Animal Epidemic Prevention in the Financial Services Market Development and its Impact on Financial Stability

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Abstract: To improve the current animal epidemic prevention system can not meet the needs of the development of market economy. Taking avian influenza and broiler industry as the research object, this paper discusses the influence of the epidemic situation on the supply and demand of chicken, the epidemic prevention behavior of farmers in major provinces producing broiler and the optimization of prevention and control strategies in a certain eastern province. The local equilibrium model of supply and demand of chicken in China was constructed within the framework of local equilibrium theory, and the annual occurrence times of highly pathogenic avian influenza in chicken flocks were introduced into the equations of chicken output, per capita consumption, import and export volume as the influence coefficient to calculate the loss caused by the epidemic to each link. The study found that from 2012 to 2019, highly pathogenic avian influenza caused a loss of 12,412,800 tons of chicken, of which the total consumption loss was the largest, resulting in economic loss of up to 208.7 billion yuan; Then there is output, then imports, then exports. When each occurrence of highly pathogenic avian influenza, chicken production decreased by 0.028%, per capita chicken consumption decreased by 0.035%, chicken import decreased by 0.031%, and chicken export decreased by 0.024%. Our livestock production in agriculture account for a large, animal epidemic prevention must adapt to the requirement of market economy, changing the concept of development, pay attention to strategy, enhancing the technical levels of epidemic prevention, strengthen information communication, and establish and improve the epidemic prevention and emergency treatment of epidemic emergency rapid response system, promote healthy livestock production security and animal husbandry financial stability.

1. Introduction

China is an important member of the international financial market. Whoever occupies the Chinese market in the competition of the international market economy will grasp the initiative of the competition [1]. In the international trade competition of animal products, the quality and safety

of animal products is the most important issue, and animal disease, as a comprehensive reflection of breeding technology, is the only determinant affecting the trade of animal products [2]. The essence of the international financial trade competition of animal products is the competition of animal epidemic prevention level [3]. If we want animal products to enter the international financial market, we must give animal epidemic prevention a new status and role [4].

The development of the market economy and the opening up of the external economy have promoted the prosperity of the market and the development of animal husbandry, and enriched the "vegetable basket" of the masses [5]. The frequent trade of animals and animal products has brought great difficulties to animal epidemic prevention work. Despite the efforts of leaders at all levels and animal epidemic prevention personnel, several animal infectious diseases have been controlled and eliminated [6]. However, the animal epidemic prevention system has not undergone fundamental changes and cannot adapt to the needs of the development of the market economy [7]. Once the occurrence of avian influenza, the most direct harm is to the entire livestock industry economic stability caused a huge shock, will also endanger the stability of the entire financial market [8,9].

At present, domestic research on animal epidemic risk analysis and financial risk prevention is still in its infancy, and most of them are experts and scholars in related disciplines of veterinary medicine. At the same time, data related to animal diseases are difficult to obtain, and quantitative analysis is relatively difficult [10,11]. In order to prevent the impact on related industries and financial markets, this paper, based on the economic assessment theory of risk analysis and management of animal epidemics at home and abroad, takes the poultry industry as an example to systematically study the impact of animal epidemics and the cost of epidemic prevention, as well as the risks to national financial stability [12].

2. Theoretical Basis and Research Methods

2.1 Theoretical Basis

(1) Animal epidemic prevention economics

Theory lies in its economic evaluation is an important part of economics for animal epidemic prevention, and economics is for animal epidemic prevention in recent years, the rise in Europe and an emerging discipline, as a branch of economics, it is based on immunology, epidemiology, pathology, public health and related subject system of natural science, with the help of the analysis methods of economics, the disease control measures of input, output, production and the economic impact of the issues related to risk quantitative analysis and evaluation [13]. In order to optimize the epidemic prevention and control measures and reduce the economic losses caused by the epidemic. At the same time, some financial support policies and Suggestions for improving or protecting animal health are provided with reasonable economic explanations.

After the emergence of animal epidemic prevention economics, it develops rapidly and becomes more and more important. This rapid development also benefits from the drastic changes of social and economic environment under the background of economic globalization. With the continuous progress of science and technology and the deepening of market integration, self-sufficiency in livestock and poultry products is no longer the primary goal of a country or region. With the development of productivity, the proportion of agriculture, a high-risk and low-return industry, in the national economy continues to decline, and the profit-seeking nature of capital makes a large amount of capital flow to the secondary and tertiary industries with higher returns. Therefore, in the context of the pursuit of rate of return, a reasonable cost-benefit assessment should be given for the input of animal epidemic prevention and control.

