

Study on the Abnormal Fluctuation of Chinese Agri-Food Price and the Prevention Measures

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Abstract: Agri-food price which both related to the core interest of farmers and the livelihood of residents, has shown abnormal fluctuation in recent years. The fluctuation not only poses tremendous impacts on producers and consumers, but also seriously affects the steady development of agricultural production and social stability. In this paper, we study the reasons of abnormal fluctuation by considering the price formation mechanism of agri-food. The rising of agri-food value, the imbalance between supply and demand, the lag of macroeconomic regulation and the impact of relative factors are all taken into account. Finally, we put forward some prevention measures to prevent the agri-food price from the abnormal fluctuation.

1. Introduction

China is a major consumer and producer of agricultural products. The price of agricultural products is not only a core issue related to the interests of farmers, but also a livelihood issue that affects the lives of the people. Therefore, it has always been the focus of the party and the state (Li Ying et al., 2011). According to the statistics released by the National Bureau of Statistics in 2013, the weight of China's food-based consumer goods in the composition of CPI is still more than 30%. Agricultural products, as the most important food-consuming consumer goods and basic living materials, are not only the price of 100%. (Zhou Linjie, Xu Yanli, 2010 ; Cao Xiehe et al., 2011), and fluctuations in agricultural product prices are likely to drive changes in the prices of other types of commodities, thus having a tremendous impact on social production and people's lives. Therefore, the relatively stable price of agricultural products plays an important role in regulating the flow of labor and production resources between agriculture and non-agricultural industries, improving the allocation efficiency of labor and production resources, and ensuring people's lives and social stability.

However, since 2007, the prices of agricultural products in China have been unstable, and even severe fluctuations have occurred, which has brought great impact to both producers and consumers. From the point of view of the end consumers, according to the total agricultural product wholesale price index compiled by the Ministry of Agriculture on the domestic 500 wholesale markets and 489 agricultural product price surveys, the short-term large fluctuations of China's agricultural product prices in recent years, the medium and long-term continuous rise, non-periodic abnormal fluctuations, etc. (Cao Xiehe et al., 2011 [3]), triggered a series of serious agricultural product price fluctuations, which brought prominent problems to the end consumers, and directly increased the low- and middle-income groups. The burden of daily life. From the perspective of farmers at the production end, due to the lack of normal judgment on the market trend, and the fact that they are struggling to catch up with the market and always lag behind the market, the production of agricultural products often enters "the price rises – mass planting – oversupply – price falls – reduction planting – less than In the vicious circle of seeking - the price rises, it leads to outstanding problems such as "difficulty in selling vegetables" and "dangerous vegetables". It can be seen that the abnormal fluctuations in the prices of agricultural products in China have had a negative impact on production and consumption, and have caused widespread concern and attention in all aspects. In this year's No. 1 Document of the Central Committee, the focus of the work on "agriculture, rural areas and farmers" is mainly to accelerate the establishment and reform of agricultural related systems, to innovate agricultural management systems, and to establish and improve agricultural

development and governance mechanisms (the Central Committee of the Communist Party of China Several Opinions on Deepening Rural Reform and Accelerating Agricultural Modernization, Zhong Fa [2014] No. 1), hopes to further stabilize agricultural product prices by standardizing corresponding systems, reforming management systems and governance mechanisms, so that farmers can better share modernization results. Promote the increase of farmers' income.

From the perspective of Marxist economics, price fluctuations around value are the manifestations of the law of value. The fluctuation of prices is a normal phenomenon ("The Complete Works of Marx and Engels", Vol. 25, 1974), price fluctuations within the normal range. It is inevitable and reasonable. In addition, agriculture is an industry in which natural production and economic production work together. The fixedness of agricultural production space and the concentration of harvest time will also bring about cyclical fluctuations in agricultural product prices. However, the current real agricultural product price fluctuations in China are already outside the normal cyclical fluctuations, and exhibit short-term large fluctuations and non-cyclical abnormal fluctuations, especially the sharp rise or fall of agricultural product prices in a short period of time. And the "roller coaster" type of regional agricultural products has become a major problem that plagues the society. It is extremely unfavorable to the stable operation of China's agricultural production and social stability. Therefore, we must pay attention to and analyze the causes of abnormal fluctuations in the prices of agricultural products in China. Take effective measures to prevent abnormal fluctuations in agricultural product prices.

