Coef.	Std. Err.		t		P> t		[95% Conf. Interval]				
fama1	.9279121	.02	232087	44.5	5	0.000		.886736 .9690882				
fama2	3472132	.0441029		-7.8	7	0.000		4344072600194				
fama3	0323957	.0603088		-0.54	4	0.592		1516295 .086838				
abw	.4827663	.0605061		4.13	3	0.000		4393542 .5710668				
bw	.3388484	.0206353		3.41	-	0.000		3632312 .4149281				
_cons	.0110379	.01	168915	0.65	5	0.515		0223574 .0444332				

Source	SS		df		MS	Number of obs = $147$ E(4, 141) = 654.00		
Model	1.29360	0612	4		612 4		.323401529	F(4, 141) = 654.00 $Prob > F = 0.0000$
Residual	.069723	5716		141	.000494494	R-squared = 0.9489		
Total	1.36332	983 1		1.36332983		145	.009402275	Adj R-squared = $0.9489$ Root MSE = $.02224$
index2	Coef.	Std. Err.		oef. Std.		t	P> t	[95% Conf. Interval]
fama1	1.055535	.0207	7964 50.76		0.000	1.014422 1.096648		
fama2	4758982	.045:	5609 -10.45		0.000	5659693858275		
fama3	3315923	.062	1405	-5.34	0.000	45443982087447		
bw	.4627644	.072	5.62		0.000	3969845 .4614556		
_cons	0152221	.0170	0213	-0.89	0.373	0488721 .0184278		

Table 4. Regression Analysis Result of Monthly Yield of Shenzhen Stock Index with BW Index

Table 5. Regression Analysis Result of Monthly Yield of Shenzhen Stock Index with ABW Index

Source Model Residual Total	SS 1.29362 .069700 1.36332	745	df 5 140 145		MS .258725817 .000497862 .009402275	Number of obs = $147$ F(5, 140) = $519.67$ Prob > F = $0.0000$ R-squared = $0.9489$ Adj R-squared = $0.9470$ Root MSE = $.02231$
index2	Coef.	Std. Er	rr.	t	P> t	[95% Conf. Interval]
fama1	1.056752	.02162	28	48.87	0.000	1.014003 1.099502
fama2	4764508	.04578	81	-10.41	0.000	56697633859252
fama3	3328201	.06261	32	-5.32	0.000	45660992090304
bw	.5127554	.0731423		5.29	0.000	4269909 .4314801
abw	.3961129	.00052	54	4.21	0.000	5711516 .5279259
_cons	0160771	.01753	69	-0.92	0.361	0507485 .0185943

Y-szzs = 0.0105353 + .9286275fama1 - 0.347538fama2 - 0.0331174fama3 + 0.3358537bw (2)

Define Y-szzs as the Shanghai Composite Index Monthly Yield

Then we put the ABW indicators in, other factors are unchanged, get the results are shown in Table 3;

It can be seen from Table 3 that the effect of ABW and BW on the monthly rate of return of the Shanghai Composite Index is huge after the ABW is added to the regression. And it is positively related. So we can get a simple equation:

Y-szzs = 0.0110379 + 0.9279121fama1 + 0.3472132fama2 - .0323957fama3 + 0.4827663bw + 0.3388484abw (3)

## **3.2 An Analysis of Investor's Emotional Index of Shenzhen Stock Index**

We take the analysis method that is same with the Shanghai Composite Index, instead of the Shanghai Composite Index monthly rate of return with the Shenzhen Composite Index monthly rate of return.

First, we examined the regression results of the BW index only (see Table 4).

From Table 4 we can see that the impact of the BW index on Shenzhen Composite Index monthly rate of return is significant and positively related. So we can get a simple equation:

Y-szcz = -0.0152221 + 1.055535fama1 - 0.4758982fama2 - .3315923fama3 + 0.4627644bw (4)

We will put ABW indicators into the regression model for analysis, the results are shown in Table 5. Define Y-szcz as the Shenzhen Composite Index monthly yield index.

It can be seen from Table 5 that the effect of ABW and BW on the monthly rate of return of ASW is important after ABW is added to the regression. And it is positively related. We can get a simple equation:

Y-szcz = -.0160771 + 1.056752fama1 - 0.4764508fama2 - 0.3328201fama3 + 0.5127554bw + 0.3961129abw (5)

#### 4. Conclusion

By using the market data of Shanghai and Shenzhen A shares and the principal component analysis method, a composite investor sentiment index is constructed, which has measured indirectly sentiment and the tested the overall effect of sentiment on stock yield. It confirms that sentiment have an effect on asset prices. It can be deemed that the 6 investor sentiment indices, including dividend premium and other 5 index, and the investor sentiment indicators that removes macro factors have a important positive impact on the Shanghai market and the Shenzhen market yield. Investors' positive sentiment will be likely to lead to positive market yields, and the investors' negative sentiment will be likely to lead to negative market yields. But this paper does not research the influence extent and whether there is a significant impact on individual share and I will further study it for other work.

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### How Herding Behavior Affects Our lives ——A Double-Edged Sword

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**Abstract:** Herding behavior is an important part of behavioral finance study. In this paper, I focus on the literature reviews of herding behavior along the timeline and explore how it affects our lives. Herding is a double-edged sword with various impacts. I conclude three possible explanations for herding actions based on regret aversion bias, group mind theory and Emergent Norms Theory. The historical evidence on social and economic impact including asset price bubbles, subprime crisis is presented. Although these negative impacts are serious, herding can improve decision-making for people who are less likely to be biased by regret. Herding may also accelerate society's development if we choose the right leader. Finally I would discuss several measures to ease the negative effect of herding behavior.

Keywords: Behavioral finance; Herding; Economic impact

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#### **1. Introduction**

Herding behavior plays a significant role in behavioral economies and may have various impacts on our life. It usually results from a tendency to imitate the actions of others. I would introduce a vivid story to help people gain better understanding.

A herd of sheep were drinking by the river, an elderly sheep fell into the water accidently and was washed away by the river. While the rest of the sheep didn't run away and believe the old sheep was leading them, so they all jumped into the water and died. The herd could have run away but they blindly followed others without judgment and lost their life.

Existing literatures on definition of herding behavior are multifaced following historical trend. The definition proposed by Christie and Huang (1995) suggested "individuals who suppress their own beliefs and base their investment decisions solely on the collective actions of the market, even when they disagree with its predictions"<sup>[1]</sup>. As for Hirshleifer and Teoh (2003) mentioned in their paper, herding behavior is a behavioral convergence, where people ignore private signals and make their decisions solely on the decision of others<sup>[2]</sup>. So, we can formulize a general definition-- if people have the tendency to follow others' actions without rational thinking, then it can be regarded as the herding behavior.

Next I will focus on herding behavior's social and economic impact on our lives based on different theories.

# 2. Herding Behavior's Social and Economic Impact

#### 2.1 Possible Explanations of Herding Behavior 2.1.1 Regret Aversion Bias

Herding behavior arise mainly because investors have bounded rationality, which is one of the most important fact in behavioral finance study. People may commit cognitive and emotional bias when faced with different situations. Koening (1999) argues that regret aversion can initiate herding behavior<sup>[3]</sup>. Investors who suffer from regret aversion bias tend to avoid making decisions that will result in action out of fear that the decision will turn out poorly. This may encourage investors to invest in a similar fashion to avoid the burden of responsibility and engage in herding actions. People normally think following others is safer and it can limit their future, causing regret for poor performance.

I remembered an interesting phenomenon in primary school. Our teacher asked us to do multiple-choice problem and raise our hand when she said different options that we support. However, many students like me were afraid to make mistakes based on our limited knowledge and would rather follow the majorities. Thus, most of my classmates chose the option by following best students without detailed thinking. However, the correct answer belongs to the minorities. This phenomenon really attracts me to dig more about people's psychology.

#### 2.1.2 Group-Mind Theory

Gustavo Le Bon's (1895) put forward a Group-mind theory, emphasizing the fact that individuals would lose all sense of self and responsibility when they are being a part of the crowd. They would gain a sentiment of invincible power due to their numbers<sup>[4]</sup>.

This is understandable because we all feel reliable with a sense of belonging when we follow others. Take Chinese stock market as an example, a growing number of college students, elders has started investing in stock markets because people around them gained a lot and it promoted them to invest in a similar pattern. They believe that their investment decisions are appropriate because a great number of people have enjoyed the benefits. The more people has invested, the more reliable decision they believe they have made.

#### 2.1.3 Emergent Norms Theory

This is another famous crowd psychology theory explaining how herding behavior grows. Turner and Killian (1987) analyzed how norms are formed through social interactions<sup>[5]</sup>. Before crowd action takes place, society is filled with uncertainty and confusion. Many individuals offer their own views of reality. Then certain people become leaders in this process who offer definite opinions and act clearly. The population will gradually follow the leaders and exclude other opinions. Eventually the crowd psychology grows.

Leaders are extremely important in herding trend since the rest of people would follow them. The key point is to find the right leaders. For instance, Jobs has led an Apple trend with smart phones and other useful electronic devices, which stimulated other global companies to capture the business opportunities for electronic device in highly competitive markets. Then imitation of smartphones became popular and herding actually accelerate technical and society developments.

### **2.2 Economic Impact on Herding Behavior in Our Life**

#### 2.2.1 Herding Behavior on Asset Price Bubbles

Asset price bubble is one of the most significant phenomenon which can be explained by herding behavior. It happens when the price goes up till extremely higher deviated from expectation. Herding behavior may emerge in a poorly informed asset market.

Christian Hott has established a model that can explain the emergence of herding behavior in asset markets. He classified clearly in assets, information types, investors and assume investors maximizing the utilities of assets. After a detailed derivation, he found the correlation among market moods, informational signal and asset price. Hott concluded that (March 2008) investors may follow a group of mood investors—who are not fully rational because they overestimate the level of information in the market. By following the mood investors, they improve the market mood and create a positive feedback. This leads to a price bubble<sup>[6]</sup>.

This herding impact is evident in our life, especially in Chinese house market. We may hear the story of someone who earned a fortune on the house investment, which might therefore makes a household think current housing market is promising and the market mood is optimistic. Then others would receive this positive signal and make the same investment. House price would rise dramatically beyond its real sustainable value.

#### 2.2.2 Herding Behavior on the Financial Crisis

The subprime crisis is an important historical event to analyze the herding behavior, which affects thousands of similar securities at the same time. From early 2000 to 2007, the US real estate prices have driven up on account of people's herding behavior of borrowing loans and buying house for short-term profits. Under the great temptation, not only ordinary home mortgage lenders but also low-income households couldn't wait to apply for home mortgages. Because institutional investors are exposed to the same information: historically low interest rate and their aversion to stock market after bubbles, they made similar investment decisions to change their preference in housing investment. That was how herding behavior arise.

However, the loose lending standards resulted in banks lending mortgage loans to low credit-worthy borrowers, default phenomenon increased and led to financial market panic. The consequences were serious due to the institutional irrational behavior.

#### 2.2.3 Herding Behavior Strategy for Better Outcomes

It is interesting to find that individuals can improve their expected outcomes by using herding psychology. In paper written by Jennifer Arlen and Stephan Tontrupt (2015), they present evidence that people can use herding as a behavioral rational strategy to overcome the negative impact of regret aversion<sup>[7]</sup>. Individuals are able to change their reference point by focusing on the choices of others and shift their bias to favor the majority choice. This increases the relative weight they give to the benefits of trading over the benefits of keeping, causing subjects to anticipate less regret over trading than keeping their ticket.

This fact can be useful for investors in social environment, especially active investors. A large number of evidences show that active investors are frequently overconfidence, who underestimate risks and overestimate expected returns, leading to hold poorly diversified portfolios. Herding in this way give them another change to reconsider their investment after observing the crowd trend and ease their regret for poor performance.

As we mentioned above, herding can contribute to the development of some competitive markets if they choose the right leader, giving them courage to catch up with the latest trend rather than staying with the same.

#### 2.3 How to Ease the Effect of Herding Behavior

To see in a general way, herding behavior is irrational. The emergence of herding may have various negative impact on our society including asset bubbles and price volatilities, increasing market risk and financial market panic. Therefore, taking actions to eliminate the consequences and trying to control it appropriately are necessary.

First, enhancing information transparency is important. As I mentioned, herding behavior may emerge in a poorly informed market based on the information asymmetry. So, the presence of adequate information can help investors gain a better understanding of the market situation. Second, investors should receive higher level of education to get more financial knowledge to eliminate cognitive errors. In this way, they won't ignore the objective market signals and make wiser decisions. Third, government should open some legal institutions to guide investors appropriately using financial instruments and contribute to steady economic environment. If there is any irrational tendency like house flipping, they can be used to suppress the heat.

#### **3.** Conclusion

In the light of those literatures analysis, herding behavior initially arises from human psyche and social exposure. Due to market's asymmetric information, investors may overestimate information levels and suffer from regret aversion bias, then crowd psychology grows to reduce their sense of responsibility and limits their future regret. The more support they are given, the safer feeling they can obtain. On the positive side, people may improve their expected outcomes by herding because of the shifting in reference point and active investors would think more comprehensively. On the negative side, the crazy herding trend would not only bid up the asset price and lead to bubbles, but also increase financial panic in credit markets. Therefore, it's essential for investors to take corresponding measures to use herding appropriately and ease the negative impact by enhancing information transparency and improving education level.

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### The Study on the Effects of Agricultural Policies to the Stock Price of Agricultural Companies of China

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**Abstract:** This paper attempts to use the intervention analysis model to study the impact of the release of the central Number 1 Documents on the stock price fluctuation of listed agricultural companies in China, and get the intervention value of the policy event on the stock return rate while separating the influence of the policy event. The results of the empirical study on the data of the study showed that the effect of the intervention on the results of the intervention was based on the publication of the "Number 1 Documents" in  $2012 \sim 2013$  as the intervention event. The results of the empirical study on the significance of biological breeding index and land transfer index (data from 2013) Intervention model, is consistent with the interpretation of the "Number 1 Documents".

Keywords: Agricultural policy; Number 1 document; Intervention analysis

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#### **1. Introduction**

griculture as an important basic industry in China is not only affected by the impact of natural factors, but also by the relevant national policies. Can the stock returns of agricultural companies reflect the relevant policy changes in a timely, effective and accurate manner? On the other hand, what impacts will the national agricultural policies have on the stocks of agricultural companies? This paper intends to use the pre-model to conduct quantitative analysis and explores the relationship between China's major agricultural policy and the stock returns of agricultural companies.

#### 2. Intervention Model and Its Parameter Description

The ideas and steps of modeling the intervention model include: Firstly, fitting a time series model with data that is not affected by the intervention event, and then use the model to predict a number that is separated from intervention event as the predicting number. Secondly, using the actual time series data to minus the predicting number obtained in the previous step to obtain the intervention number of the intervention event, and the parameters of the pre-intervention model will be obtained by using these intervention numbers. Thirdly, use all the data that is separated from the influence of the intervention event, to identify and estimate the time series model. Fourthly, the time series model obtained in step 3 is added to the intervention model to obtain the total intervention analysis model containing the effect of intervention.

The basic variables of the intervention model are intervention variables, with two basic forms. One is a transient intervention variable:

$$S_t^T = \begin{cases} 0 & t < T \\ 1 & t \ge T \end{cases}$$
(1)

The other is a persistent intervention variable;

$$P_t^T = \begin{cases} 0 & t=T \\ 1 & t \neq T \end{cases}$$
(2)

In it t is the time variable and T is the node where the intervention event occurs.