Risk analysis and management can be divided into four stages: risk identification, risk assessment, risk control and risk recording. First, identify the possible risks; Secondly, according to

the results of risk identification, an appropriate mathematical model is constructed to obtain the necessary and basic available information or data through expert investigation, historical records, extrapolation, etc., and then the information is quantified by appropriate mathematical methods, and then the constructed mathematical model is used to process and analyze the data. Thirdly, according to the results of risk assessment and established evaluation criteria, the risk size is determined to provide information that can be used to guide the operation for further risk control. Finally, the data of each stage of risk analysis and management were recorded to provide support for subsequent research. At present, there are many theories of risk analysis, these analysis methods follow the basic risk assessment process, but there are differences in the specific implementation means and risk calculation methods.

(2) Local equilibrium--cost-benefit theory

Animal health is not only a public welfare, but also a tertiary industry, with both the characteristics of hygiene and economics. Animal influenza prevention and control is an important part of animal health. In order to improve the prevention and control efficiency of avian influenza, the cross-disciplinary thinking should be applied to seek a relative balance between hygiene and economics. Because avian influenza epidemiology and economics are different disciplines, the research on the impact and prevention and control of avian influenza from the perspective of economics has not been paid much attention so far. Therefore, this paper intends to use local equilibrium theory and cost-benefit theory and other economic principles, the impact of avian influenza and prevention and control of economic laws and relations.

The study of the impact of avian influenza on the output, consumption, import and export of animal husbandry industry involves the theoretical analysis of local equilibrium. According to the hypothesis of perfectly competitive market, a large number of producers and consumers are active in the market, both of which are price takers. Moreover, they act according to the price, and the behavior of any individual cannot affect the market price, so the price is regarded as an exogenous variable. The theory of supply and demand, however, holds that the sum of the actions of all economic actors has a decisive effect on prices. When market demand and market supply change, the price of goods or factors can change, thus changing the behavior of each producer and consumer. The theory has two levels, one is local equilibrium and general equilibrium. Local equilibrium theory is an economic analysis method, also known as local equilibrium analysis, which refers to the analysis of the impact of a certain variable in a certain period of economic life on the relevant economic variables under other conditions unchanged. The theory takes a single producer and consumer as the analysis object, but does not consider the interaction with other producers or consumers. Second, the substitution effect can be ignored. The small size of the commodity or factor market studied also makes the price change of such commodity or factor have almost no substitution effect on other commodities or factors. It can be considered that the price of other commodities or factor is not affected by the price of the commodity or factor. In view of these two characteristics, when analyzing the market equilibrium problem, it can be considered that the supply and demand of a single commodity or factor is determined by the price of the commodity or factor, and is only a function of the price of the commodity or factor. Furthermore, all other goods or factors may be grouped together as a class of standard goods or factors, money, with the price of such goods or factors unchanged. Thus, the economy becomes an economy of two goods or factors, thus simplifying the problem of price determination. In this study, only the supply and demand market of chicken was taken as the research object, and the interaction with other markets was not considered. When the supply and demand of chicken market were impacted by avian influenza, the market price and import and export price of chicken also changed.

The economic analysis of the impact of avian influenza and its prevention and control cannot be separated from the cost-benefit theory. When human beings are in economic activities, they

generally consider the gain and loss of economic value, and make as scientific an estimate of input and output as possible. Thus, the concept of cost and benefit is generated, which are the value category of commodity economy. From the perspective of economics, cost and benefit are to measure the cost and material wealth of scarce resources allocated to different USES. In particular, the concept of cost has connotation and extension, including explicit cost, implicit cost and opportunity cost. Cost-benefit theory, also known as cost-benefit analysis, is a common method throughout economic theory. It is also an economic concept of making plans in advance and living within one's means. Therefore, the economic activity main body takes profit maximization as the starting point, tries to obtain the maximum benefit with the minimum cost. Generally speaking, the social benefit of private epidemic prevention is greater than the individual cost, and the power of private epidemic prevention and control is insufficient. Therefore, the government needs to compensate the net loss of private prevention and control and internalize the positive externalities. Finally, the animal prevention and control work has the productive characteristic, and the material production, objectively stresses the efficiency and the benefit. When there are multiple prevention and control schemes, in addition to considering the prevention and control effect, it is also necessary to conduct cost-benefit assessment of alternative schemes through cost-benefit analysis.