2. Reasons for abnormal fluctuations in agricultural product prices in China

The reasons for the abnormal fluctuation of agricultural product prices in China are more complicated and have many influencing factors. Therefore, we must start from the mechanism of agricultural product price formation and gradually analyze the main reasons. The so-called agricultural product price formation mechanism refers to the process of achieving equilibrium between various economic entities participating in the agricultural product industrial chain under the influence of certain external factors, and the agricultural product price is the market performance of this equilibrium state. form. Since the reform and opening up, the pricing reform of China's agricultural products has gone through four stages. From the initial stage of adjustment to the main method, the combination of adjustment and release has gradually transformed into a price dominated by market formation prices, supplemented by policy pricing, and a combination of factors. Form a mechanism. Therefore, the current formation mechanism of agricultural product prices in China is a process of formation under the joint effect of agricultural product value determination, market supply and demand, government macro-control, and related influencing factors, and through the analysis of the above various factors, we can better grasp The main reason for abnormal fluctuations in agricultural products prices.

(1) Reasons for the rise in the value of agricultural products. The value of agricultural products is not only the basic factor determining its price, but also the main factor determining its long-term price changes. In recent years, the value of China's agricultural products has shown a continuous upward trend in the medium and long term, which determines the corresponding increase in the price of agricultural products to a certain extent. The value of China's agricultural products continues to rise and prices increase. On the one hand, due to the long-term "scissors difference" policy of industrial and agricultural products, the price of agricultural products is artificially lowered, which deviates from the value law of agricultural products. Therefore, under the current market economy conditions, agricultural product prices have gradually returned to the law of value, resulting in an increase in the price of agricultural products along with their value. On the other hand, with the rising prices of agricultural production materials in China and the slow increase in agricultural production efficiency, the value of agricultural products continues to rise. From 2007 to the present, not only the prices of agricultural production materials have continued to rise, but also the cost of agricultural labor has increased significantly. In particular, the daily wages of short-term workers have increased by nearly 100% from 2008 to 2011 (Xing Ying, 2011) It also promoted the rise of the value of agricultural products to a certain extent. However, the rise in the value of

agricultural products in reality does not fully explain the several-fold increase in the price of agricultural products in the short term. For example, the price of garlic in Jinxiang, Shandong Province has soared nearly 8 times from May 2008 to January 2009, while the production of agricultural products in the same period. The increase in data and labor costs are all below 14%. It can be seen that although the increase in the value of agricultural products is one of the reasons for the increase in agricultural prices, it is not the main reason for the abnormal fluctuation of agricultural prices.

(2) Reasons for imbalance between supply and demand of agricultural products. The price of agricultural products is generally determined by the market mechanism, and is determined by the supply and demand relationship of agricultural products. Since different agricultural product market forms have different supply and demand relationships, market supply and demand is an important factor affecting the short-term fluctuation of agricultural prices, such as regional spreads. Factors such as seasonal price difference and time-of-day price difference may affect the fluctuation of agricultural product prices by affecting the supply and demand of agricultural products. From the perspective of the demand for agricultural products, since most agricultural products are essential for people's daily life, the demand for end products in agricultural products is generally relatively stable (ie, the elasticity of demand is low). Even if the price of agricultural products fluctuates greatly, it will not cause major changes in the demand of the end market. Therefore, changes in end-market demand are not the main cause of abnormal fluctuations in agricultural prices. From the perspective of the supply of agricultural products, it takes a long time for agricultural products to grow from planting to output, and the low mobility of agricultural assets in China, the higher the risk of farmers' production transformation, so the farmers' production behavior has strong one-way reactivity. Regardless of whether the price of agricultural products produced by them rises or falls, most farmers can only guarantee their income level by expanding or reducing the original planting amount. Therefore, farmers are only the recipients of agricultural products, not the deciders. Although the one-way reactivity of farmers will lead to changes in the supply of agricultural products, which will cause fluctuations in agricultural product prices, it can only affect the rising or falling trend of agricultural product price fluctuations, rather than the main cause of abnormal fluctuations in agricultural product prices. .