The intervention event is in a variety of forms, overall it can be summarized as the following four types:

The impact of the intervention event will suddenly begin and continue for a long time. This type of model is  $Y_t = \omega \mathbf{S}_t^T$ ,  $\omega$  is the intensity of the effect of the interven-

tion. If the Yt requires a difference to be a stationary sequence, the intervention model will be adjusted to (1-B) Y<sub>t</sub>=wS. If the intervention event has a certain lag, the intervention model can be further adjusted to (1-B)  $Y_t = \omega B^b S_t^T$ , where B is the hysteresis operator.

The impact of intervention events gradually begins and become a long-term sustainability, the model is:

$$Y_{t} = \frac{\omega}{1 - \delta B} S_{t}^{T} \quad 0 < \delta < 1$$
(3)

The more general model is:

$$Y_{t} = \frac{\omega B^{b}}{1 - \delta_{t} \dots \delta_{t} B^{r}} S_{t}^{T}$$

$$\tag{4}$$

Intervention suddenly starts but the time of effect is short, the model is:

$$Y_{t} = \frac{\omega B^{b}}{1 - \delta B} P_{t}^{T} \qquad 0 < \delta < 1$$
<sup>(5)</sup>

Intervention suddenly begin to have temporary effects. The Intervention model is:

$$Y_{t} = \frac{\omega_{0}}{1 - \delta_{1} \dots \delta_{t} B^{r}} P_{t}^{T} \quad 2 \le r$$

$$\tag{6}$$

No matter how complicated the intervention event can be, we can generally use the above four types or their units to describe it, and use these models to stimulate the effect of intervention event.

# 2.1 The Time Series Model Measuring Methods of the Intervention Model

The time series model under the influence of no intervention can be analyzed by Autoregressive Integrated Moving Average (ARIMA). Bokes and Jenkins firstly proposed this model in the early 1970s as a method of predicting time series. The modeling idea of it is to treat the data of the time series to be predicted over time as a random sequence process and approximately describe the time series in mathematical models. Once the model is identified, the historical numbers of the time series can be used to predict future numbers.

In this model, AR is autoregressive, MA is moving average, p is the number of autoregressive terms, q is the moving average term, and d is the difference number of times when the time series is stationary.

#### 2.2 AR (P) (P-Order Autoregressive Model)

 $Y_t$  represents the economic variable of period t,  $Y_t$ 's model can be written as:

$$Y_{t} - \delta = \alpha_{1} Y_{t-1} - \delta + \mu_{1}$$

 $\mu_{\rm t}$  is an irrelevant random error term (white noise se-

quence) with zero mean and invariant variance, then Yt follows a stochastic process of first order autoregressive, and the p-order autoregressive function form is:

$$Y_{t} - \delta = \alpha_1 Y_{t-1} - \delta + \alpha_2 Y_{t-2} - \delta + \alpha_3 Y_{t-3} - \delta + \dots + \alpha_p Y_{t-p} - \delta + \mu_t$$

2.3 MA (q) (Q-Order Moving Average Model)

Sometimes the AR process may not be able to predict the time series very well, we can usually use the moving average process, that is, the model of  $Y_t$ . And it can be written as:

$$Y_{t} = \alpha + \beta_{0}\mu_{t} + \beta_{1}\mu_{t-1}$$

 $\alpha$  is the mean constant term, u is the random error

term for white noise? The Y of the t period is equal to a constant plus a moving average of the past and the current error term, that is, Y follows a first order moving average process, which can be abbreviated as MA (1). The q-order moving average process can be recorded as:

$$Y_{t} = \alpha + \beta_{0}\mu_{t} + \beta_{1}\mu_{t-1} + \beta_{2}\mu_{t-2} + \dots + \beta_{q}\mu_{t-q}$$

# 2.4 ARMA (p, q) (Autoregressive Moving Average Process)

When  $Y_t$  has the characteristics of AR and MA, it will be the ARMA process, and  $Y_t$  can be written as:

$$Y_{t} = \theta + \alpha_{1}Y_{t-1} + \beta_{0}\mu_{t} + \beta_{1}\mu_{t-1}$$

It includes an autoregressive term and a moving average term.  $\theta$  is a constant term and can be recorded as

ARMA (1,1). When there is p autoregressive and q moving averages in the model:

$$Y_{t} = \theta + \alpha_1 Y_{t-1} + \alpha_2 Y_{t-2} + \dots + \alpha_p Y_{t-p} + \mu_t + \beta_0 \mu_t + \beta_1 \mu_{t-1} + \beta_2 \mu_{t-2} + \dots + \beta_0 \mu_{t-q}$$

#### 3. An Empirical Analysis of the Impact of Agricultural Policy Release on Agricultural Stock Companies' Stock Prices

#### **3.1 Agricultural Industry Policy and Sample Data** Selections

In this paper, the policy event is the release of  $2012 \sim 2013$  "No. 1 document", according to the past study on the agricultural industry stock research and policy, biological

breeding and land transfer related stocks have the highest market attention. This paper examines the impact of policy documents on the corresponding share price through the grasp of keywords in the first document.

Table 1.	Policy	File	Keywords	Selection
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	Biological breeding	land transfer
Policy keywords		land transfer, land right, agricultural

This paper mainly studies the impact of the  $2012 \sim 2013$  "No. 1 document" on the corresponding concept stock, mainly considering the conceptual stock of two kinds: biological breeding and land circulation. Therefore, we adopt the 2012-2013 Wind Concept Index: the Biological Breeding Index (884062.WI), and the Land circulation Index (884139.WI), both of which were compiled by Wind and these two were started at December 31, 2009.

## **3.2 The Selection Between Estimation Interval and Event Interval**

Definition of event interval and estimated interval. In the case of the event class analysis method, it is necessary to decide the to-be-studied event interval and the estimated interval, and analyze the response of the agricultural listed company's stock price to the policy event in the event interval. The time of the policy events and policy events that lead to changes of the stock price is the event interval, while the period before the event window period that is not affected by the policy event is called estimation interval.

As is shown in chart 8, the estimated interval's BCI and LTI in 2012 can get a better fitting effect using ARI-MA(2,0,2), ARIMA(9,1,0) respectively.

The simulated result of biological breeding index in 2012 is:

 $BCI_{t=0.00129+0.375BCI_{t-1}-0.842BCI_{t-2}-0.289u_t+0.738u_{t-1}$ :

The simulated result of land rights transformation index in 2012 is:

 $\label{eq:linear_constraint} \begin{array}{l} d\mbox{-}LTI_t\mbox{=}-0.0000297\mbox{-}0.861d\mbox{-}LTI_{t\mbox{-}1}\mbox{-}0.809d\mbox{-}LTI_{t\mbox{-}2}\mbox{-}0.802d\mbox{-}LTI_{t\mbox{-}3}\mbox{-}0.629d\mbox{-}LTI_{t\mbox{-}5}\mbox{-}0.525d\mbox{-}LTI_{t\mbox{-}6}\mbox{-}0.398d\mbox{-}LTI_{t\mbox{-}7}\mbox{-}0.283d\mbox{-}LTI_{t\mbox{-}8}\mbox{-}0.142d\mbox{-}LTI_{t\mbox{-}9} \end{array}$ 

The simulated result of biological breeding index in 2013 is (the parameter result in this year is not shown):

 $\begin{array}{l} BCI_{t}=&-0.000288-0.836BCI_{t-1}+0.741BCI_{t-2}+1.363BCI_{t-3}+0.588BCI_{t-4}-0.904BCI_{t-5}-0.833BCI_{t-6}-0.990u_{t}-0.754u_{t-1}-0.990u_{t}-1.030u_{t-1} \end{array}$ 

The simulated result of land rights transformation index in 2013 is:

$$\begin{split} LTI_t = & 0.000936 + 0.684 LTI_{t\text{-}1} - 0.703 LTI_{t\text{-}2} - 0.850 LTI_{t\text{-}3} - \\ & 1.70d\text{-}LTI_{t\text{-}4} - 0.581 u_t + 0.529 u_{t\text{-}1} - 0.696 u_{t\text{-}2} \end{split}$$

#### 3.3 Build an Intervention Analysis Model

The ARIMA model can be extrapolated to get the estimated daily return when event interval is not affected by intervention, and then the value of policy intervention can be got by using the actual value minus the estimated value.

The policy effects' intervention model estimation of Document NO.1 in 2012 is:

	(1)	(2)
	zl	z2
VARIABLES	ffd_LTI	zz_BCI
L.ffd_LTI	-0.281	
	(0.339)	
L.zz_BCI		-0.622*
		(0.274)
Constant	-0.00293	0.0129**
	(0.00351)	(0.00400)
Observations	10	10
R-squared	0.079	0.391

Table 2. The Intervention Model Estimated Result in

Notes: the Robust Std. are in brackets and the SE have been adjusted by heteroscedasticity.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

It's shown that the intervention effect of policy event to land rights transformation index in 2012 is not remarkable, but the effect to biological breeding index is remarkable. The intervention model is:

$$eBCI = \frac{0.0129}{1+0.622B}S_t^T$$

The final intervention model is:

 $BCI_{t=0.00129+0.375BCI_{t-1}-0.842BCI_{t-2}-0.289u_t+0.738u_{t-1}+eBCI$ 

In which 
$$S_t^T = \begin{cases} 0 & 2011.3.8-2012.1.31 \\ 1 & 1 & 1 \end{cases}$$

1 2012.2.1-2012.3.1 The policy effect's intervention model estimation of Document NO.1 in 2013 is:

	(1)	(2)
	b1	b2
VARIABLES	zzBCI	zzLTI
L.zzBCI	-0.418*	
	(0.219)	
L.zzLTI		-0.386*
		(0.217)
Constant	0.000462*	-0.00150
	(0.00379)	(0.00321)
Observations	20	20
R-squared	0.168	0.150

Table 3. The Intervention Model Estimated Result in

Notes: The Robust Std. are in brackets and the SE have been adjusted by heteroscedasticity.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

It's shown that the intervention effects of policy event to both land rights transformation index and biological breeding index in 2012 are all remarkable. The intervention models are as follows:

$$eBCI = \frac{0.000462}{1+0.418B} S_{t}^{T}$$

$$eLTI = \frac{-0.0015}{1+0.386B} S_{t}^{T}$$
The final intervention mod

The final intervention models are:

$$\begin{split} BCI_t &= -0.000288 - 0.836BCI_{t-1} + 0.741BCI_{t-2} + 1.363BCI_{t-3} \\ & + 0.588BCI_{t-4} - 0.904BCI_{t-5} - 0.833BCI_{t-6} - 0.990u_t - 0.754u_{t-1} \\ & - 0.990u_t - 1.030u_{t-1} + eBCI \end{split}$$

$$\label{eq:LTI_t} \begin{split} LTI_t = & 0.000936 + 0.684 LTI_{t-1} - 0.703 LTI_{t-2} - 0.850 LTI_{t-3} - \\ & 1.70d - LTI_{t-4} - 0.581 u_t + 0.529 u_{t-1} - 0.696 u_{t-2} + eLTI \end{split}$$

In which 
$$S_t^T = \begin{cases} 0 & 2012.3.1-2013.1.30 \\ 1 & 2013.2.1-2013.3.7 \end{cases}$$

#### 4. Conclusion

The Document NO.1 in 2012 stressed the importance of improving the capacity in agricultural technological innovation and popularization, putting the key point of agricultural technology on seed cultivation, continuing to implement special science and technology projects such as genetically modified organisms and push the industrialization process of which. But the corresponding expression of land rights transformation just referred to improve the transference market of land contractual management rights. So it's shown that policy in 2012 helped biological breeding stocks. Compared to intervention analysis model's empirical results, in 2012, the biological breeding index is remarkable while the land rights transformation index is not, which are as expected.

The Document NO.1 in 2013 referred to the key science and technology projects such as continue to implement seed industry development and the R&D of fertilizers, pesticides and veterinary drugs efficiently and safely with regard to biological breeding, and referred to encourage and support land transformation to new operating entities such as professional large family, family farms and cooperatives in land rights transformation. It has shown that there is not obvious difference in both aspects concerning policy expressions, but due to the remarkable integrated effects of policy events, the intervention analysis model in this year are remarkable at a lower confidence level, which are as expected.

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### Analyze China High-Speed Railway Ticket for Spring Transportation from the Perspective of Microeconomics

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**Abstract:** In recent ten years, the rapid development of China high-speed railway is called "China miracle", and it not only provides great convenience for people's daily life trip, but also greatly promotes the economic development. However, the annual spring transportation in the special period is still a great challenge to high-speed railway transportation, and this paper analyzes the high-speed railway ticket for spring transportation from the perspective of microeconomics, and then thinks for the solution.

This paper specifically analyzes the problem that demand exceeds supply for high-speed railway ticket by using the theories of the demand elasticity of supply and demand and the influence of price on supply and demand, monopoly markets. In addition, opportunity cost, incomplete information and other economic principles are used to think about the theoretical reasons for the difficulty of buying tickets during the spring transportation. I have given my understanding for the two problems owned by China spring transportation, and the corresponding countermeasures and suggestions. For example, speed up the development of substitutes and carry out the mechanism of price fluctuation; In the ticket refunding mechanism, this paper boldly conceives the method to relieve the pressure through a reasonable and scientific ticket refunding mechanism. Finally, this paper starts from the source and find the key point to solve the problem of spring transportation in China by breaking the urban-rural dual structure.

Hereafter the final conclusion was drawn: Although there are some problems to cope with the spring transport for the current China high-speed railway, it is believed that in the near future, the difficulty of buying a ticket in spring transportation will no longer hinder the homecoming of wanderers.

Keywords: China high-speed railway; Spring transportation; Ticket; Supply and demand

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#### **1. Introduction**

hen the high-speed railway is mentioned, people's eyes in the world will focus on China. From nothing at the beginning to gradual gap filling by using the mature and perfect technology system, there are not only difficulties and frustrations, but also magnificent phenomenon all the way. Nowadays, when China enters the era of high-speed railway, the high-speed railway not only builds up a new life space for people, but also provides high-quality public products for the society and has become a powerful driving force for the economic and social development. However, with the rapid development of China high-speed railway system, a series of problems are emerging, and especially in the spring transportation problem owned by China, the high-speed railway transportation is still facing problems and challenges.

# 2. Imbalance Between Supply and Demand of High-Speed Railway Transportation

# **2.1 Large Overall Demand for the Spring Transportation**

In 2017, China high-speed railway has become the means

of transportation with the national longest mileage, the largest scale of construction and the most advanced technical level. However, in the face of the huge flow of people and the pressure gathered by population at a special time, demand in China high-speed railway operation still exceeds supply, and it is a difficult problem that the needs of all passengers can't be met.

According to the statistics of the National Development and Reform Commission, the volume of passenger flow during the spring transportation in China reached 2.978 billion passengers in 2017, which increased 63 million passengers compared with last year. According to the introduction of China Railway Corporation, 350 million passengers were sent during the spring transportation in 2017, which set a new record.