2.2 Research Methods

In this paper, the local equilibrium model, the orderly Probit model and the north American animal epidemic transmission model are used to solve the impact of highly pathogenic avian influenza on the supply and demand of chicken, the farmers fully implement the epidemic prevention system and facilities as well as the overall epidemic prevention behavior, and the highly pathogenic avian influenza prevention and control strategy evaluation and optimization.

(1) Local equilibrium model

For the study of highly pathogenic avian influenza chicken concrete influence the amount of supply and demand in China, the local equilibrium theory was used to construct the chicken of local equilibrium of supply and demand model, and then each year the happening of the highly pathogenic avian influenza in chickens number as a model of influence coefficient is introduced into production functions, per capita consumption of chicken, chicken chicken imports functions with chicken exports, by equilibrium relationship, the calculation of highly pathogenic avian influenza in chicken production, consumption, imports and exports of China such as the loss caused by four aspects.

(2) Orderly Probit model

For analysis of poultry production in China producers of highly pathogenic avian influenza prevention and control the behavior and its influencing factors, according to the conditions for animal epidemic prevention measures for the examination of the beds of seven epidemic prevention system and eight epidemic prevention facilities as farmers standard prevention research framework, consider the same farmers build system of epidemic prevention and facilities of the disturbance between two equations in theory may be correlation, therefore, to establish ordered Probit model to analyze whether the farmers and epidemic prevention system are fully implemented and whether epidemic prevention facilities are fully implemented and its influencing factors; Then, the orderly model is established to discuss the overall epidemic prevention behavior because there is no orderly relationship in the cost-benefit analysis from three aspects: the complete implementation of epidemic prevention system and facilities, the complete implementation of epidemic prevention system or facilities, and the complete implementation of epidemic prevention system and facilities.

(3) North American animal disease transmission model

Developed by the United States center for epidemiology and animal health, the north American

animal disease transmission model is a spatial, stochastic, and state transition simulation model for the spread of animal diseases. Since its inception in 2006, the north American model of animal disease transmission has been used in more than 30 countries in 6 continents as a mainstream zoonotic economic model. For assessment and optimization of highly pathogenic avian influenza prevention and control strategy, north American animal disease transmission model is adopted to establish the avian flu spreads between group model, evaluation of immunization strategies and immunization strategies under the highly pathogenic avian influenza in guangdong province broilers, laying hens, flesh duck, goose, prevention and control effect and the direct costs of prevention and control between the flocks, again through the sensitivity analysis of optimization scheme is put forward.

3. Research Process

3.1 Model Construction

This study first attempts to measure the losses caused by avian influenza on the production, consumption, import and export of chicken in the case site from 2012 to 2019, aiming to solve the estimation of the supply and demand of animal products caused by the current major animal diseases. Secondly, from the national provisions of the epidemic prevention system and epidemic prevention facilities and equipment to build an analytical framework of farmers on the prevention and control of highly pathogenic avian influenza standards, the effectiveness of farmers' epidemic prevention behavior is systematically evaluated, to make up for the micro level neglect of epidemic prevention facilities and equipment and the overall epidemic prevention research gaps; Finally, determine the some provinces send ill sex avian flu high to be acceptable as a representative study area, simulate the spread of bird flu in chicken group between farms, evaluation is not immune strategies and immunization strategies of prevention and control effect and the direct costs, and put forward the optimization scheme, rich in our country about major animal disease prevention and control strategy evaluation and optimization research.

The core problems of this paper all require the construction of models. When using foreign research methods for reference, it is necessary to turn the influence of the feed, production, processing and trade of pig, beef cattle, cow, sheep, poultry, eggs and other livestock and poultry industries into the influence of avian influenza on the production, consumption, import and export of chicken. Build multivariate ordered Probit model and epidemic prevention system and facilities used for farmers and the overall prevention behavior in the process of research, not only to build the model according to the influence factors of domestic and foreign literature research, and build the model of need through the statistical indicators, the need to keep trying different types of independent variable and the way of assignment; The north American animal epidemic transmission model is a kind of interface interactive software, which does not need to use any programming language to realize the simulation of epidemic transmission. However, it is necessary to master the principle, hypothesis and parameter setting of the model through learning the user manual of the model, so as to build an assessment model of avian influenza destructive power consistent with the actual situation in China.