Through the in-depth analysis of the imbalance between supply and demand of agricultural products, it is found that the reasons for the abnormal fluctuation of agricultural product prices in China are mainly caused by the unbalanced supply and demand relationship of "one-sided" in the short-term under the existing market pattern. In the case of relatively stable market demand, this "one-sided" supply and demand relationship is usually caused by changes in market supply, especially the lag and asymmetry of supply and demand information. On the one hand, the current agricultural product price information release mechanism is still not perfect, which makes the agricultural product supply and demand information have the characteristics of lag and asymmetry, especially the information manipulation and utilization behavior of the intermediary of the circulation link, which leads to the strong leverage effect of agricultural product prices. The influence of news effects has caused a very imbalance between supply and demand information in agricultural products market in a short period of time; on the other hand, the surplus of hot money and the profitability of capital caused by the global financial crisis have intensified the motivation and behavior of information manipulation by intermediaries, especially At present, there is a lack of basic access system for the circulation of agricultural products in China, and the degree of organization of agricultural products is also low, which makes it easy for some middlemen to control and hoard the supply of goods, which leads to more opaque market supply and demand information in the circulation of agricultural products, thus directly targeting agricultural products. Fluctuation has an inductive effect and is one of the main reasons for abnormal fluctuations in agricultural prices.

(3) Reasons for the lag of macroeconomic regulation and control. In the current market economy transformation in China, price regulation is one of the important contents of the government's macro-control. Therefore, some scholars' research results reflect that the government's

macro-control lag is one of the important reasons leading to abnormal fluctuations in agricultural products prices. For example, the research results of scholars such as Hu Yansong (2010) show that the prices of products lacking government macro-control are more volatile. Therefore, from the perspective of macro-control, the abnormal fluctuation of agricultural products will inevitably have the reasons for weak government regulation. At the same time, in most Under the circumstances, the government's control measures are lagging behind, that is, after the occurrence of abnormal fluctuations, the corresponding control programs are implemented, and the corresponding early warning and plan mechanisms are lacking. Li Guoxiang (2011), Zhang Wenjun (2011) and other research found that social investment fluctuations usually cause synchronous fluctuations in agricultural product prices, especially the rapid changes in China's money supply growth in recent years, which also lead to abnormal fluctuations in agricultural product prices. important reason. In addition, some scholars have analyzed that inflation and austerity have affected the large-scale fluctuations in agricultural product prices to a certain extent. Studies such as Li Huimin and Guo Wei (2005) have shown that the price of agricultural products is rising too fast and inflation. There is a mutual influence relationship. The increase in the price of agricultural products is partly due to the overheating of the domestic economy and the rise in the price of agricultural materials, and the relationship between the two may be either one-way or two-way. There is also a consistent overall trend of change, and in the short term, there is a mutual influence of volatility, and there is co-integration and significant positive correlation in the long run; but some studies believe that (He Lei, Zhao Zhiqiang, 2011 The changes in the price index brought about by inflation and austerity are similar to the fluctuations in agricultural product prices in terms of trends. However, from the actual mechanism of action, the two do not exhibit mutual influence.