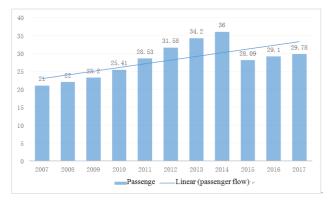


Figure 1. The Trend Figure of the Passenger Flow in the Spring Transportation in China from 2007 to 2017 (100 million passengers)

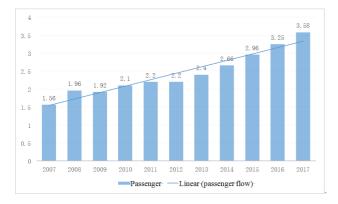


Figure 2. The Passenger Volume Sent by the National Railway in the Spring Transportation from 2007 to 2017 (100 million passengers)

The term "spring transportation", which was created by Chinese, has become a unique phenomenon of population movement during the annual lunar calendar Spring Festival in China. Its main body is mainly composed of migrant workers and college students, and their common features are to stay away from their hometown.

### **2.2 Analysis of the Supply and Demand Curve Model**

We will analyze the condition by establishing a simple economic model for the supply and demand of train tickets (see Figure 3). Where S0 and  $D_0$  indicate the demand and demand curve during the non-holiday period, and S1 and  $D_1$  indicate the supply and demand during the Spring Festival.

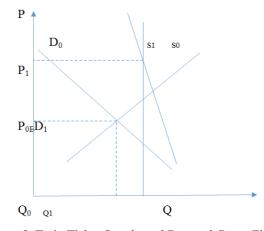


Figure 3. Train Ticket Supply and Demand Curve Figure

Firstly, analyze it from the perspective of demand. The increase in demand and the smaller elasticity can be clearly seen from  $D_0$  to  $D_1$ . Due to a large number of floating populations returning to their homes in the short term during the Spring Festival, a ticket for home is very valuable for them who miss their relatives, so the elasticity of the demand curve is smaller. With the Spring Festival in the winter, cars, planes and other alternative vehicles are easily affected by the weather, such as blizzard and wind, so the train will become the choice of the vast majority of people.

During the spring transportation, the supply and demand curve turns into a vertical line perpendicular to the horizontal axis, i.e., it has no elasticity. In other words, during the Spring Festival, the railway department has mobilized all trains and high-speed railways to exert their maximum supply.

From the whole point of view, the equilibrium price and the equilibrium demand have been improved, and as a public product, the government has limited the price of railway transportation and stipulates its highest price. At the highest price, the demand is set to Q\*, and the equilibrium demand is  $Q_0$ , and at this time, the number of insufficient supply is  $\Delta Q = Q^* - Q0$ , which increases the consumer surplus, and in other words, there is a certain difference between the maximum ticket price and the actual price that passengers want to buy.

How to reduce the marginal cost and improve the allocative efficiency of resources is the key point to solve the problem. Though the country has been trying to break railway monopoly over the years, and as a national public infrastructure, it takes a certain amount of time for its market-oriented reform, the high-speed railway industry is temporarily regarded as a monopoly market. In the complete monopoly market, the manufacturers would like to maximize their profits, the necessary condition is MR=SMC=LMC, and in other words, the marginal revenue is equal to the marginal cost. However, because the monopoly manufacturers would like to get more excess profits, they will take some pricing strategies when pricing, for example, they implement differential pricing and three-level price discrimination strategy at times of peak demand and low demand. At the same time, the implementation of peak and off-peak differential pricing is also an effective solution when the demand is unsmooth, unstable and inelastic in time. The Ministry of Railways used to raise the price of tickets during the spring transportation, and in other words, the peak differential pricing strategy was adopted, and the purpose was to improving the allocative efficiency of resources and increase profits. However, as analyzed before, the ticket demand and supply price during the spring transportation has a very small elasticity, and the rise in the price during the spring transportation does not get an obvious control effect, but the rent-seeking phenomena are more frequent, such as "ticket scalper" and "backdoor purchasing".

#### **3.** The Theoretical Reasons for the Difficulty of Buying Tickets during the Spring Transportation

### **3.1** The Influence of the Incomplete Information on the Uncertainty of the Purchase of Tickets

During this Spring Festival, the author experienced the awkward situation of the difficulty in getting a ticket during "the spring transportation". During the winter vacation in 2016, the student ticket of high-speed railway can be booked 60 days in advance, and the adult ticket can be booked 30 days in advance. On the 30th day of count-down, the alternative tickets are sold out except for some first-class seats and business seats on the 12306 website.

Through the experience of ticket purchasing, the author sums up the following questions: student tickets are sold 60 days in advance, but only a small number of tickets are sold. In the first 30 days, tickets are almost purchased, and many of them have gone through the awkward experience of "it's over before it starts". If the purpose that tickets are sold 60 days in advance is to relieve the pressure of ticket purchasing for students going home on the vacation during the spring transportation and students finds that there is no suitable ticket when purchasing a ticket since 30 days from the normal pre-sale period, this way of selling tickets is likely to cause the tension of tickets due to the incomplete information and the asymmetric information.

The so-called incomplete information refers to the whole knowledge of an economic environment state, which is not owned by the market participants. In the incomplete information state, passengers may not know the relevant purchase policy, or do not know whether they have chosen the most economical and reasonable way of transportation. Some migrant workers can't buy tickets through the network platform, and for them, the ticket buying channel is relatively single, and most of them directly purchase tickets to the manual service window in the station, so they know less about information channels in time. In addition, after the purchase of tickets, if a more suitable ticket is found, whether or when they refund tickets is also a dynamic game under the incomplete information.

Therefore, it is particularly important for railway departments to show the specific and comprehensive information to passengers in advance, and at the same time, they need to broaden and improve information channels and give appropriate helps when passengers have questions.

The ticket buyer also needs to pay attention to the relevant information in time, and tries to do the best to buy tickets as much as possible.

#### 3.2 The Existence of Opportunity Cost

In the process of buying tickets during the spring transportation, there are often queuing purchase and non-value competition, and at this time, there will be the phenomena of rent dissipation. These phenomena are related to the problem of allocating resources and improving efficiency. Theoretically speaking, the ticket price of high-speed railway is lower than the equilibrium supply and demand price, but in fact, the price is not just the par price which can be seen and the waiting for queuing to buy tickets and the time and energy cost of buying tickets are the opportunity cost paid by people. For the low-income people, their time value is not high, and in order to return home during Spring Festival, they are willing to pay their time, energy and queuing cost to get lower fares. For the most people, even if the ticket price is increased, the opportunity cost they may have to pay will not be much reduced than before, so they will still choose to queue as before.

To some extent, the measurement of the opportunity cost explains the reason that the ticket scalpers always exist and are difficult to suppress. Because of the difference between the actual supply and demand equilibrium price and the par price, the ticket scalpers have profit points. During the period of spring transportation with the limited ticket supply and demand and the increasing demand, even though the price is higher than the parity, a proper ticket saves the cost and burden of the passengers with a high time value, which is in line with the needs of the market.

#### 4. The Practical Problems which China High-Speed Railway has During the Spring Transportation

#### 4.1 Ticket Refunding Mechanism

The ticket refunding mechanism of China high-speed railway is one of the important reasons for the tension of tickets during the spring transport. Before 2013, no matter when passengers returned their tickets, only 5% of the fees were charged. Since September 2013, the provisions of China high-speed railway ticket refunding fees are as follows: if tickets are refunded 15 days before driving (not including the 15th day), fees shall not be charged; if tickets are refunded more than 48 hours before driving according to the par value, 5% of fees shall be charged, and 10% of fees shall be charged for more than 24 hours but less than 48 hours, and 20% of fees shall be charged for less than 24 hours according to the par value<sup>[1]</sup>. However, during this spring transportation, if the date of travel for the ticket changed is between January 13th and February 21st, all the refunding fees shall charge 20% of the ticket price.

According to the above provisions, the smart Chinese net friends have found some ticket refunding loopholes, and have summed up the so-called "ticket refunding tips" to save the fees for procedures, and other people have formulated a comprehensive strategy for purchasing tickets after summarizing passengers' ticket refunding mentality. For example, in this spring transportation, a set of highspeed railway ticket refunding scheme is popular online, and people say that the fee for ticket refunding declines from 20% to 1.76%, which bursts into an uproar. Finally, through the verification of railway departments, this difficult "ticket refunding tips" cannot save money and makes passengers overpay RMB 0.5 of ticket refunding fee. Although the fact has proved that this is a rumor, but "flies always find the cracked egg", which indicates that China high-speed railway ticket refunding mechanism still has problems.

During this year's spring transportation, and in the ticket lobby of the Foshan Railway Station, Foshan City, Guangdong, although it is in the peak of ticket purchasing during spring transportation, there are more people who refund tickets than those who buy tickets. According to the Foshan railway police, from December 22, 2016 to December 31, 2016, Foshan Railway Station has received 7,042 refunded tickets, and there are more than 700 returned tickets in a day, and the total refund is RMB 1,336,042.<sup>[2]</sup>

The reasons for the passengers' ticket refunding are attributed to the change in the way of travel and the change of the travel. At the same time, because passengers can buy tickets online and the fees shall not be charged if tickets are refunded 15 days before the train leaves, many people have the mentality of "occupying tickets" and the phenomenon of repeated ticket purchasing. On the other hand, there are some passengers who are uncertain of and random about their trips, and they have the casual behaviors when they buy tickets. If they would like to buy a ticket, they will buy it and if they think the ticket is improper, they will refund the ticket through regarding buying a ticket as online shopping, and the circumstance that a passenger bought several tickets in the same period of time occurred.

As a public resource, train ticket is scarcer during the spring transportation, and the similar repeated ticket purchasing behaviors not only disturb the dispatching arrangement of Railway Departments to bring pressure to the service window of the railway station, but also cause shortage of ticket resources artificially to affect other people's ticket purchasing in time.

In addition to the large number of passengers who have not planned a good trip and the subjective factors of random and repeated ticket purchasing in the reason for this problem, the relatively simple way of ticket refunding and the low cost of passengers' ticket refunding are the objective factors. From the economical perspective, lower opportunity costs make passengers spend certain costs in exchange for the maximization of the final result benefit.

#### 4.2 The Influence of the Urban-Rural Dual Structure

In fact, the fundamental reason of "difficulty in buying a ticket" during the spring transportation is that the relatively lower level of urbanization in China than that of the developed countries for a long time and the urban-rural dual structure, thereby resulting in a large number of floating populations. The vast majority of these foreign populations will choose to return home in the Spring Festival, and are forced to migrate back and forth like "migratory birds" and it is difficult for them to settle down in cities. Therefore, there are still many second-generation migrant workers and third-generation migrant workers who are not yet included in the urban social security system, and they are only "urbanized" in this process.

#### 5. Countermeasures and Relevant Suggestions

#### 5.1 Price Fluctuation Mechanism

Since April 2017, railway enterprises have optimized and adjusted the ticket price announced by the China Railway High-speed train of the southeast coastal high-speed railway at the speed of 250 kilometers to 200 kilometers per hour. For the adjusted ticket prices, the amount of increase of the first-class seats is in the 65%-70% interval, and the amount of increase of the second-class seats is in the 25%-30% interval, and the specific ticket price will change with the change in seasons and volumes of passenger flow. The overall income level of the southeast coastal residents is high, and the appropriate rise in price will increase the demand elasticity of the high-speed railway during the spring transportation, and these residents will choose aircraft and other ways for travel.

#### **5.2 Develop Substitutes**

In European and American countries, the preferred means of transportation for a long voyage is civil aviation. In addition to some special geographical reasons, the fast transportation speed and the cheap and affordable ticket price are the reasons for attracting many passengers. In China, the choice of civil aviation is a high level of consumption, and most ordinary people who return home are unable to pay the price. However, in recent years, with the rapid development of high-speed railway, China's Civil Aviation has launched various activities of lowering the price to enhance its competitiveness, and the ticket price in the short-distance and medium-distance transportation is even lower than that of the second-class seats of highspeed railway. The development of civil aviation can, to a certain extent, ease the pressure of the high-speed railway transportation during the spring transportation.

In addition, with the development of sharing economy, the short-distance passengers can choose to the shared vehicles as a means of transportation, which is economical and cost-effective.

#### **5.3 Ticket Refunding Mechanism**

As the spring transportation is the period with the largest volume of passenger flow in the whole year, the increase of ticket price can't solve the problem, and the pressure can be relieved by increasing the cost of ticket refunding. For example, the time of free ticket refunding is shortened to 10 days. During the spring transportation, the 20% procedure fee remains unchanged, but the proportion of fees will be increased at the second time of ticket refunding. At the same time, the quantity of changing tickets and refunding tickets will have the more stringent upper limit. The cost for passengers' ticket refunding is increased in these ways, so that they can carefully consider their purchase, thus improving the precision of ticket purchasing.

For the reason why the Ministry of Railways does not modify the ticket refunding mechanism, in the author's opinion, our country hopes that the public transport service facility can facilitate the masses and meet people's interests as much as possible from the perspective of people. After all, relatively speaking, because the ticket price of high-speed railway is high and some migrant workers can't purchase tickets online with the relatively single channels for them to buy tickets, there may be a wrong ticket purchasing. Recently, the high-speed railway has set up the range of floating price adjustment and the ticket price in some areas has been improved, so the original mechanism is still maintained in ticket refunding.

Under the environment of "internet +", the online ticket purchasing has deeply rooted in the hearts of the people. In January 2017, TaiYuan Railway Station recommended the automatic ticket refunding machine to facilitate passengers' ticket refunding, which also fully embodies the humanistic care of the railway department. When the convenience is provided, it hopes that passengers can buy tickets regularly and accurately.

#### 5.4 Promote Urban-Rural Integration

In order to change the situation of "difficulty in buying a ticket" during the spring transportation, the urban-rural dual structure should be broken at its source and the quality and level of urbanization should be constantly improved to promote the balanced development of the regional economy.

According to the statistics of the National Bureau of Statistics, from the urban and rural structure, the proportion of China's urban population in the total population (urbanization rate) was 57.35% in 2016, and the urbanization rate of the registered population reached 41.2%, and the population status with separation of living areas from their household in China (the population whose registered residence is not in the same town and street as the place of residence and who leaves his/her registered residence for more than half a year) was 292 million, which reduced 2.03 million compared with the end of the last year, in which the floating population was 245 million, reducing 1.71 million compared with the end of the last year<sup>[3]</sup>. These data show that our country has made some progress in abolishing the urban-rural dual structure, which is fundamentally helpful to solve the problem of buying tickets during the spring transportation.

At the same time, we can start with the reduction of the demand for train tickets during the spring transportation, such as: the balanced development of the domestic economy makes migrant workers evenly distributed throughout the country and alleviates the problem of transportation before the Spring Festival, which is always operated from east to west and from south to north; the development of the economy in villages and towns can enable farmers to work nearby their homes; the migrant workers are encouraged to spend the Spring Festival in their working place to relieve the pressure of railway transportation.

## 6. Conclusion

Although there are still some problems in China highspeed railway, I believe that in the near future, with the support of national policies and the rapid development of modern science and technology, under the cooperation of various vehicles, ticket purchasing will no longer hinder the homecoming of wanderers.

Recently, new progress has been made in China highspeed railway. With the levitation of Chinese "strongest communication satellite", passengers can also enjoy the WiFi service in the high-speed railway in the future; in the future, passengers can get on and off even the highspeed railways don't stop. Relying on the promotion of "The Belt and Road Initiative", it is no longer a fantasy to go to the world arena and connect Europe and Asia. The future high-speed railway should continue to conduct the good balanced regional development and better complement the advantages of road, aviation and water transport to improve the quality, safety and time value. China highspeed railway is an important for obtaining the Chinese people's confidence, and this card of China high-speed railway should be grasped to open up the farther and more beautiful scenery.