This paper tries to adopt the advanced research methods to improve the research level. First, will send ill sex avian flu high to the impact on the supply and demand of chicken chicken as influence coefficient is introduced into local equilibrium of supply and demand model, grasp the outbreak of chicken production, consumption, import and export of influence and the correlation of systemic, raised the estimate of science: secondly, considering the same farmers fully established and epidemic prevention system and epidemic prevention facilities of behavior may exist correlation, in order to ensure the authenticity of the results, the ordered Probit model are studied; Finally, the

north American animal epidemic model was adopted to simulate two different strategies for the prevention and control of highly pathogenic avian influenza in China.

3.2 Field Investigation

The main purpose of field research is data acquisition. According to the research content, this paper needs a large amount of data to support, both statistical data and field survey data. Data were collected through the ministry of agriculture's veterinary bulletin and the OIE website. Highly pathogenic avian influenza in China monthly frequency, location, type of virus subtype, sick animals and the incidence and the number of deaths and killed, but the chicken group of highly pathogenic avian influenza in number, location, number, number of deaths and culling and no detailed statistics, increased the difficulty of data processing.

In order to study the adoption of epidemic prevention system and epidemic prevention facilities and equipment by farmers in major provinces of broiler production, in addition to preliminary investigation and well-designed questionnaire, field investigation should be carried out in 6 representative provinces of stratified sampling among 12 major provinces of broiler production to ensure the representativeness of survey data. Finally, although the north American animal disease transmission model is an interactive software interface, but in order to improve the effect of simulation, need animal characteristics, status of disease and contact transmission, disease prevention and control, prevention and control of cost data, such as support, among them, the scarce of hygiene, epidemiological investigation of professional data, need through the literature search and expert consultation can get.

4. Discuss

4.1 Occurrence of Avian Influenza in the Case Site

As shown in figure 1 below, since 2012, China's chicken production and the quantity of broilers presented an overall trend of increase. Chicken production rose to a peak of 32.964 million tons in 2017, up 5.505 times from 6.525 million tons in 2012. However, since 2017, there has been a downward trend. This paper believes that the decline in growth is not unrelated to the occurrence of avian influenza.
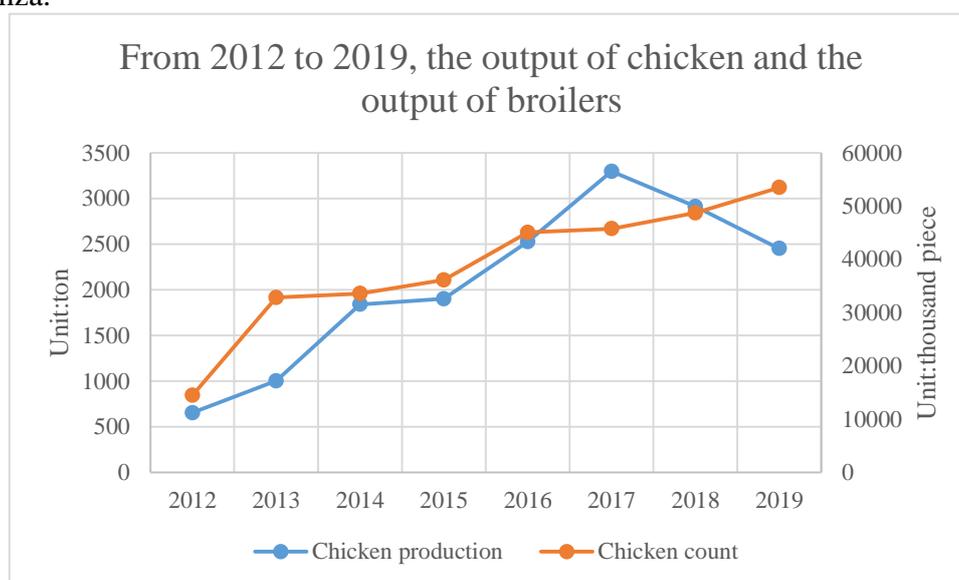