(4) Reasons for the impact of relevant factors. Many scholars have done a lot of research on the related factors of abnormal fluctuations of agricultural products prices in China, and verified the objectivity and possibility of their influence by using econometric models, mainly in the following aspects. First, the international market price factor, the link between China's agricultural product prices and the international market price is very close, the cross-border large grain traders in China's agricultural product acquisition strategic alliance, joint action of domestic and foreign speculative forces, etc., to a certain extent directly affect the price of agricultural products Volatility, especially the large-scale acquisition or sale of international and domestic capital, is very likely to be one of the main reasons for the abnormal fluctuations in agricultural prices, and the influx and withdrawal of these capitals often directly determine to a certain extent. Manipulated fluctuations in the price of agricultural products. Second, the futures price factor, that is, the impact of agricultural product futures prices on spot prices, is also one of the main reasons for abnormal fluctuations in agricultural product prices, in which Bao Chunsheng (2009), Wang Jun, Liu Yaqing (2007), etc. In the study, it shows that there is a long-term dynamic equilibrium relationship between the agricultural product futures price and the spot price, which has the function of guiding the spot price. After introducing new futures trading varieties in the agricultural futures market, there are abnormalities in the spot prices of 8 agricultural products. Volatility has decreased significantly, indicating that the launch of agricultural futures has significantly reduced the volatility of spot prices (Du Caichao et al., 2011). Third, the price factors of related products, namely the price of agricultural consumer goods and the transmission of upstream and downstream product prices, such as Yang Xue (2010) and others through the use of simultaneous equation econometric model analysis, research proves agricultural product price fluctuations and agricultural consumer goods There is a certain internal economic logic, and it is found that there is a price transfer effect between various categories of agricultural products; Zhang Lijun and Zhang Xicai (2011) apply the cointegration model and VEC model to study the mutual transmission of the prices of upstream and downstream products in the agricultural product industry chain. The relationship found that there is a long-term cointegration relationship and a short-term decision relationship among the products at all levels of the agricultural product industry chain, which proves that the abnormal fluctuation of the upstream product price will cause abnormal fluctuations in the prices of downstream products. Fourth, the factors affecting price transmission, that is, abnormal fluctuations in agricultural product

prices often have strong price transmission effects. For example, Wang Chao and Bao Feng (2011) believe that for agricultural products of different scales, the price of small agricultural products is often changed first, which further affects the price of bulk agricultural products, and the fluctuation of small agricultural products is more intense. From the actual situation, small-scale agricultural products are only supplements and auxiliary products of bulk agricultural products, and have little impact on end consumers. However, the prices of such products are highly volatile, mainly because the overall supply of small-scale agricultural products is relatively large. Smaller, more prone to hot money hype, but also easy to hoard and store, thus bringing speculation to speculators. In addition, based on the comparison of the effects of related factors, Shao Weibao and Cui Yusheng (2011) based on the VAR model, using the impulse response function and the variance decomposition method to empirically analyze the influencing factors of agricultural product price fluctuation in China. It is found that the price of agricultural products has the greatest impact on its own volatility, followed by inflation, while the supply of money and the export of agricultural products have little effect on the price fluctuation of agricultural products; Yu Yan (2011) used the price transmission model to analyze the appreciation of the renminbi. The impact of agricultural product prices, money supply, real estate prices, etc. on domestic agricultural product prices, and the ability to influence these factors is gradually decreasing.

3. Prevention of abnormal fluctuations in agricultural product prices in China

Preventing abnormal fluctuations in agricultural product prices and maintaining relatively stable agricultural product prices will not only improve the efficiency of the allocation of labor and production resources, but also promote the stable and healthy development of agricultural production. At the same time, it will protect farmers' income and maintain the interests of end consumers, and even social stability and harmonious society. Both have an important role. Therefore, in view of the abnormal fluctuation of agricultural product prices in China, corresponding preventive measures should be taken from the following aspects.