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## Analysis on Marketing Strategy of Ningxia Wine Market Based on 4P Perspective

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**Abstract:** With the development of our society and the continuous improvement of people's living standards, consumers demand for wine is also growing. In recent years, China's wine industry has entered a stage of rapid development, although the Ningxia wine is a national enterprise, but also the old brand, but because of the market, many brands of wine, Ningxia wine is facing many brands of similar products between the competition. Under such a huge market competition pressure, how to seize the market opportunities, establish a good product image, so that Ningxia wine in the market invincible, has a very important significance. Based on the market-ing theory and the information collected from the market, this paper analyzes the current situation and existing problems of Ningxia wine, and puts forward some suggestions for the situation of Ningxia wine, hoping to bring some help to Ningxia wine.

Keywords: Ningxia wine; Marketing status analysis; Strategy analysis

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## 1. Introduction

ith the rapid development of economy in recent years, China's wine industry has entered a period of rapid development, wine production capacity, sales are growing rapidly, many companies have joined the market competition, but because of the lack of marketing ideas, making the domestic wine market Was occupied by foreign brands.

Based on the analysis of the marketing environment and existing problems of Ningxia grape industry, this paper explores the marketing strategy of Ningxia wine with Ningxia wine industry as the starting point, puts forward some suggestions for the marketing strategy of Ningxia wine market, and provides some development suggestions for Ningxia wine wine marketing management. Ningxia wine sales market to expand the idea of innovation. The study will provide guidance on the actual marketing work of Ningxia wine, which is conducive to the better design of its marketing strategy system. Drawing on the experience of successful enterprises, to solve the practical problems in the marketing of Ningxia wine has a reference to the Ningxia wine to healthy and orderly development track, has important practical reference.

### 2. Analysis of Wine Environment in Ningxia

#### 2.1 Macro Environment Analysis

#### 2.1.1 Economic Environment

With the growth of China's per capita GDP, the rapid upgrading of consumer spending structure, enjoy the consumption began to dominate, people's demand for wine will be increasing. China's wine consumption in 2012 more than 2.16 billion bottles, compared with 1.9 billion bottles in 2011 increased by 13.68%, China's per capita wine consumption from 0.25 L in 2002 expanded to 1.24 L in 2012, an increase of 400%. But compared with the global per capita consumption of wine 3.38 L, China's per capita consumption of wine is still low, the wine market in the wine market share of the smaller.

### 2.1.2 Political and Legal Environment

April 2003, Helan Mountain Dongfang wine has been with excellent ecological and natural conditions by the State Administration of Quality Supervision approved, the implementation of national origin of regional product protection. This is a powerful way to enhance the branding effect of the northern foothills of Helan Mountain, and to improve the competitive advantage in the domestic and foreign markets.

In 2004, the autonomous region government introduced the "Autonomous Region People's Government on accelerating the implementation of the development of grape industry in our region," a clear plan for the development of grape industry, the grape industry identified as regional advantages of industry, included in the agricultural industrialization development program, Helan Shandong Lu grape industry in Ningxia regional economy occupies an important strategic position.

In 2011, the autonomous region government formulated the "China (Ningxia) Helan Mountain footland grape industrial belt and cultural corridor development master plan", clear the specific development strategy of the region. Autonomous Region government has introduced a series of support and preferential policies in Yinchuan, Qingtongxia, Yongning, Hongsipu, Shizuishan development of wine grape cultivation, planting area in 2015 has reached 47,000 hectares in 2020 will form a million acres of grape industry corridor. In short, the grape industry will be in the local policy support to achieve leapfrog development.

## 2.2 Micro-Environment Analysis 2.2.1 Consumer Analysis

There is a large part of the consumer who likes to drink wine because it does not have much alcohol content. Consumers of Chinese wine culture is the continuation of liquor culture, in the domestic consumers on the taste and quality of wine to understand too little, so it will often appear to blush blossom cola, Sprite, many consumers do not know how to drink Drinking culture too little knowledge, ruined the unique quality of wine, but do not care what value and culture.

#### 2.2.2 Competitor Analysis

Local enterprises are not good at the game, not with similar enterprises in the field to start an effective cooperation and competition, Ningxia Helan Mountain East area wine industry in the development process, but subjectively want to do bigger and stronger, too dependent on government power, very few In the integration of external capital, management, technology, marketing and other aspects of practical action, but also failed to fully develop and nurture market economy channels. This is not in line with the requirements of open economy and market management. Open economy is bound to appear cooperation or non-cooperation issues, market management is always a game problem, and around the specific industry and the game is mostly repeated game.

# **3. Ningxia Wine Marketing Strategy in the Existing Problems**

### **3.1 Product Lack of Competitive Advantage 3.1.1 Product Brand Influence is Insufficient**

Ningxia wine brand is not as big as other brands have the advantage, in general, the lack of their own characteristics, the product has yet to be developed. Some winery brand types are not many, only launched dry red or dry white, and each species, including too few varieties, will make consumers feel too monotonous, in the competitive products will not highlight the characteristics.

Wine companies use their own advantages to find the market, the brand effect has not been fully exploited. Although the "Xixia Wang", "Helan Mountain" dry red, dry white and other wines in the domestic market to enjoy a higher quality reputation, but the current Ningxia is not relatively high-end, distinctive wine market. Wine on the basis of the same raw materials in the paste Zhangyu, dynasty, the Great Wall and other well-known brands, a bottle of wine can be sold for hundred or so, or even higher, and Ningxia product prices have been hovering around 30 yuan.

### **3.1.2 Packaging Lack of Characteristics**

Wine packaging imitation Western style is more serious, the lack of local characteristics, stay in the Western model to follow, can not break its own problems. Color composition changes a single, it is difficult for consumers to have a bright feeling. In the packaging is too old, no innovation, so that consumers do not have much visual in the visual senses. For the initial purchase of the product is difficult to distinguish between consumers of Ningxia wine and other products, making consumers feel that the product is too monotonous. Without its unique identification, it is difficult for consumers to remember.

## **3.2 Promotion Strategy is Simple 3.2.1 Means a Single**

Ningxia wine only uses the staff marketing and advertising in two ways, too single. Now all kinds of wine, each has launched a different means of promotion. Ningxia wine for the two means of publicity is not enough, can not attract consumers, more customers are difficult to specifically understand the wine industry in Ningxia.

### 3.2.2 Publicity is Not Big Enough

Advertising only in the magazine or business weekly to do, most consumers will not go to the newspaper commercial magazine, too limited. Do not read the newspaper this part of the crowd will not know the brand of Ningxia wine. And busy day of office workers they just want to take a break to ease the day's fatigue, but will not go to the weekly, for commercial bosses can also, but not for the majority of consumer groups.

### 3.3 Market Supervision is Not Big Enough

The rapid development of the wine industry led to the emergence of fake wine is growing, making the fake wine market mixed more and more serious, many criminals mixed into them. Their main purpose is to rely on the visibility of existing brands to create the same kind of alcohol products, reduce the price, to seek profits. But consumers do not know what the wine in the end is what raw materials manufacturing, only from the packaging can not tell whether it is genuine, criminals use of industrial fraud, consumers are difficult to identify out, so that manufacturers of wine drilled loopholes.

## 4. Analysis on Marketing Strategy of Ningxia Wine

## 4.1 To Carry out Product Innovation, Shaping the Brand Culture

The wine produced in China is bitter and the taste is not particularly sweet. The Australian wine to liqueur-based, taste is also relatively smooth, you can learn from the practice of Australian wine, to produce more sweet wine. Their wine color is also very good, not very deep, more in line with the wine of the aesthetic. Ningxia wine should learn from their production principles to create more in line with the Chinese taste of new products, so that consumers shines, and other brands to distinguish. For different wineries of wine to have their own winery culture, so that culture in the wine, wine and culture. As long as have their own winery culture, will have more loyal consumers.

#### 4.2 Improve Product Packaging

Packaging to have a unified element, a strong symbol of the characteristics of the change in the unity. Requirements packaging design novel, with original, full of personality, different from the competitive brand; customer DIY special custom, custom out of the customer's favorite packaging, according to customer requirements designed to exclusive of their exclusive products.

And as the main banquet, senior wine supermarket wine, to reflect the high-end cultural theme. Change the appearance of Ningxia wine products, only to innovate in order to be remembered. Suggestions: packaging materials, square solid wood box packaging, carton packaging. Graphic text: simple text "Ningxia xxx winery" is very simple, allows consumers to understand and remember the brand in Ningxia. In the packaging according to different products have different design concepts. Because it can highlight the different categories of each product in order to allow consumers to remember.

### **4.3 Customer Differentiation Promotion**

1) For the general level of consumption of customers in the supermarket can be launched in the discount or buy gifts activities, supermarket customers are generally more value in the price, you can in the holidays when consumers for the promotion of activities, consumers in the purchase of products You can directly reduce the price or return the form of coupons, or by buying a gift in the form of stimulating consumer desire to buy.

2) For the mid-level consumer level in the restaurant launched three activities, you can take full gift promotions. For example: consumption of 300 yuan gift of a bottle of 68 yuan worth of wine; consumption of 1,000 yuan to 2,000 yuan, presented a bottle of 238 yuan worth of grapes; consumption of more than 3,000 yuan, presented a bottle of wine worth 698 yuan The So that customers feel the enjoyment of food at the same time, but also enjoy the delicious sweet and delicious wine.

3) For high-income consumer level customers in the Ningxia wine winery inside to buy wine to customers free wine strategy, to provide customers with the best quality after-sales service. For customers who buy high prices of wine can be free to them for VIP membership card, the implementation of points system, the cumulative score is different, the final reward products are also different. At the same time take them to the winery in Ningxia inside to

visit, taste the library wine.

## 4.4 To Strengthen Publicity Efforts to Enhance Brand Efficiency

In the publicity, you can take a lot of ways to increase consumer awareness of Ningxia wine.

#### 4.4.1 Cooperation With Public Welfare Programs

Most people will see, but also increase the Ningxia wine in the minds of consumers a good impression, increase recognition.

#### 4.4.2 Trade Fairs Publicity

So that customers free tasting activities, relatively large flow of people to attract more consumers, increase consumer awareness.

### 4.4.3 TV Ads

Invitation some customers like the star as a product spokesperson, so that consumer psychology to generate new awareness, so as to stimulate consumer motivation to buy.

### 4.5 To Strengthen Market Supervision

Now on the market a lot of lawless elements to use brand awareness for fraud. There is a great risk in the security, improve the quality of wine is the basis of the development of wine in Ningxia, but also to promote its development of the most important. Strengthen the supervision of the wine market, strengthen the control of the retailers to crack down, strengthen the quality of the production process, we must establish a safe and healthy wine production system and management system, improve the laws and regulations require a special law, improve the testing standards, Establishment of long-term mechanism of liquor circulation management.

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## **Study on China's Carbon Emission Trading Market Development under the Globalization**

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**Abstract:** This paper starts by describing China's carbon emissions trading market development history, reveals the existence of its development problems, then, analyzes the experience of successful establishment of the European and American national carbon emissions trading market. At last, this paper recommends for a call of unified effort to improve domestic carbon emissions trading market system.

Keywords: Carbon emissions trading market; Kyoto protocol; Emission right

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### **1. Introduction**

The relationships between climate and human beings are closely related. In recent year, climate situation becomes more and more serious. Excessive emissions of greenhouse gases lead to global warming and seriously damage the normal circulation of the natural ecological system, which brings many unimaginable catastrophe to us. China, as a responsible developing country, actively responds to the "Kyoto Protocol" in the face of severe problems of climate warming, tries to reduce greenhouse gas emissions. And in November 2011, the State Council approved "the Twelfth Five-Year Work Plan for Controlling Greenhouse Gas Emissions " clearly points to explore and establish carbon emissions trading market to further control of greenhouse gas emissions. China, as the world's No.1 of carbon emissions, with the increasing pressure of reducing emissions, has to develop a resource-saving and environment-friendly road. In fact, carbon emissions trading market is a combination of both opportunities and challenges.

The opportunities lie in that the low carbon economy has been increasingly becoming an economic road for various countries. China is committed to the development of carbon emissions trading market, which caters to the trend of the development of the times, and China's earlier entering into this new market is good for China to get rid of road of "pollution first, treatment later", and the reduction of emissions can be realized through technical exchanges between countries. China's advantage of carbon emission resource is superior and current carbon emissions reduction has accounted around the world's 1/3, next only to the United states. Beside, China's timely access to carbon emissions trading market is conducive to better establish the relevant trading system, to standardize the relevant laws and regulations, to attract the relevant talent, to do a good job related to the supervision, and to improve the entire carbon emissions trading market system. However, the challenge of building carbon emissions trading market should not be ignored. Due to that China is a developing country, carbon emission reduction technology still has a long way to go compared with western countries, which leads to a higher cost of carbon emission reduction in China and weak bargaining ability in carbon emissions trading market, thus making China's discourse power suffer a severer challenge in other countries. This paper aims to figure out the current situation of global carbon emissions trading market, analyzes overseas successful experience, provides reference for China's carbon emissions trading market, and brings up solutions.

## 2. Reference of International Carbon Trading Market Development for China

#### 2.1 Overview of International Market

Carbon emissions trading market is an emerging commodity market and has gained rapid development since the "Kyoto protocol" enacted in 2005. At present, the international carbon trading market is mainly conducted in the regional market, while various financial institutions play important roles in the market. Due to different responsibilities and national conditions of each region, a unified trading system has not yet formed worldwide, and all the regions are actively exploring their own carbon emissions trading patterns. According to the world bank's data report, during 2005-2011 years, the international carbon trading market trading volume has maintained a good momentum annually, which the total turnover respectively reached 10.8 billion, 31.2 billion, 64 billion, 126.3 billion, 143.7 billion, 159.2 billion and 176 billion. Besides, the U.S. official data predicts that the global carbon market transactions will reach \$2500 -3000 U.S. dollars in 2020 and the market development gradually becomes mature.

## 2.2 Successful International Carbon Trading Market Model

#### 2.2.1 EU Carbon Emissions Trading System

The EU carbon emissions trading system (EU ETS) plan is divided into two phases: the first three years of the system is the first phase of the system from 2005 to 2007. This phase achieves 45% of "the Kyoto Protocol" commitment to emission reduction targets. The second phase will achieve all the emission reduction targets of the Kyoto Protocol from 2008 to 2012. The trading system adopts a decentralized governance model, the EU members have vast autonomy on the setting of total emission, distribution and transaction registration, bridging the gap between members and balancing the interests between each member and the EU. EU ETS adopt the "limited quantity and trade" trading system that the EU Member States must submit the country's total carbon emissions quota plan to the EU, after the instruction of the specific total amount of carbon emissions, the enterprises of each member should strictly finish the targets in accordance with the instructions. If the enterprise still has an additional amounts of carbon emissions under the premise of the total amount of carbon emissions restrictions, its carbon trading rights in the carbon trading market should be transferred. EU ETS's punishment system is that the relevant corporate would be punished by 40 Euros if its carbon dioxide emissions exceed 1 tons, and the amount has upgraded to 100 Euros since 2008, and the quota would get reduced in number

accordingly in the following year.