Figure 1. Output of chicken and broiler from 2012 to 2019

The results of the survey on the change trend of per capita chicken consumption in urban and rural households from 2012 to 2019 are shown in figure 2 below. As can be seen from the figure, with the increase of the income level of urban and rural residents in China, the average chicken consumption per resident is also increasing. In 2012, the per capita chicken consumption of rural households in China was 7.56kg. By 2017, it had reached an all-time high of 18.32kg, and then declined. From 2012 to 2019, the per capita chicken consumption of urban households increased by 2.32 times. In addition, the gap between urban and rural per capita consumption and urban residents first widened and then narrowed. In 2012, the gap between urban and rural per capita chicken consumption was 1.35 kg. In 2017, the gap widened to 2.41 kg/person.
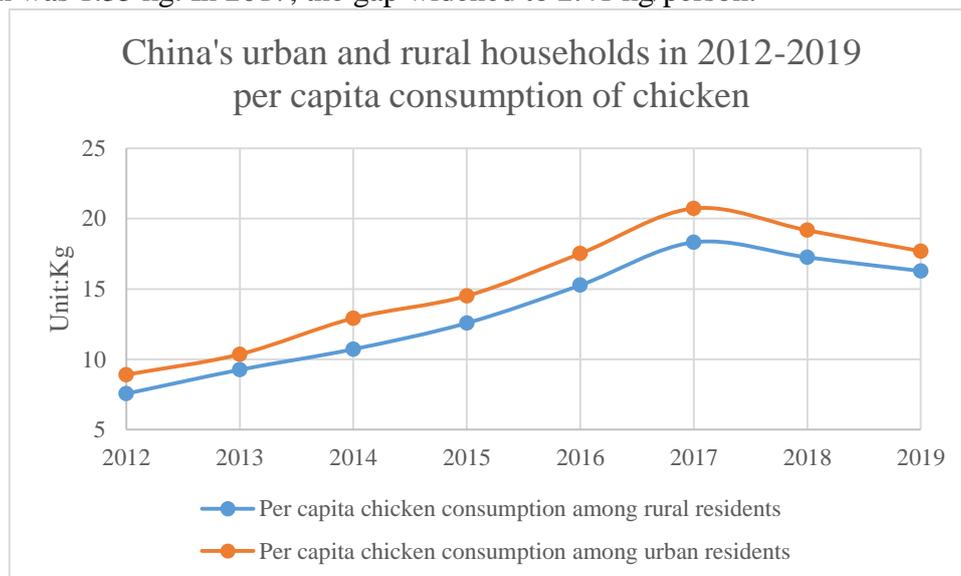

Figure 2. Change trend of per capita chicken consumption of urban and rural families in China from 2012 to 2019