(1) Improve the market organization form of agricultural products. Through the industrialization of agriculture, promote the transformation and upgrading of the agricultural industrial structure, improve the organizational level of agricultural production, trading and sales, and maintain a stable supply of agricultural products to avoid excessive fluctuations in agricultural prices. At the production end, it is necessary to promote the development of farmers' professional cooperatives, strengthen the organizational functions and information functions of farmers' professional cooperatives, enhance the market price-playing ability of farmers, and avoid the blindness and convergence brought about by the spontaneous adjustment of the structure of farmers, and through internal Mutual cooperation, complementary interests and other risks. At the same time, regional agricultural industry organizations can be established to guide the production and sales of specific agricultural products throughout the region, and further guide farmers to enter the field of agricultural product processing and sales, and effectively increase the enthusiasm of farmers. In the trading session, it is necessary to strengthen the government's financial support for the cultivation of agricultural products trading markets, encourage and support the development of trading intermediary organizations, establish multi-functional and multi-level agricultural products producing/selling wholesale markets, farmer's markets, direct sales of agricultural products, and actively explore the establishment of agricultural products. The auction market, continuously improve the productivity of agricultural products and reduce production costs, in order to control the abnormal fluctuations and rising space of agricultural products through the means of agricultural industrialization.

(2) Improve the circulation system of agricultural products market. Accelerate the construction of circulation industry infrastructure, establish and improve a modern agricultural circulation system, strengthen the innovation of agricultural product circulation channels, increase the institutional supply of agricultural products circulation, construct a smooth and effective market information and circulation service system, and adopt direct circulation methods such as agriculture-super-docking. Reduce the cost of circulation and improve the efficiency of agricultural products circulation. At the

same time, it is necessary to speed up the implementation of the agricultural product circulation model, accelerate the reform of the existing completely free and open agricultural product circulation system, implement institutional innovation, optimize the agricultural product industrial structure, extend the industrial chain, etc., effectively avoid and contain the information manipulation of the intermediary of the circulation link. The use of, control and hoarding of bad sources of goods, etc., to improve the transparency of agricultural product supply and demand information, and effectively prevent the issue of agricultural product prices in the circulation link soaring and falling.

(3) To exert the price control function of the futures market. Strengthen cooperation between financial institutions, futures exchanges, futures companies, spot companies and other entities, establish multi-species agricultural futures markets, set up agricultural futures market investment funds, improve the price discovery function of the futures market, and regulate the operation of the futures market. Further improve the order farming and give full play to the futures market's regulation of agricultural product prices. At the same time, correctly guide the investment of agricultural products, cultivate stable and diversified private capital investment channels, limit the price of agricultural inputs, improve investment efficiency, improve investment structure, supervise key markets, and monitor agricultural capital.

(4) Strengthen macroeconomic regulation and control of agricultural product prices. Government departments at all levels should strengthen the monitoring of agricultural product prices, establish a real-time monitoring system for agricultural product prices, increase the control of agricultural products market, strengthen the role of the government in regulating agricultural product prices, establish and improve the early warning mechanism for agricultural product price information, and strengthen the price protection of major agricultural products. Explore the establishment of agricultural product risk control funds or agricultural product insurance, improve the grain storage and storage system, enhance food control capacity, strictly control grain import and export quotas, and deep processing project approval; increase government financial and taxation, financial support for agriculture, and strengthen support policies. Implementation and credit efforts to promote rural tax and fee reform, increase subsidies for production materials, stabilize the prices of agricultural production materials, moderately control the continuous rapid rise in the value of agricultural products, explore the establishment of counter-cyclical price control mechanisms, etc., with active macro-control measures And means to effectively prevent abnormal fluctuations in agricultural product prices.

(5) Strengthen scientific and technological support for agriculture. Further increase support for agricultural science and technology, information and funds, improve agricultural production technology, promote the construction of agricultural product trading networks, improve the agricultural product trading network and information dissemination platform, strengthen the monitoring and release of agricultural product market prices and supply and demand information, and improve agricultural products. The transparency of supply and demand information and price information promotes the relative stability of agricultural product prices.

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