### 2.2.2 Chicago Climate Exchange

Under the Kyoto Protocol, Chicago Climate Exchange (CCX), the world's first legal emissions trading platform, came into being. CCX emission reduction plan is divided into two phases: The first stage (2003 -2006) all commitment member annually reduce 1% of targets based on the baseline emission level. The second stage all commitment members make emission 6% below baseline. In terms of these commitments, members can buy a license from other company through internal emission reduction, or buy credit limit generated by emission reduction projects meeting specific norms to fulfill its commitment. In addition, it also develops an electronic trading platform online transactions of emission reduction members, in which all transactions process information is not disclosed and supervised by the United States National Securities Dealers Association.

## **3.** Current Situation of China's Carbon Trading Market

## **3.1 Development of Carbon Trading Market in China**

The construction of carbon trading market is the new direction of the global economic development. In order to meet this challenge and opportunity, China has already actively promote the construction of domestic carbon trading platform. On August 5th, 2008, the Shanghai Environmental and Energy Exchange and the Beijing Environmental Exchange were established on the same day. On September 25th, 2008, Tianjin Climate Exchange was set up. Despite China's positive response to the trend of carbon trading market of international construction, domestic carbon trading volume is small. This is because of the bleak international carbon trading market in 2008 and the poor knowing of carbon trading for domestic intellectuals. However, our country didn't give up the idea of building carbon trading market. In November, 2011, the National Development and Reform Commission issued "About Carrying Out the Carbon Emissions Trading Pilot", which allows Tianjin City, Beijing City, Chongqing City, Guangdong Province, Hubei Province, Shenzhen City to carry out carbon emissions trading pilots, moving a big step toward establishing a unified carbon trading market system. On June 18th, 2013, Shenzhen carbon trading opened; From November to December of 2013, Shanghai, Beijing, Guangdong, Tianjin have started work of carbon trading pilot.

For the actual emission limits of various experimental

unit of carbon emissions, China has also made the corresponding punishment mechanism. If the pilot exceeds the agreed amount of emissions, 3 to 5 times fine of quota price is accepted. For example, if the quota price is 60 Yuan per ton, the fine is 300 Yuan per ton.

At present, the main form of domestic carbon trading is the quota transaction. The government set the corresponding emissions for the relevant industries or enterprises and enterprises can sell or purchase the emission rights according to their own situation. All in all, the emissions of enterprises should meet the requirements of the country. Although, compared with the western countries, China's carbon trading market lags far behind, China is a developing countries. We are not forced to fulfill the obligations of emission reduction while the western developed countries are constrained according to the "Kyoto Protocol", so their emission reduction costs are more than China's, which will attract the developed countries to actively cooperate with us to save emission reduction costs under the premise of commonly achieving target of emission reduction targets.

Around the world, China is already the world's second largest economy, developed countries have asked China to take greater responsibility on emission reduction work. With the international appeal, how to ensure the smooth development of the domestic carbon trading market and growth of GDP without interference has become quite an important problem in need of solution in our country. As China is in the process of industrialization and urbanization, many industries in China are second industries. Many domestic industries' development relies on raw materials like petroleum and coal, which still produce a lot of greenhouse gas, causing a big problem to complete emission reduction work required by international community.

### **3.2 Problems in Development of Carbon Emissions Trading Market in China**

Carbon emissions trading market has many problem in Chinese development. In order to prepare for future integration into the international carbon emission trading market, we need to pay much attention. In general, I think there are six important problems in our country's carbon emissions trading market.

## **3.2.1 Defective Carbon Financial System, High Transaction Risk**

A sound legal protection can regulate and restrict the orderly development of carbon emissions trading, the European Union and the United States of the trading system has a strict law as the guarantee of its development. Carbon emissions have a distinct characteristic of financial products and carbon index trading involves bank loans, Options and Future, etc. The subjects of carbon emissions trading abroad are mainly investment banks and other financial institutions and these institutions understand the carbon trading well. Due to the fact that our country development of carbon trading market in is late, domestic enterprises is not clear about the value of carbon finance, the operation mode while the financial market is not perfect. There is a huge security risk in such a platform under the transaction.

## **3.2.2** Common Unfair Initial Distribution of Gas Emission Right

This situation is mainly due to two reasons: first, enterprises are unwilling to prematurely undertaken many emission reduction work, therefore enterprises borrow right of carbon emission from other enterprises in the form of leasing when regulating the total amount of carbon emission, which leads to that more powerful enterprises can guarantee quantity to complete the emission reduction work, meanwhile some small businesses are just shell companies which just match carbon emissions for large companies, so market regulatory role is not apparent. Secondly, the regulation of carbon emissions trading is regulated by the relevant departments of the country for managing the total carbon emissions, which may cause that carbon emissions trading gets controlled by relevant departments.

## **3.2.3** China's Cleaner Production Technology Restricted the Development

Because our country's cleaner production technology has a long distance away from the European and American countries, the higher cost of our country's production makes the price of carbon emissions right deviate the real price of the product and influences full functions of the market mechanism. Clean production technology has a great impact on the efficiency and fairness of carbon emissions trading mechanism.

## 3.2.4 Inappropriate Carbon Emissions Trading Policy Planning

Carrying out carbon emissions trading involves many aspects, such as total amount, clearing and settlement system, market supervision system and so on, but our country has no unified regulations, policy disorders, which leads to that the development of carbon trading market cannot be smooth and fast, seriously affecting the implementation of carbon emissions trading.

#### 3.2.5 Defective Carbon Emission Pricing Mechanism

Price can reflect the value of the product; the real price can effectively promote the reasonable development of the market. In China, the value of the product is generally measured in accordance with the foreign pricing mechanism which ignores to establish our own pricing mechanism. In addition, due to the country's initial emissions share, under the interests of the government and enterprises, the price of carbon emissions trading is distorted by man-made, which results in the market transaction price is not standardized.

## 3.2.6 Lack of Intensity of Government's Supervision on Trading Market

At present, China's carbon emissions trading market trading mechanism is not perfect, there are still many problems in the environmental monitoring and monitoring facilities for technical development, how to establish a supervisory authority with prestige has become a guarantee for the development of carbon trading market in the future.

## 4. Countermeasures and Enlightenment of China's Carbon Emissions Trading Market

This paper puts forward the following suggestions:

### 4.1 Increasing Technical Input of CDM Project

When foreign buyers of CDM project cooperate with China, mostly, funds instead of technical output. A large part of the reason is worrying about their production technology to be stolen, even if the introduce production technology comes true, the technology has been eliminated in foreign country. Therefore, improving the protection of domestic intellectual property rights ensures that foreign countries provide more technical assistance to China, so China's enterprises can improve production efficiency and increase economic benefits. However, this approach is not always a long-term plan; our country should get technical assistance and continue to develop their original production technology as far as possible to get closer the foreign advanced production technology to develop cleaner production technology with Chinese characteristics.

## 4.2 Actively Chang the Position of China's Carbon Trading Industry Chain

China is the world's largest supplier of CDM carbon emission. Due to the weak discourse right in the international carbon emissions market, our country has been in the lowest part of carbon trading industry chain in a long term. And Chinese CER is usually purchased by developed countries with very low price, while developed countries sell it to in second market with a high price to get huge profits, which make our government lose a lot of economic interests. Therefore, our country strives to cultivate more talents of carbon trading market, accelerates the transformation of industrial structure and improves the clean production technology, obtains the right of discourse in the international carbon trading market and gets himself out of the lowest part of the carbon trading industry chain.

## 4.3 Improving Legal System of Carbon Trading Market

The perfect legal system is an important measure for the smooth development of the carbon trading market. However, there are no clear legal provisions on the confirmation of the legal status of carbon emissions trading, as well as the settlements of the problems in the process of carbon trading. Therefore, China should expedite the construction of the legal system of carbon trading market, and make detailed provisions on the formulation, distribution, transaction and punishment rules in carbon trading process. In addition, it should clearly show that how to deal with the bankrupt enterprises in carbon trading market, so domestic enterprises have laws to go by.

## 4.4 Strengthening Carbon Trading Market Supervision

The intangible nature of carbon trading rights makes the supervision of the domestic relevant departments of the carbon trading market have a relatively large loss. Because of the intangible nature of carbon trading, the relevant departments are difficult to accurately identify the different stages of corporations' carbon emissions, which affects the confirmation of the carbon volume and finally influences the normal operation of carbon trading market. In order to solve this problem, I think that the relevant departments should strictly audit the qualification of the emissions of carbon dioxide emissions market requirements and then establish a compliance reporting system in which the report includes the condition of carbon emissions, the condition of carbon trading, etc. Finally, relevant departments should set up a specific regulatory system to monitor whether the enterprise in accordance with the requirements of the carbon emissions quotas and to monitor the Legal compliance of domestic carbon trading market requirements.

## 4.5 Vigorously Promoting the Application of High and New Technology

At present, when Chinese carbon emissions technology is relatively backward, we should actively learn from foreign advanced cleaner production technology and encourage enterprises to introduce advanced production technology, improve the utilization rate of fuel, which can reduce emissions and increase economic benefits. At the same time, China should actively call for industry restructuring, adjust the industrial structure and further improve China's carbon emissions trading market system, which achieves the goal of Chinese energy-saving emission reduction and sustainable development.

## 4.6 Establishment of the Market of Carbon Finance Mechanism

Carbon emissions trading market is developing to the direction of the financial market, during the time, China needs to use financial markets to achieve the economic benefits of carbon industry, while China should strengthen the development of banking, securities, insurance and other financial institutions, forming a variety of carbon finance market.

## 5. Conclusion

The development of carbon emissions trading market is a great impact on the development of China in the future. With the development of the times, people's awareness of environmental protection is gradually improving, and the development of low-carbon economy is imperative. With the integration of both opportunity and challenge, China should intensify its own cleaner production technology, try hard to reduce the cost of production of carbon products, which makes us get higher international discourse right to get rid of the lowest position of the carbon trading market. In addition, in the process of development, our country should try to learn from successful international experience, develop a set of carbon trading market theory according to specific national condition and cultivate more talents of carbon trading, thus enhancing the competitiveness of our country in the international carbon trading market.

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## Building Characteristic Sports Towns ——Opening A New Blue Ocean for the Economic Development of Sports Industry

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Abstract: When advancing the construction new-type urbanization was put forward to being an important move of urban economic development in the following decade in the 18th National Congress of the Communist Party of China, the characteristic towns' construction emerged as the times require. At the same time, the development of sports industry was lifted to a strategic height of national economic construction. This paper, taking the construction of characteristic sports town as the research object, with multiple research methods such as literature review method, case analysis method and expert interviews applied, makes "Building a Characteristic Sports Town" as the new economic growth pole of the development of sports industry, clearly analyzing the construction of sports town with PEST analytical method, which provides study and reference for opening up the new blue ocean for the economic development of sports industry.

Keywords: Characteristic sports town; PEST analysis; Sports industry; Economic development

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## **1. PEST Analysis on the Construction of Sports Town**

#### **1.1 Analysis on Political Environment**

n February 6, 2016, the State Council issued Several Suggestions on Advancing the Newtype Urbanization Construction in Depth, which comprehensively planned the new-type urbanization construction in depth and put forward the development of attractive towns with characteristic advantages. At the same time, it was also put forward to fully developing attractive towns in 13th Five-year Plan Outline of National Economy and Social Development. On May 11, 2016, the General Administration of Sport of China officially issued Notice on Advancing the Construction the Characteristic Town of Sports and Leisure (hereinafter referred to as Notice), which meant that sports towns officially gained the policy support. It was pointed out in the Notice that up to 2020, a batch of characteristic sports and leisure towns with distinct sports features, rich cultural ambience, integrated industrial cluster, fine ecological environment and benefiting people's health will be supported and constructed nationwide. On July 21, 2016, Ministry of Housing and Urban-Rural Development, National Development and Reform Commission (NDRC) and the Ministry of Finance jointly released Notice on Implementing the Cultivation of Characteristic Towns, which clearly pointed out: about 1,000 characteristic towns with various features and full of vitality are planned to be cultivated up to 2020, to lead and drive the towns construction nationwide. In the development of characteristic industries, great attention should be paid to inheriting traditional culture, protecting ecological environment, constructing livable environment and perfecting the construction of municipal infrastructure and public service. Through the cultivation of characteristic towns, more towns are expected to truly become the carriers of nearby urbanization, keeping more people to live in towns, attracting more surplus rural labor force and providing better public service and good living condition for town residents. NDRC and the Ministry of Finance also introduced a series of financial aid methods in succession. On policy, the General Administration of Sport of China provided certain subsidy, for constructing and perfecting sports and leisure facilities, organizing and implementing sports competitions and activities around the masses, at one time for the pilot towns included. Each project management center (project association) of the General Administration of Sport of China will provide standardized design patterns of sports facilities and allocate all kinds of competition resources for each town. In October 2016, the General Office of the State Council introduced Opinions on Advancing the Development of Fitness and Leisure Industry, which pointed out "depending on key sports projects and industrial demonstration bases of fitness and leisure, the local authorities are encouraged to cultivate a batch of service trade demonstration pilots featured by fitness and leisure."

## **1.2 Economic and Demographic Environment Analysis**

Fischer, an economist from New Zealand, once divided traditional industries into three classes: the primary industry include agriculture, forestry, animal husbandry, fishery, etc.; the secondary industry, generally called industry, is the industrial sector processing products (raw materials) provided by the primary industry and secondary industry itself. Mining industry, manufacturing industry, electricity, the production and supply of gas and water, construction industry, etc. be included; the tertiary industry includes circulation and service, which are divided into four levels, namely the circulation department, the department providing service for production and life, the department for improving scientific and cultural level and residents' quality and the department providing service for social needs. The sports industry includes sports noumenon industry, sports peripheral industry, sports intermediary industry and sports industry consumers. Wherein the sports noumenon industry, including sports competition and public fitness, is the core of the whole sports industry; the industry chain of sports peripheral industry includes sports goods providers, sports equipment providers, sportswear providers, sports tourism providers, sports betting providers, sports building providers, etc. The industry chain of sports intermediary industry includes sports advertisers, sports sponsors, sports insurance, etc. And sports consumer is the

deciding force of the sports industry. Characteristic sports town industry, with wide coverage, is an industry with the largest development basis, development advantage and development features. It is generally an integrative carrier of the complex functions of "industry, culture, tour, community". Some towns are of rather weak tour function.

#### **1.3 Social and Cultural Environment Analysis**

Sports characteristic towns should be equipped with distinct industrial features, profound cultural accumulation, collective and integrated industrial form, livable and comfortable ecological environment, highly integrated functional orientation and widely participated multiple subjects. What's more, sports characteristic towns should express the characteristic sports cultural connotation and the specific sports industry orientation, which integrates production and life, as well as living and traveling, mixing together multiple elements. Governments of all levels should try hard to cultivate the characteristic sports towns into carriers and platforms of sports functions which are simultaneously equipped with specialized industry, integrated function, ecological environment, flexible mechanism and clear space boundary.

## 1.4 Technological and Natural Environment Analysis

Sports characteristic town is the higher level of sports industrial cluster. The following sports industrial bases are rather mature ones in China: Shenzhen National Sports Industrial Base featured by high and new sports technical research and development and high-end competitions, Fujian Jinjiang National Sports Industrial Base featured by coastal sports and leisure and sports goods manufacturing; Chengdu Wenjiang National Sports Industrial Base featured by sports goods manufacturing and sports leisure and Beijing Longtanhu National Sports Industrial Base mainly focusing on the development of sports headquarters economy.