The investigation and results of the trend of import and export of chicken and its products and live chicken from 2012 to 2019 are shown in figure 3 below. As can be seen from the figure, on the whole, China's trade deficit in chicken and its products, while the trade surplus in live chicken. From 2012 to 2015, China's canned chicken imports showed a small increase, and from 2016 to 2017, a sharp increase. From 1.535 million tons in 2012 to 2.7202 million tons in 2015, an increase of 1.17 times and a record high of 3.3716 million tons in 2017. The change trend of China's export volume of chicken and canned food is relatively flat, showing the characteristics of small growth (2012-2015) to rapid rise (2016-2017) and small fluctuations (2018-2019). Since 2013, China's trade deficit of chicken and canned goods has been larger than the surplus. The overall change trend of China's live chicken import showed a wide v-shaped feature, which decreased from fluctuation to gentle and small fluctuation, and increased by 13.8% from 25.765,000 in 2012 to 29.9 million in 2019. It can be seen that the change range of live chicken import in 7 years was very small. China's export volume of live chickens increased slightly from 2012-2014 to 2015-2019 and then decreased year by year. From 63.95 million at the beginning to 36.18 million at the end, it decreased by 64.7%. From 2012 to 2019, China's import volume of live chicken is far less than the export volume of live chicken, and the total export volume is 11.64 times of the total import volume, which has been in trade surplus.
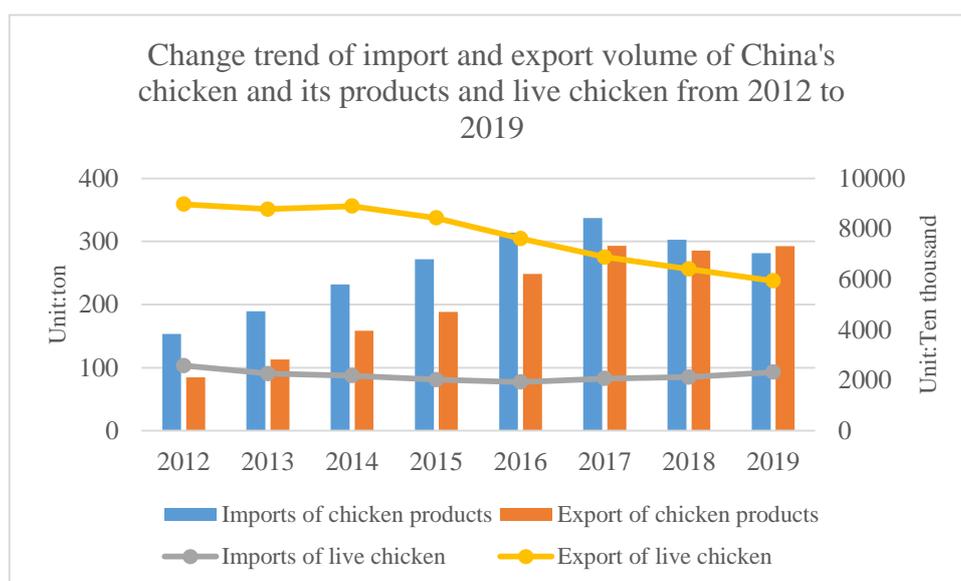
Figure 3. The trend of import and export volume of China's chicken and its products and live chicken from 2012 to 2019

Avian influenza as a major animal disease, since 2004, has been in 23 provinces in the country a total of 110 outbreaks, in wild birds, chickens, ducks, geese and other birds are found in the virus, resulting in many birds sick, dead and culled. Avian influenza in 2009-2019 in our country's situation as a whole are shown in table 1 below, 2009-2019 in China of highly pathogenic avian influenza occurred 89 times, 8.9 times per year on average, 2012 and 2015 is a high incidence of highly pathogenic avian influenza in China year, two years accumulative total 33 of the outbreak, accounting for 37% of the total frequency, especially in 2015, the cumulative outbreak 19 times, is a year since 2009, most of the outbreak.

Table 1. Overall situation of avian influenza in China from 2009 to 2019

	Number of outbreaks in all poultry	Number of outbreaks in chickens	Specific gravity
2009	5	2	40.00%
2010	5	3	60.00%
2011	7	4	57.14%
2012	14	11	78.57%
2013	7	5	71.43%
2014	9	5	55.56%
2015	19	12	63.16%
2016	7	6	85.71%
2017	6	6	100.00%
2018	5	4	80.00%
2019	5	3	60.00%

As shown in table 2 below, from 2009 to 2019, a total of 442,379 sick, dead and culled birds were affected by avian influenza, 428,449 and 953,567. In general, the more outbreaks occur, the more birds, including chickens, get sick, die and are culled. After each outbreak, it will not only directly affect the economic interests of farmers, but also directly affect the stability of the entire

agricultural economic system. The direct economic losses and indirect economic losses caused by the outbreak each year are shown in figure 4 below.

Table 2. Incidence, death and culling of avian influenza chickens in China from 2009 to 2019