Take Beijing as the example, by answering the national call and under the general background of the government's policy support, all districts in Beijing, based on their natural geographical factors and scientific and technological development level, have built eight major sports industry gathering places with different industrial features and new-type functional orientations. They are Olympic Green Center, Longtanhu Sports Industrial Park, Chaobaihu Water Leisure Sports Gathering Zone, Ming Tombs Outdoors Leisure Sports Gathering Zone, Badachu Network Sports Gaterhing Zone, Daxing Fashionable Sports Gathering Zone and Miyun Aviation Sports Gathering Zone, all of which are of characteristics and regional advantages.

# **2.** Case Analysis of Sports Towns in China and Foreign Countries

## 2.1 Case Analysis of Domestic Sports Towns – with the Example of China's "Wanda Changbai Mountains International Sports Resort Town"

#### 2.1.1 Background Information

Changbai Mountains International Resort is located in China, it began construction in May 2010 and was completed in 2012. With beautiful environment, abundant industrial state, perfect supporting facilities, it is an international resort town integrating multiple functions such as recreation, catering, culture, entertainment, shopping and tour. The town was built based on its unique natural geographical advantage. Shops and sporting events with different features attract tourists from both home and abroad, playing an indispensable impelling role for the regional economic development of Changbai Mountains area and creating a rather good sports + travel life style for tourists.

### 2.1.2 Function Division

### 2.1.2.1 Ski Resort

The ski resort of "Wanda Changbai Mountains International Resort Town" covers a total area of 7 square kilometers, with 43 ski runs equipped and 8,000 sliders available to be held simultaneously, which is a professional ski resorts meeting the requirements of international competitions such as the Winter Olympics.

#### 2.1.2.2 Golf Course

There are two characteristic golf courses in the resort, namely a 36-hole gorges golf course and a 18-hole forest golf course, respectively covering the area of 2.75 square kilometers and 1.34 square kilometers.

#### 2.1.2.3 Tourist Town

The tourist town located at the center of Changbai Mountains International Resort Area, integrating multiple functions such as shopping, catering, entertaining and relaxation, consists of supporting facilities like cultural center, Shaman Museum, hot spring bath center, shopping street and grand theater, creating perfect sports tourism experience for tourists from home and abroad.

## 2.1.2.4 High-End Resort Hotel Area

Supporting facilities in "Wanda Changbai Mountains International Sports Resort Town" includes nine tops and high-end resort hotels, such as the six-star Park Hyatt, sixstar West, five-star Hyatt Hotels, five-star Sheraton, etc., to meet all kinds of requirements from high-end consumers comprehensively and to create a harmonious and nice sports tourism style.

## 2.2 Case Analysis of International Sports Town with the Example of "Austrian Innsbruck Skiing Town"

## **2.2.1 Background Information**

Austrian Innsbruck Skiing Town, built in 1239, is an international famous ski resort which successfully held two Winter Olympic Games in 1964 and 1976 respectively. At the same time, it is the place where the headquarters of SOS, the largest children charitable organization, and the headquarters of Swarovski crystal located. It is of comprehensive public benefit and economic benefit. Either the Gothic architecture or the Baroque gate, or the Renaissance-style bridge is reflecting its unique charm of regional culture.

## 2.2.2 Geographical Advantages and Transportation Facilities

Austrian Innsbruck Ski Town is located at a geographical crossroad, with its east to Vienna, west to Switzerland, south to Italy and north to Germany. With unique geographical advantage, it could use all kinds of resources from all directions to attract sports consumers from all over the world. The town is located in the southwest region of Austria. Both external transportation of aviation and railway and internal traffic of the town are rather convenient and rapid.

#### 2.2.3 Distribution of Ski Resort

The town is surrounded by 10 famous ski resorts, the most famous of which are Stubaier Gletscher Ski Resort. Stubaier Gletscher, about 20-minute drive away from Innsbruck Town, is the local first-rated ski resort. Here, unique tourism resources and rare ski resources, complementing each other, are skillfully combined together, making the resort internationally renowned.

## 3. Prospect Analysis on Sports Town

China, one of the world's major players, is in pursuit of emerging as a powerhouse in the international community. As is known to all, the sport serves as an epitome of a country's comprehensive national strength. Both 2008 Beijing Olympic Games and 2019 Beijing-Zhangjiakou Winter Olympics serve as show windows of China's comprehensive national strength. In the expert interview, we have learned that as the Winter Olympics is approaching, Xianpeng Lin (vice chairman of Asian Sports Industry Association and deputy dean of School of Management, Beijing Sport University) comments that the ice-snow characteristic town, as a branch of the sports-oriented towns, is awaiting us. In addition, the sports-oriented real-estate industry is mushrooming with rapid development. According to the statistics, within less than six months after the characteristic towns and the related policies announced by the related ministries and departments in 2016, a number of real-estate listed companies have disclosed their plans on the construction of characteristic towns, such as Country Garden, Greenland Group, CFLD, and other famous real-estate enterprises. At the same time, Vanke, Myhome Real Estate, and other real-estate enterprises will put the characteristic towns high on the development agenda, and vigorously participate in the local construction of the sports-oriented towns, in order to share the economic benefits brought about by the accelerating sports industry.

## 4. Conclusion

In the era of the rapid development of IT application, the sports industry is full of vast potential. The sports-oriented towns, as the emerging economic growth of the sports industry, serve as the development mode and important carrier of new urbanization. This mode of development, characterized with the integrated pattern of politics, economy, culture, society, and ecological system, is beneficial to address various uncoordinated and contradictory issues in terms of the current urbanization in China. It, of prime significance, aims to dovetail with the national strategies of facilitating the sports industry and promoting the people's healthcare level, and serves as an important move to accelerate the national economy and blaze a new trail of the new blue sea of the sport industry. At the same time, the construction of the sports-oriented towns needs to integrate such multi-dimensional resources as interest, industry, culture, proceed from the local conditions, give full play to the advantages of agglomerating economy, shared economy, and wisdom economy, and renew efforts in the system control, thus injecting enormous vitality into the sports industry in China.

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## A Brief Discussion on the Comprehensive Budget of Industrial Enterprises

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**Abstract:** The medium-sized industrial enterprise is the important component of our national economy, its development is fine or not, representing the rise and decline of our national economy, the research focal point of standard lies in what utilizes the west to manage in the theory budgets for the financial administration which strengthens enterprises in The Master Budgeting.

This text introduces relevant contents of master budgeting, analyze the difficult problem met in implementing, and combine enterprise's own characteristics to solve. First of all, this kind of enterprise of our country is a kind of enterprise surviving between grouping enterprise and small business, it indicates, there is this kind of enterprise to the demand for development of big enterprise by own enterprise characteristic. Utilize the budgets of enterprises to manage and strengthen management to the budgets of enterprises, introduce, direct against the question that the characteristic of every enterprise uses enterprise's budget management and should be paid attention to.

Keywords: The master budgeting; Medium-Sized industrial enterprise; The master budget for and manage

**Subject:** The reality of China's national economy shows that the status and development potential of China's industrial enterprises are not to be underestimated. However, now, China has joined the world economic competition in this environment, the domestic industrial enterprises will face such a situation. How they will improve the company's own disadvantages and win in this commercial war.

Himself through a lot of investigation, found in the current situation of the development of industrial enterprises more appeared on some problems in financial management, such as cash management, the production cost calculation is not clear, many problems such as financing cost increase, I tried to find a way, to better solve these problems. I have read some relevant references and found that using the full budget of the enterprise can help improve and even solve these problems. This paper enumerates some disadvantages of financial management of industrial enterprises in China, which is to use the comprehensive budget of enterprises to solve these problems. It is hoped that this will lead to a further development, and the modern enterprise competition will go further.

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## **1. Introduction**

How to improve and improve the financial management level of Chinese enterprises to better cope with the increasingly fierce market competition has become one of the biggest problems facing our enterprises<sup>[1]</sup>. Comprehensive budget management, with its unique function and function in enterprise operation and management, is attracting more and more attention from enterprise managers. Comprehensive budget, also known as the total budget, is the enterprise the floorboard of the next annual operating budget, refers to the management goal as the starting point of this enterprise, through the study of market demand and forecast, to sales as the guide, and then extended to many aspects, such as production, cost and capital income, the preparation of financial statements is expected comprehensive budget system<sup>[2]</sup>.

Comprehensive budget management is a new enterprise financial management mode, which relocates the budget in enterprise financial management. It is a strategic security system that is compatible with the enterprise development strategy, which is a consistent operating index system with the requirements of the entire company's business flow, capital flow, information flow and human resources. Through a comprehensive budget management can be the biggest play full of initiative, arouse the enthusiasm of responsible personnel at all levels, at the same time, through the budget index decomposition, can also make the enterprise goals into one department of small target, enables each department responsible for some production and management, in order to achieve with budget control, control department at a lower level, urged managers to work hard at all levels, so as to ensure the biggest target of enterprise according to the budget implementation<sup>[3]</sup>.

Implement comprehensive budget management, it is the innovation of enterprise comprehensive management idea and the new mode design of the output benefit. This model is especially suitable for industrial enterprises. In the development process of the financial management of industrial enterprises in China, we will find that our industrial enterprise is one of the largest in current our country enterprise type, basically their financial management techniques or saved in previous production not only calculation, not only count accounting level, so, when we are faced with such a large medium-sized processing enterprises in our country, we will fully aware and understand comprehensive budget in our country, these companies use the reality of how important it is<sup>[4]</sup>.

The implementation of the comprehensive budget management of the enterprise is in line with the existing production practice and production targets in China. Under the environment of global competition, Chinese enterprises have their own development has not only on behalf of the enterprise itself, it is more representative of our country's productivity level and with the rest of the world of confrontation in the field of economic strength, so, in our country's existing implementation of comprehensive budget management in the enterprise management mode is especially important.<sup>[5]</sup>

## 2. At Present, the Financial Management of Industrial Enterprises in Our Country Generally Has Disadvantages

Firstly, the backward concept of enterprise management

leads the operators of industrial enterprises in China to determine the key point of enterprise management with habitual thinking, focusing on the sales of enterprises and abandoning the cost. Some enterprises, even in the absence of cost budgets for enterprises, directly adopt the strategy of thin profits, sales volume is large, but the sales profit of the enterprise is not increased. In the absence of the establishment of the enterprise, and once the price impact of the enterprise, it will lead to the bankruptcy of the enterprise<sup>[6]</sup>.

Secondly, it is backward to manage cash management within the enterprise, and in the absence of the capital budget of the enterprise, it will produce or invest in the enterprise, which will lead to the financial strain of the enterprise<sup>[7]</sup>.

One is the lack of cash management, resulting in cash idle or insufficient. Some companies think that the more cash, the better, causing the cash to sit idle and not participate in production turnover; Some enterprises have a lack of plan for capital use, overpurchase of real estate, unable to cope with badly needed funds and get into financial difficulties.

Second, accounts receivable turnover is slow, resulting in capital recovery difficulties. The reason is that there is no strict credit system, lack of effective credit investigation and credit evaluation for customers, and lack of effective collection measures. A lot of receivables are not coming back, and liquidity is tight, making it difficult for companies.

Third, inventory control is weak, resulting in sluggish capital. Many medium-sized enterprises lack scientific argumentation in the production and operation, resulting in the lack of market and inventory backlog. Also some enterprise production scale is small, worried about receiving orders, production, prior to production, as a result, in the case of every order, inventory backlog, thus light person influence capital operation ability, the person that weigh up completely capital chain, shut down or bankruptcy.

Four is heavy money not heavy, the loss of capital is serious. Many small and medium-sized enterprises managers, the raw materials, semi-finished products, fixed assets and other management are not in place, the problems are not investigated, the asset is wasteful.

Five is to focus only on cash flow, thinking that there is sufficient capital turnover, no analysis of income, cost, profit, lack of big picture. Some small enterprises pay attention to the short-term effect, usually have the capital turnover is enough, wait until the money chain has a problem, then came to find the cause, the way.

Thirdly, the management of enterprises lacks unified internal control and information transfer system. Most of the management of the enterprise is the enterprise of all departments that acted unified under the enterprise leaders, no mechanism for corporate finance department is responsible for, cause the enterprise internal control is not unified, weaken the monitoring ability of the enterprise of enterprise financial sector, the financial monitoring ability of the enterprise.

In general, the key to corporate financial management is that the enterprise does not have the "budget of capital" and the "budget of sales cost" in this period. It is very important to use the comprehensive budget to improve the financial management of enterprises.

## **3.** Comprehensive Budget Can Solve Problems for the Disadvantages of Enterprises

The budget management of industrial enterprises adopts the combination of internal and external control, which refers to the control of the execution process of each responsibility unit. The advantage of self control, in the process of budgeting, responsible departments at all levels have been involved in, before the budget implementation to the budget already have some idea of is conducive to our subjective initiative in the process of execution. Goal decomposition of clear the goal of each responsibility unit and responsibility, and make them have the corresponding power, to match the incentive system, and combining the responsibility, right, and it will be more conducive to responsibility unit in the process of execution to the detriment of the deviation from the budget activities to correct itself, arouse the enthusiasm of responsibility unit for self-control. But as a result of medium-sized enterprise budget management can't separate budget department for internal control itself, so that in the event of any errors, fraud, for enterprise hazards is immeasurable, so the adoption of a certain external monitoring is necessary<sup>[8]</sup>.

Industrial enterprise budget management content mainly is the use of enterprise comprehensive budget for the enterprise internal departments and units of all kinds of financial and non-financial resources distribution, assessment, control, in order to effectively organize and coordinate the production and business operation activities of the enterprise, complete the established business objectives. The method of allocation and assessment shall be customized by combining the enterprise's actual practice. But in general, there are a few things to consider.

## **3.1 Strengthen the Cost Budget And Estimate the Profit**

Industrial enterprises produce more variety of products, larger scale and more complex production process, which results in more complicated calculation of production cost. Some enterprises in order to reduce the trouble, and generally only in estimating the cost of enterprise, or no actual production cost of enterprise management budget, to the enterprise of the enterprise by the content of the comprehensive budget is one of the production cost budget, the operators of the enterprise products cost clear, accurate profit budget.

### 3.2 The Centralized Management of the Funds

Set up a settlement center system, strictly control the accounts opened and exterior circulation of funds, guarantee funds of centralized and unified management, enterprise through the establishment of financial settlement center, implements the internal funds centralized management, unified scheduling and effective monitoring, to subordinate units do "you take my money, I look at you spend results". A vent to bank settlement center, the subordinate units, besides keep everyday expenses account unified open a settlement account in settlement center, give full play to the role of the internal funds collected the settlement center<sup>[9]</sup>.

Take advantage of the enterprise comprehensive budget, strengthen the monitoring and management, enterprise cash flow to the enterprise a certain period of cash flow budget and the cash inflow of the budget, can help enterprises operators to understand the current business situation, is advantageous for the enterprise's business of short - and long-term plan of the finance department.

#### **3.3 Increase the Forecast of Cash flow Analysis**

Strengthen cash flow analysis and forecast, strictly control cash flow and outflow, guarantee payment ability and solvency. Some companies have set up. Where the money flows, management is closely followed by the idea of managing cash flow management through all aspects of enterprise management, paying great attention to the payment risk and liquidity risk of enterprises. Strict management of cash flow and cash flow generated by operating activities, investment activities and financing activities.

### 3.4 Ensure the Orderly Flow of Funds

We will carry out comprehensive budget management,

strictly control capital expenditures in advance, and ensure the orderly flow of funds.

One of the functions of budget management is to control the cash flow of the enterprise. It controls the cash management of the enterprise based on the cash inflow and outflow quantity of the initial budget. Be able to make the advance budget of cash, control and review afterwards<sup>[10]</sup>.

## 4. The Preparation Process of the Comprehensive Budget of the Enterprise

Enterprises shall, in accordance with the business budget establishment comprehensive financial budget, capital budget, capital budget and financial budget process, and in accordance with the budget implementation unit to the types and their responsibility and authority of the economic business, prepare the different forms of financial budget.

Business budget is a budget during the period of enterprise production and business operation activities of cash receipts and payment can be formed or business activities of the budget, generally includes sales or business budget, production budget, the manufacturing cost budget, product cost, operating cost budget, procurement budget and cost budget, etc., during the concrete preparation of enterprise can according to the actual situation.

The capital budget is the budget for the investment activities of the enterprise during the budget period, which mainly includes the fixed asset investment budget, the equity capital investment budget and the bond investment budget.

Capital budget is the enterprise in the budget period need new borrowing of short - and long-term, approved to issue bonds, and the original loan, debt servicing budget, mainly on the basis of enterprise information on money demand decisions, issuing bonds for examination and approval document and the initial loan balance and interest rate, etc.

The financial budget is the budget that relates to the enterprise cash management results and the financial situation. It is mainly reflected in the form of cash balance budget, expected income statement (expected profit and loss statement) and expected balance sheet.

The enterprise shall independently prepare the budget according to the plans for the issuance of shares, the rights issue and the issuance of share plans. Share issue expenses should also be arranged in the financing budget.

### 4.1 Development of Sales Budget

Sales or operating budget on the basis of the management goal (i.e., target profit), is the budget period budget implementation unit sales of all kinds of products or service offers a variety of possible sales or business and revenue of the budget, based on factors such as market demand, unit price and the cost of consumption. Based on annual target profit, forecast market sales or labor demand and provided product structure and market price.

In the preparation of sales or operating budgets, the revenue budget of the accounts receivable should be prepared to reflect the receivables and actual revenue of each period, providing a basis for the cash budget. The compilation of the sales cost budget also has to be made at the end of the department.

The sales of the products of medium-sized enterprises usually have their own specific targets, and the customers who make up the larger sales volume of the enterprises are the long-term customers of the enterprises, and the customers are more stable. Therefore, the sales budget of an enterprise should be formulated according to the basic requirements of the enterprise and the market development environment and product sales season.

#### **4.2 Production Budget Formulation**

The production budget is engaged in the industrial production of budget implementation unit in the budget period to achieve the production scale and product structure of the budget, mainly in the sales budget, on the basis of various materials on the basis of production capacity of various products, and artificial rate of consumption and its price level and that the ending inventory status. In order to achieve effective management, direct labor budget and direct material budget should be further developed.

The production volume of the product is determined by the estimated sales volume, the expected amount of the final inventory and the initial inventory amount, and the calculation formula is as follows:

Expected volume = expected sales + expected ending inventory - initial inventory

Direct material budget, production quantity is determined, can prepare material consumption and procurement budget. The amount of material consumed depends on the size of the production and the stock of materials. The calculation formula of material purchase quantity is as follows: Expected material purchase amount = expected material consumption + expected final material inventory material inventory of final materials

While preparing the material procurement budget, the expenditure budget for the payment of goods must be prepared, which reflects the number of accounts payable and the number of accounts payable in each quarter, providing a basis for the cash budget.

The basis of direct labor budget preparation is the production quantity per quarter of production budget, the time quota of unit production and hourly wage rate. The calculation formula is as follows:

Estimated direct labor cost = expected production \* unit hours quota \* hourly rate of work

Manufacturing cost budget is engaged in the industrial production of budget implementation unit in the budget period needed to complete the production budget for a variety of indirect expenses budget, mainly on the basis of the production budget, according to the project cost budget implementation and the previous year, according to the requirement of the budget period to reduce costs and expenses. In preparing the budget, the change budget should be determined based on the estimated cost of production and the projected change in the cost of the fixed expenses in accordance with the zero-based budget. In addition, the cost of cash payment should be calculated under the budget, providing information for the cash budget.

Product cost budget is engaged in the industrial production of budget implementation unit production costs required for the production of products during the budget period, the unit cost of production and cost of sales budget, mainly on the basis of the production budget, direct materials, direct labor budget, such as manufacturing cost budget summary. In the calculation of variable cost calculation, production cost and inventory cost should include only variable production cost.

### 4.3 Formulation of Procurement Budget

Procurement budget is a budget execution unit in the budget period to ensure that the needs of production or business operations from the outside to buy all kinds of goods, inventory of the budget, such as material, low-value products mainly according to the sales or operating budget, production budget, beginning inventory and ending inventory stock of economic establishment.

#### 4.4 Formulation of Financial Budget

During the cost budget belongs to the production budget, budget period budget implementation unit organization activities necessary cost, financial cost management and cost of sales (business) budget, such as included in the financial budget. Should distinguish between variable cost and fixed cost, the nature of the controllable and uncontrollable cost, actual cost level according to the previous year and the change of the budget period, combined with expenses standards and the requirements of enterprises to reduce costs and expenses, points and prepare for the project and responsible units.

The cash budget is a budget that reflects all the cash balances and the results of the enterprise budget during the budget period according to the main item of the cash flow statement. Its business budget, capital budget and capital budget as the foundation, is other budget summary about cash receipts and cash disbursements, is to the budget involving cash flow statistics, it can clear the funds required to budget, mainly used as the basis for controlling of enterprise capital position.

Also known as the budget income statement budget profit, on the basis of cash budget, according to the content and format of the income statement reflect the budget practice unit profit target budget statements during the budget period. The budget profit statement reflects the final outcome of the business operation within the budget period; In accordance with sales or operating budget, production budget, product cost budget or operating cost budget, period expense budget and other special budget, etc.

Budget balance sheet according to the content and format of the balance sheet is the comprehensive reflection of final financial budget report, budget implementation unit reflects the enterprise budget final for the assets, rights and interests and the status of the relationship. General budget balance sheet according to the actual budget at the beginning of a balance sheet and sales or business budget, production budget, procurement budget, capital budget and capital budget and related data analysis.<sup>[11]</sup>

### 4.5 Capital Budgeting

Budget of investment in fixed assets is the enterprise in the budget period and construction, reconstruction, expansion and updating of fixed assets to invest capital budget, shall, according to the unit information on investment decision-making and the annual plan of investment in fixed assets. The cash inflow caused by the disposal of fixed assets shall also be included in the capital budget. Enterprises such as a national basic construction investment, the country's fiscal productive funds, shall, according to the relevant state departments approved documents, the industrial structure adjustment policy, technical transformation plan of the enterprise information budgeting alone.

Equity capital investment budget is the enterprise in the budget period in order to obtain other units of the equity and income distribution and capital budget of the investment, should according to enterprise information on investment decisions and annual equity capital investment planning. The capital budget shall also be included in the cash inflow caused by the transfer of equity capital investment or the profit generated by the invested unit.

The budget of the bond investment is the budget for the purchase of government bonds, corporate bonds and financial bonds in the budget period, and shall be prepared according to the relevant investment decision data and securities market quotation. The capital budget shall also be included in the cash inflow caused by the withdrawal of the principal and interest of the enterprise.

## 5. The Enterprises Shall Take Into Account the Problems That the Comprehensive Budget Should Consider

Before implementation, the enterprise should consider the following questions, and according to the actual situation of different enterprises, a comprehensive budget model is really suitable for enterprises.

## 5.1 The Relationship Between the Overall Budget of the Enterprise And the Enterprise Operation Plan

The overall budget of the enterprise is prepared for the business plan of the enterprise. The enterprise operation plan is divided into long-term plan and short-term plan. To enterprise's long-term plan, the enterprise must carry on the long-term budgeting, is the enterprise for predicting the production situation in recent years, namely the target during the period of one year or one operating a broad description. A short-term corporate budget is a short-term forecast of a business plan. Yet the two predictions are not imaginary, nor are they based on past experience. It is based on the enterprise production process of production and production information, classifies the decomposition and refinement, and in combination, and interpretation of accounting language, more specific and explicit and rigorous, large amount of information, the maneuverability is strong, strong authority<sup>[12]</sup>.

### 5.2 Introduce Excellent Financial Management Talents

Budget management is an important part of financial

management work, to the enterprise development to play the role of a decision, can truly play a role of its decision-making, staff, and restricted by the objective environment of the enterprise, but fundamentally depends on the finance department head's own quality and ability<sup>[13]</sup>.

## 5.3 Establish a Standardized Budget Management System

The establishment of the standard budget management system can help the investment decision management and the capital use and control of enterprises, as well as the financial risk prevention of enterprises. Only by establishing a series of scientific internal management system, various functional departments of the enterprise's business activities are organized, restriction, evaluation and regulation, to improve business efficiency and competitiveness, to achieve the business operators to achieve the expected goal. As the operation of enterprises the core department of the Treasury, create and improve the system of financial management and other related management system, the standardization of the overall operation of the enterprise have the effect of "single point", so should first create the company's basic budget management system, and on this basis to develop with the enterprise the core systems in the construction of the system architecture and other various types of concrete system to gradually improve.

### 5.4 Strengthen the Rigid Role of Budget

Practice proves that, without effective supervision, it is difficult to achieve the desired goal. Therefore, in the case of budgetary management, there should be strong supervision measures and safeguard measures. On the watchdog, enterprise group of audit and accounting department should be the corresponding responsibilities, to the decision-making departments, relevant information timely feedback to the group so that the budget management organization, analysis of measurement data, as an reference to enterprise budget next year. External personnel can also be hired at the end of the year to review the budget of the enterprise<sup>[14]</sup>.

# 5.5 Establish a Reasonable Budget Appraisal System

Budget laws as a value goal system, at the end of the final for the execution and completion, also should through the reasonable procedures for examination and assessment, which reflects the objective and fair, give play to the role of the budget of the incentive and constraint, therefore, to establish a reasonable budget for examination and assessment system is very necessary. The budget appraisal system should include the establishment of the budget appraisal index, the organization leading organization, personnel composition, budget appraisal time, the result and use of the budget appraisal.

Reasonable evaluation system of the enterprise group and the budget management of the budget is very important, must reflect the objectivity, the seriousness and authority, thus the budget management work to a new level<sup>[15]</sup>.

# 5.6 The Application of Financial Computerization to the Budget

With the advent of the electronic information age, the budget will also enter a new development period, and we should not despise the role of financial software in the overall budget of enterprises. How to effectively use network resources to strengthen budget monitoring is the new task facing budget management. The author believes that the development of extensive network resources including management software should be developed to improve the quality and efficiency of budget management, and improve the budget management to a new starting point<sup>[16]</sup>.

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## The Impact of Tourism Across the Taiwan Strait on the Taiwanese Identity

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**Abstract:** Nowadays, the search for identity in Taiwan has been more significant today compared to the past because political parties have been attempting to use Taiwanese identity to impact the political loyalty, the democratization as well as language. Based on current situation of tourism cross-straits, this paper respectively analyzes its economic value, political value as well as cultural value on Taiwanese identity. This paper finds that due to a series of strategies adopted by Tsai' government, tourism does not make a big difference in Taiwan's economy, hence, the interdependence of tourism does not remarkably diminish Taiwanese identity from the perspective of economic value. Furthermore, according to the current perceptions of Taiwanese to Mainland tourists, tourism across Taiwan Strait makes slight influence on Taiwanese identity. Consequently, the current effect of using tourism as an economic lever to encourage political unification is extremely rough and tenuous. Besides, to some extent, currently tourism is likely to produce greater social and cultural alienation among Taiwanese, which makes a contribution to boost Taiwanese identity. However, the result can be reverse with the current improvement of education and the quality of Chinese and admiration of China's remarkable development.

Key Words: Ttourism, Taiwan Strait, Taiwanese identity

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### 1. Introduction

Tourism plays a profound role in international relations and world peace.<sup>[1]</sup> Yu & Chung states that it has been universally acknowledged as a lens of people-to-people diplomacy for fostering a better understanding and friendship among individuals from different political and cultural background.<sup>[2]</sup> Furthermore, many researches also have found the importance of tourism in reducing conflicts, tension, barriers to cooperation and political mistrust, which idealistically leads to peace-building.<sup>[3]</sup> Nowadays, the benefits of using tourism as a political tool for reconciliation and peace building between partitioned countries have been increasingly recognized.<sup>[4]</sup> However, most of these studies examine the perspective of political economy while few of them pay attention to the viewpoints of people. There are a few studies such as Lanfant, Tomaselli, Cronin and Frew focusing on the general association between international tourism and identity.<sup>[5-8]</sup> Whereas, little attention has been paid to the role of tourism in identity among divided countries. The search for identity in Taiwan has been more significant today compared to the past because political parties have been attempting to use Taiwanese identity to impact the political loyalty, the democratization as well as language.<sup>[9]</sup> Therefore, this paper aims to examine the current situation of tourism and then explores its impact on Taiwanese identity. More specifically, the paper is anticipated to analyze the impact through three perspectives which are the economic, political and cultural values of tourism. Apart from that, this paper will also explore how Taiwanese perceive Chinese, whether their viewpoints have been changed due to the activities linked to tourism and to what extent their perceptions have been altered.

# 2. The History of Tourism Across the Taiwan Strait

There is no standard definition for the tourism. A abroad definition of tourism by Goeldner and Ritchie is that "tourism is the sum of the process, activities and outcomes arising from the relationships and the interactions among tourists, tourism suppliers, host government, host communities and surrounding environments that are involved in the attracting, transporting, hosting and management of tourists and other visitors." [10] This concept puts tourism in a detailed stakeholder context. It is notable that the tourism is different from residence, migration and business collaborations while the reasons for traveling can be various factors such as pleasure, health, conferences, meetings, diplomacy, business purposes and religious purposes, which more focuses on the pleasure and people-to-people interactions.<sup>[10]</sup> Owing to the fact of political division between Mainland China and Taiwan, tourism across the Taiwan Strait also experienced a tough and changeable time. The figure 1 describes the number and the growth rate of tourist arrivals between Mainland China and Taiwan from 1988 to 2004.