|	Incidence ling		Number of death		Culled several	
	All poultry	Flock of chickens	All poultry	Flock of chickens	All poultry	Flock of chickens
2009	3038	1094	2437	1718	3273	1312
2010	3919	1757	3331	1117	4243	1955
2011	2158	1005	4705	1227	2391	1470
2012	4201	1922	4693	1267	2186	1383
2013	4607	1421	3958	1272	5412	1551
2014	2227	1366	5053	1284	4947	1913
2015	2052	1515	3818	1264	4145	1681
2016	2691	1206	3550	1823	5963	1187
2017	3890	1815	4056	1798	5520	1431
2018	3448	1450	2181	1728	4818	1859
2019	2419	1140	2139	1651	5357	1424
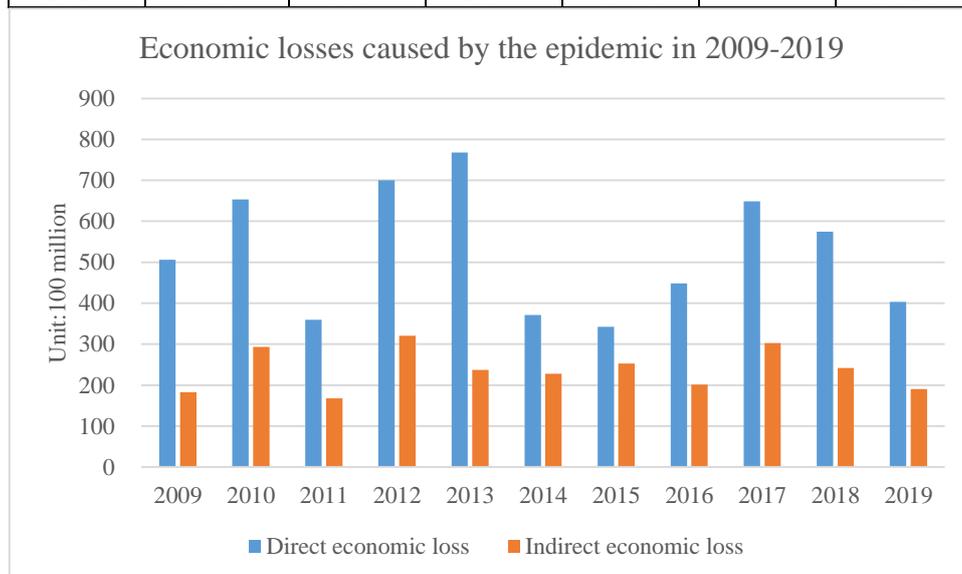
Figure 4. Economic losses caused by the epidemic from 2009 to 2019

4.2 Analysis on the Effect of Animal Epidemic Prevention on Financial Stability

(1) Protecting livestock production

Animal epidemic disease is the major enemy of animal husbandry and has a great impact on animal husbandry. One is the animal infectious disease, once the occurrence of epidemic, will cause catastrophic losses to the farm and related industries, breeding enterprises serious losses or even bankruptcy, many farmers and related enterprises suffered heavy economic losses, so the debt or return to poverty, a large number of workers unemployment, income reduction. The second is the culling of disease livestock (poultry) and suspected livestock (poultry) and the quarantine of the epidemic area blockade work cost a lot of money. Three is some animal disease mortality rate is not

high, but because of livestock production performance is reduced, feed conversion rate decreased, the production costs, bring long-term potential losses to the production of animal husbandry, such as milk production and living of reducing, abandoned meat, fur and other animal products, livestock, the loss of working capacity, etc. Since the 1990s, the outbreak of foot-and-mouth disease among livestock in Greece, Macedonia, Albania, bosnia and herzegovina and Turkey in southeast Europe has cost Greece about $6.52 million to control the spread of foot-and-mouth disease. Then came foot-and-mouth disease in Asia, in Israel, Syria, Taiwan, South Korea and Japan. In 1997, the pig type O foot-and-mouth disease in Taiwan was the most serious. The total number of pigs killed on the island was 3.55 million. In that year, the gross product of Taiwan's pig industry decreased by 49.6%. After the outbreak of foot-and-mouth disease in South Korea in 2010, the government spent $520 million on epidemic prevention alone. The foot-and-mouth disease in 2011 cost the country £7 billion.

(2) Prevent impact on related industries

Breeding industry is closely related to the production field of upstream industry and the use of raw materials and other economic behaviors of downstream industry. The related upstream industries include planting industry, animal feed production, veterinary medicine production, etc. Related downstream industries include animal slaughterhouses, food processing, wool and clothing, transportation, hotels and trade. Animal diseases destroy the market's consumer confidence in animals and their products, resulting in the fracture of the supply chain. The unbalanced demand leads to the decline in the efficiency and quantity of breeding, which then affects the production and sales of feed, and affects the consumer demand for corn, soybean meal and other raw materials, and directly affects the development of planting industry. In early 2009, KFC in Vietnam, hit by bird flu, canceled all chicken supplies and replaced them with fish and other ingredients. In Thailand, fresh chicken, a favorite food, once disappeared from Bangkok's food markets, hurting the poultry processing and supply industries. Thailand's worst-hit poultry and feed industries lost $650 million and $360 million, respectively, the parliamentary research center reported.