Prior to 1978, travel between Taiwan and the Mainland was highly restricted. Even from 1978 to 1987, there was very slight increase in the cross-straits tourism. In 1987 and later, the ban on travel to Mainland China was lifted by Taiwan, which resulted in a flood of travel to PR

Number of tourist arrivals between Mainland China and Taiwan

China. However, at that time only selected Mainland or Taiwanese residents were permitted to visit relatives and friends whom they had not seen for over 35 years.<sup>[11]</sup> Leisure and recreation travel was still banned. In 1992, there was a remarkable growth (39%) of the number of Taiwanese tourists to Mainland. Since 1992, the Kuomingtang government gradually relaxed its policy and the policy for PR China also experienced a gradual door opening. Therefore, visitors have increased obviously in both directions while it experienced a temporary plunge due to the "Qiandao Lake incident" in 1994.<sup>[11]</sup> In 2005, Mr. Lien Chan, president of Kuoming Party in Taiwan, and Mr. Chuyu Song, president of the People First Party) in Taiwan, visited Mainland China, which greatly promoted close contact, mutual understanding and tourism. From 1988 to 2004, although the number of Mainlanders visiting Taiwan was much lower compared to that of Taiwanese visiting Mainland China, it is noted that the majority of Mainlanders to Taiwan were outstanding individuals such as professors, scientists, journalists, actors and athletes.<sup>[3]</sup> Since 2016 May, tourists from Mainlanders to Taiwan as a whole have dwindled significantly since President Tsai Ing-wen took power and declined to endorse the notion that Taiwan is a part of one united China.<sup>[12]</sup> However, in 2015 Mainland tourists to Taiwan reached a record high, making up approximately 40% of tourists to Taiwan.<sup>[12]</sup>

To sum up, since the early 1990s, travel across the Taiwan Strait was essentially irresistible.<sup>[11]</sup> There are three main features of the tourism across the Taiwan Strait. First of all, the initial purpose of visitors has altered from pay-

Year	Tourists from Taiwan to Mainland China (in thousands)	Growth rate (%)	Tourists from Mainland China to Taiwan (in thousands)	Growth rate (%)	
1988	473.7	N/A	0.381	N/A	
1989	541.0	23.60	4.838	1169.82	
1990	947.6	75.16	7.520	55.44	
1991	946.6	-00.11	11.074	47.26	
1992	1317.8	39.21	13.134	18.60	
1993	1527.0	15.87	18.343	39.66	
1994	1390.2	-8.96	23.562	28.45	
1995	1532.3	10.23	47.176	100.22	
1996	1734.0	13.16	58.510	24.02	
1997	2118.0	22.15	72.346	23.65	
1998	2174.6	2.67	90.626	25.27	
1999	2584.6	18.85	106.699	17.74	
2000	3108.6	20.27	117.125	9.77	
2001	3442.0	10.73	133.655	14.11	
2002	3660.6	6.35	153.923	15.16	
2003	3670.5	0.27	150.683	-2.10	
2004	3686.0	0.42	145.000	-3.77	
Total	34,819.1	15.62	858,912	98.96	

Figure 1. Source: Yearbook of China Tourists Statistics (1989-2004)

Residence	Total	Business	pleasure	Visit Relatives	Conference	Study	Exhibition	Medical Treatment	Others
Hongkong Macao	1,614,803	\$7,032	1,397,233	44,083	8,071	5,913	180	2,439	69,852
Mainland China	3,511,734	14,982	2,845,547	67,584	704	25,191	89	30,713	526,92 4
Japan	1,895,702	253,159	1,379,233	21,403	10,572	5,707	1,245	124	224,25 9
Korea, Republic of	884,397	59,578	693,224	17,791	5,727	6,112	3,125	81	98,759
India	33,550	12,053	3,260	903	2,132	544	498	38	14,322

#### Visitor Arrivals by Purpose of Visit, 2016 Unit: Person

Figure 2. Source: Tourism Bureau, M.O.T.C. Republic of China (Taiwan), 2016

ing a visit to families and relatives to aiming at business, pleasure, sightseeing, conferences, exhibitions and so forth in more recent years (Figure 2). Second, Mao states that tourism is a non-basic-need activity so its demand is closely associated to income level.<sup>[13]</sup> Due to the different levels of economics, standards of living and restricted policies, the tourism market presents an obvious uni-directional flow from Taiwanese visitors to Mainland at a early period.<sup>[3]</sup> The number of Mainlanders traveling to Taiwan is relatively smaller. Furthermore, tourism is easily influenced by the tenuous political relationship between Mainland China and Taiwan.

## **3.** The Impact of Tourism Cross-Straits on Taiwanese Identity

In defining identity, scholars usually distinguish between national identity and social identity. For nation identity, Dittmer and Kim states that it is a feeling and evaluation normally circumscribed by its territory and it tends to coincide with objective criteria as common language, ethnic or racial origin as well as political culture.<sup>[14]</sup> Horowitz, Heo & Tan argues that national identity is the imaginary community that the state is supposed to protect and serve and is related to political, economic, national cultural as well as geopolitical goals that the state is supposed to promote.<sup>[15]</sup> Jenkins, however, declares that social identity is a part of self-concept which derives from the group membership that is meaningful to individuals and permits self-evaluation.<sup>[16]</sup> Furthermore, it is a shared representation and the appropriate behaviour of who one is. In this paper, Taiwanese identity covers not only national identity but also self-concept.

Despite the surveys completed by Wu reported that the rising Taiwanese identity was not impeded by the close economic relationship with Mainland since the early 1990s, it is understandable that, with Mainland's unquenchable political ambition of annexing Taiwan, the increasing Taiwanese identity alone will not be able to maintain the general consensus on Taiwan's independence and autonomy.<sup>[17]</sup> Without political sovereignty, it might be much more easily for Taiwanese social identity to be transformed into Cantonese or Hunanese.<sup>[18]</sup> In fact, the people of Hong Kong under the "one country, two system"have a rising identity as Hong Kongese. Nonetheless, these issues are too complicated and risky to be analyzed within the scope of this paper and merely from economic perspectives.

According to Tourism Bureau, M.O.T.C. Republic of China (Taiwan) (2017), a total of Mainlanders traveling to Taiwan in February 2017 decreased by 14.42% compared to that in February of 2016.<sup>[19]</sup> The constant drop of Mainlanders to Taiwan to some extent challenges Taiwanese tourism industry and arouses the concern about the economic safety net, which are supposed to form the political pressure from the perspective of PR China. For example, on Sept. 12, up to 10,000 tourism industry workers protested, holding signs saying "No Jobs, No Life!" and "We Need to Survive".<sup>[20]</sup> They demand the Tsai government take a more China-friendly path. This discord revealed the challenge that Taiwan heavily depends on Mainland's economy against greater autonomy. Nevertheless, this time Beijing did not imagine that the attempt of throttling

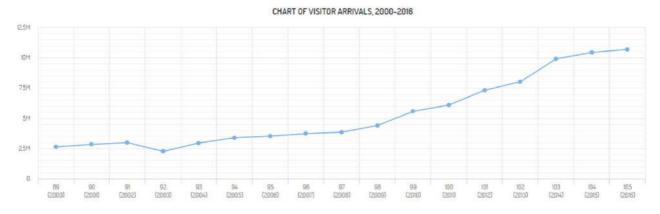


Figure 3. Source: Tourism Bureau, M.O.T.C. Republic of China (Taiwan), 2000-2016

tourism from PRC has not made much influence. The tourism as a whole still successfully grew by courting visitors from the rest of Asia such as Japan and South Korea (Figure, 3).

Furthermore, the decreased Mainland tourists correspond with Tsai's official measure to diminish Taiwan's economic reliance on Mainland and to intensify relations with Southeast Asian nations.<sup>[21]</sup> Apart from that, Tsai administration announced a \$9.5 million emergency fund to boost the tourism sector and other measures have been adopted such as easing visa processes and creating slick marketing campaigns.<sup>[20]</sup> Therefore, based on such various strategies, even though some companies catering to mainland tourists complaint about a drop of profit, the overall economic effect on Taiwan is limited.<sup>[20]</sup> That is to say, the economic and political value of tourism cross-straits on changing Taiwanese identity is not profound, at least during this period.

Kin & Crompton deem that even though the unsettled political climate is surrounded by many of these political anomalies, the cultural and social linkage between the partitioned section have often been maintained in certain forms, in particular by kinship or general ethnic, religious, and language linkage.<sup>[13,22]</sup> However, Brown argues that identity is supposed to be based on social experience, not cultural ideas or ancestry.<sup>[23]</sup> Tourism is considered as a not threaten sensitive contact between tourists and local people in the host country. Because it provides visitors an opportunity to meet people in the host country and the contact, though superficial most of the time, it can enable travelers and hosts to better understand each other, which can further facilitate the visitors' appreciation of the host way of life. The mutual understanding can thus lead to improved relationships between two people in partitioned areas. Through this indirect vehicle, it is more easily to

boost the relations, which eventually make a difference on identity.<sup>[2]</sup> However, the current experience of interaction between Mainlanders and Taiwanese, to a certain degree, is unpleasant. For one thing, some Taiwanese complain about Mainland group tourists' poor behavior including loud talking, smoking in inappropriate areas, public urination, poor hygiene and spitting as well as jumping the queue.<sup>[24]</sup> For another, some Chinese also consider Taiwanese locals disrespectful, unwelcome and prideful to them.

Consequently, based on Rowen's Taiwanese perceptions above, this reveals a fundamental risk of the contact of the tourism: the more that Taiwanese engaged with Mainlanders, the more alienated they felt China's people and culture, undermining the unificationist program and enhancing their national identity.<sup>[24]</sup> The outcome suggests that the impact of tourism may not diminish Taiwanese identity, in reverse, it is likely that to some extent it will strengthen Taiwanese identity.

### 4. Conclusion

Tourism is usually empirically viewed as contributing positively to cultural understanding and economic development. Nonetheless, tourism between partitioned states has its own distinct patterns. This paper looked back the history of tourism across the Taiwan Strait. It found that the purpose of visitors has altered significantly over these years and at the beginning the flow from Taiwanese visitors to Mainland presented an obvious uni-direction. Additionally, tourism is easily impacted by uncertain political relationship between Mainland China and Taiwan.

Based on current situation of tourism cross-straits, this paper respectively analyzes its economic value, political value as well as cultural value on Taiwanese identity. Due

to a series of strategies adopted by Tsai' government, tourism does not make a big difference in Taiwan's economy, hence, the interdependence of tourism does not remarkably diminish Taiwanese identity from the perspective of economic value. As Brown points out that identities of individuals as members of groups, especially national identity are portrayed by political leaders as fixed, with borders that are not based on individual experiences.<sup>[23]</sup> Furthermore, according to the current perceptions of Taiwanese to Mainland tourists, it is not surprising that tourism across Taiwan Strait makes slight influence on Taiwanese identity. However, the result can be reverse with the current improvement of education and the quality of Chinese. Consequently, we can see that the current effect of using tourism as an economic lever to encourage political unification is extremely rough and tenuous. Besides, to some extent, currently tourism is likely to produce greater social and cultural alienation among Taiwanese, which makes a contribution to boost Taiwanese identity.

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## **Research on Internal Control of JK Restaurant Company**

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**Abstract:** With the steady growth of the national economy, people's income level is higher and higher, and consumers are willing to spend more money to enjoy material life. A large number of overseas catering enterprises has flooded into China's market, which has brought unprecedented competitive pressure, and also made the catering enterprises in China realize their shortcomings. This paper takes JK Restaurant company as an example to study the internal control.

Keywords: JK Restaurant Company; Internal control; Operation risk

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## 1. Introduction

Internal control is the inevitable outcome of social and economic development. It is the realization of the enterprise to ensure its strategic objectives, and the management enterprise develops the system of strategy and operation risk.

## 2. Internal Control Theory

#### 2.1 The Concept of Internal Control

Internal control is a dynamic system which develops continuously with the development of society and is the basis of all work. Management at all levels in order to protect the security, integrity of their economic resources, to ensure accurate and reliable economic and accounting information, coordinate economic behavior, control economic activity, use the unit internal division of labor and mutual restriction, mutual connection relationship, form a series of methods, measures, procedures, and standardized, systematic with control function, making it become a rigorous, relatively complete system.

### 2.2 The Principle of Internal Control

1) Comprehensive principle. When building an internal control system, consider the independence and interconnection between each system, making it unification and cooperating with each other.

2) Importance principle. During the establishment of internal control carefully screened, and according to their own enterprises need to select suitable elements, subsystem and the status of the control process, find out the process control key, with clear policy, indirect process frame out the key control program.

3) The principle of equity. Internal control shall, in the governance structure, institutional setup and responsibilities distribution, business process, etc., to form mutual restriction, mutual supervision, if excessive restriction on power distribution and setting up the business process will affect the enterprise the management efficiency.

4) Adaptive principles. The internal control should be adjusted to the size, scope of business, competition and risk level of the enterprise, and adjusted accordingly.

5) Principle of cost-effectiveness. The internal control is only reasonable guarantee to prevent the wrong and risk of enterprise activities. It should weigh the implementation cost and expected benefits, and realize effective control at the appropriate cost.

## **3. Internal Control Analysis of JK Restaurant Chain Co., LTD**

JK restaurant chain co., LTD, founded in 2006, is a fast food chain selling rice noodle is as its main product in China, combing Chinese traditional rice noodle, the internationalization of fast food chain management concept, and the global food industry. The main products of the restaurant are provided by the central kitchen to support all store sales products made from the food industry standard.

### **3.1 Business Process**

Waiter arrives an hour earlier before store opens, cleaning, set the tableware to meet customers, customers choose seat, transmit the order to the cashier and pass-through after founding order by order machine, pass-through member tells the kitchen to prepare food, after pass-through Ramadan according to the order to the customer's table, finished eating, choose cash or credit card for payment, obtain the invoice. The cashier will send the summary and cash to the supervisor at the end of the day, the supervisor will check the documents and calculate the total amount of the documents, count the cash and check the sum of cash and remittance.

#### **3.2 Internal Control Analysis**

Through the investigation of the company, the following problems are found in the internal control of the company, and the following analysis is made on these problems:

#### 3.2.1 The Cost Control is Weak

Inconsistent pricing for raw materials procurement of headquarters and the division, no strict examination and approval system for fees, no expense budgets or without according to the budget implementation, frequent over budget cost.

#### 3.2.2 Weak Income Control

Income control, established by the company scientific and effective control measures, in order to prevent a catering income decreases, is to reduce the production cost, improve profits and take a management control measures. Improper storage of accounting information, internal audit cannot be carried out in depth, funds are embezzled, stolen or misappropriated.

### 3.2.3 The Management Mode to Be Adjusted

The management right is concentrated in the hands of the general manager, which greatly reduces the enthusiasm of other management personnel in the company to participate in the management. The manager is likely to take the wrong decision and make the wrong decision because he is not clear about the specific operation of the company, or not to have a thorough understanding of the company.

## 4. Internal Control Construction of JK Restaurant Chain co., LTD

#### 4.1 Organizational Structure

By adopting the combination of centralized and decentralized management mode, the new organization is composed of five departments of purchasing department, service department, administration department, finance department and supervision department, the decentralization of the general manager to the department supervisor, department manager should set up a team to facilitate management and regularly report to the general manager of the business.

#### **4.2 Human Resources**

Enterprises must continuously train employees to develop the habit of self-learning. To formulate the corresponding incentive measures, all contents of enterprise internal control activities, to cultivate employees master the sense of responsibility, team cooperation and common struggle of team spirit, to give full play to their initiative, enthusiasm and creativity, to achieve the best effect of internal control.

#### **4.3 Internal Supervision**

To the supervision of the internal control, effectively protect the interests of the company, improve the efficiency of management, the department directors in the supervision of each store, check the scientific rationality of the internal control according to the requirements of the enterprise management, discover the problems existing in the internal control mechanism, and put forward feasible improvement opinions and suggestions according to these problems.

## **5.** Conclusion

To sum up, the construction of enterprise system, only within the scope of the system, and fully reflecting the will of the legal system and requirements, can achieve the goal of internal system construction, if the enterprise system separates from the specification of the legal system, the information generated by system will lose its authenticity, reliability and usefulness, which cannot meet the needs of the national macroeconomic regulation and control, as well as the investors, creditors, and the company's internal management.

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