(3) Protecting the international market of animal products

Animal epidemic prevention is playing a more and more important role in the development of animal husbandry. Some serious animal diseases occur from time to time and fail to be effectively controlled, which affect the international trade reputation of livestock and poultry products in China and lead to frequent obstacles in the export of livestock and poultry products. China is the world's largest meat producer, meat output accounts for more than a quarter of the world's total output, and the price is far lower than the international market price, such as China's 1 ton of pork more than 100,000 yuan, Europe and the United States per ton of pork is up to more than 500,000 yuan. But the meat exported each year only accounts for 1% of the world's exports and 0.8% of China's total meat output. In 2001 China's accession to the WTO in the first year, the export livestock facing the foreign "green barriers" block and returns for many times, on January 25, 2002, the European Union committee passed a resolution, a complete ban on imports of Chinese food of animal origin, January 28, 2002, after Japan announced to strengthen quarantine inspection of meat imports from China, and some countries have banned imports from China meat, causes our country meat product export suddenly get into trouble. In January 2004, China's GuangXi, HuBei and HuNan provinces after the outbreak of avian influenza, Japan, the republic of Korea, Singapore, Romania and Switzerland and other countries have taken measures to restrict or ban the import of our country's poultry products, at least for more than half a year.

(4) Protecting domestic market of animal products

If the quality of animal products in China is not improved, and the consumer confidence in domestic animal products is not restored, it will not only lose its competitiveness in the international market, but also lose a considerable domestic market share. Before China's entry into

wto, the import restrictions on animal products were mainly through tariff barriers and non-tariff barriers. After joining wto, this kind of trade barrier means is prohibited, the possibility that foreign animal product imports will increase greatly. A us research report at the end of 2002 pointed out that after China joined the WTO, the us would increase its pork and poultry exports to China and profit from the pork and poultry trade due to its comprehensive advantages. Since the end of 2002, China's animal products import growth range in the double digit above, higher than the urban and rural food consumption growth rate.

(5) Maintaining social stability

Animal epidemics lead to a decrease in private consumption and an increase in savings, while a decrease in consumption in the short term leads to a general decline in the economy. Government financial subsidies and tax incentives to mitigate the impact of the outbreak, such as government compensation to infected chicken farmers for culling chickens, have increased fiscal spending and led to slower economic growth and slower development plans. Fears of bird flu triggered selling on Jan. 26, 2004, the first day many Asian stock markets resumed trading after the lunar New Year holiday. Thailand's stock market, the most volatile, fell nearly 4% and the baht weakened. Some financial analysts believe a sell-off triggered by the outbreak could drag down Asian currencies.

(6) Optimize the investment environment

The crisis caused by animal diseases, especially the crisis that appears repeatedly in a short period of time and the crisis that lasts for a long time will have a negative impact on investment. Investors need a relatively stable and high degree of certainty investment environment to reduce the risk of investment, and the crisis will cause unemployment, curb consumer demand, lead to economic stagflation, etc., all these increase the uncertainty of investment environment. Uncontrolled outbreaks, or a long period of non-transparent information, can affect the international community's perception of animals and their products and even the investment environment in affected countries, resulting in a decline in trade.

5. Conclusion

Since China's entry into the world trade organization (WTO), there have been both advantages and disadvantages in the international market competition. In the competitive trade of animal products, the effectiveness of animal epidemic prevention work bears great responsibility and heavy tasks. We should not only make further improvements in technology, but also in management. Animal epidemic prevention work is directly related to the people's health and public health safety, related to the development of animal husbandry and farmers' income, related to social harmony and stability and sustained economic development. The rapid and stable development of animal husbandry not only promotes the development of prenatal feed processing industry, but also promotes the development of postpartum animal product processing industry, transportation, operation and other tertiary industries, increases the employment of urban and rural labor, and plays a very important role in stabilizing and increasing farmers' income. Therefore, strengthening animal epidemic prevention is of great significance to the protection and maintenance of financial stability and development.

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