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Retraction

Retracted: The Dynamic Influence of Fiscal Expenditure on Farmers' Income in Guangdong Province Based on the Vector Autoregression Model

Security and Communication Networks

This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

(1) Discrepancies in scope

(2) Discrepancies in the description of the research reported

(3) Discrepancies between the availability of data and the research described

(4) Inappropriate citations

(5) Incoherent, meaningless and/or irrelevant content included in the article

(6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

[1] H. Y. Chien, "The Dynamic Influence of Fiscal Expenditure on Farmers' Income in Guangdong Province Based on the Vector Autoregression Model," *Security and Communication Networks*, vol. 2022, Article ID 4066642, 7 pages, 2022.

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Research Article

The Dynamic Influence of Fiscal Expenditure on Farmers' Income in Guangdong Province Based on the Vector Autoregression Model

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Using the skew integration theory and the establishment of a vector autoregression model (Var) to analyze the dynamic impact of fiscal expenditure on annual per capita net income of farmers, wage income, net operating income of farmers, and transferability and property income in Guangdong province from 1998 to 2019, the empirical findings show that government spending has a considerable favourable influence on farmers' yearly per capita net income, family operating net income, transferability, and property income. Fiscal spending has a lag time on the rise of yearly per capita disposable income, family operating net income, transfers, and property income, according to impulse response analysis and variance decomposition analysis, and then the contribution steadily grows. The government should continue to expand fiscal expenditure for agriculture, improving the marketing channel of agricultural products, to strengthen the efficiency of agricultural production, establishing agricultural project comprehensive evaluation standard and characteristic agriculture, vigorously develop rural fiscal agriculture capital allocation efficiency, and increase farmers' families annual per capita net income, net income of household operation, and transfer and property income.

1. Introduction

Agricultural development has consistently been the backward industry after industrialization in every place. In the period of industrial progress, agriculture is also considered to be one of the industries that need to provide protection. By the end of 2020, the disposable income gap between urban and rural residents in China was 2.56:1, and the number of rural residents was 551.62 million, accounting for 39% of the total population. In this dual economic development structure, apart from hindering the development of the agricultural economy and the quality of life of farmers, it has likewise become a major concern for the sustainable development of China's economy. With the global economic growth slowing down, increasing farmers' income and consumption has become the focus of the government. The CPC Central Committee issued the State to Accurately Understand the Position and Status of Agriculture, Rural Areas, and Farmers Work in 2021, which is the 18th no. 1

central document on agriculture, rural areas, and farmers work since 2000, demonstrating the critical role of rural residents in the country's economic development.

The government's primary way of improving farmers' income is via its fiscal policy of subsidising agricultural spending, which has a direct impact on farmers' income. Agricultural investment and development are both important. The majority of studies on the link between fiscal agricultural spending and farmer income are qualitative, with the following two features in the study variables: The first step is to examine the link between fiscal agriculture spending and single farmer income factors. For example, Wu and Hu adopted Granger causality test and selected countries from 1991 to 2010 to verify that fiscal expenditure on agriculture had a positive impact on farmers' income. [1] Xing studied the influence of fiscal expenditure on farmers' income in China and found that fiscal expenditure invested in agricultural plan will effectively increase farmers' income. [2] Yu studied the cointegration of urban residents' income,

agricultural fiscal policy expenditure, and farmers' income in Guangdong province. In the short term, agricultural support expenditure has no obvious effect on rural residents' income growth, and in the long run, it has a positive and weak effect on rural residents' income [3]. Wang believes that agricultural fiscal expenditure will increase peasants' income, and there is an obvious long-term equilibrium relationship between the two. Each additional 100 million yuan of agricultural fiscal expenditure will increase peasants' per capita net income by 1.88 yuan on average [4]. Yuan et al. analyzed the data of 31 provinces and cities in China from 2007 to 2016 and showed that fiscal expenditure on agriculture, forestry, fishing, and animal husbandry was regarded as fiscal agricultural input, and gross output value of agriculture, forestry, fishing, and animal husbandry was regarded as agricultural output. Empirical analysis was carried out to understand the impact of fiscal agricultural input on agricultural output, and a significant increase was noted in all regions. It also indicates that financial agricultural input has a positive impact on agricultural output [5]. Agricultural expenditures have a positive impact on agricultural output to varying degrees due to the original agricultural output basis.

Second, the main research focuses on the impact of agricultural policy on poverty alleviation, such as Jin Zehu and Wen-jing Dong's analysis of 16 cities in Anhui Province's inland open new heights policy which can promote the precise effect of poverty alleviation; the results show that open to the public policy can effectively reduce poverty, provide agricultural products market and pathways, and assist farmers in escaping poverty [5]. Luo believes that agricultural poverty alleviation should promote the industrialization of agriculture, formulate subsidy policies for agricultural enterprises, inject funds into large agricultural enterprises in poor areas, and expand the radiation effect, thereby improving agricultural output value and ultimately driving the development of poor areas [6]. The implementation of agricultural poverty alleviation policies has a certain impact on economic development. Li researched Zhangjiakou, Hebei province, to implement agricultural poverty alleviation work. Even if funding for poverty alleviation, there are still some structural problems. Farmers rely mainly on government subsidies. However, lacking of the ability of self-reliance, rural low value-added agricultural products, and low agricultural production, farmers are difficult to rely on agricultural products as the main income, making farmers give up work in the countryside. In the end, it is not good for agriculture [7].

Therefore, in order to promote the development of farmers, this paper mainly conducts an empirical analysis of farmers' income by examining the financial expenditure for agricultural support and makes relevant policies for agricultural development to solve the problem of farmers' income.

2. 2. Variable Selection and Data Processing

2.1. Selection of Variables. This study selected 1999–2019, the year of the family per capita net income of farmers, farmers' salary income of Guangdong province, farmers' net income

of household operation, and transfer and property income, financial expenditure for supporting agriculture, and data from Guangdong statistical yearbook, on $y1$, $y2$, $y3$, and $y4$, and represented the $x1$ and the consumer price index in 1999 as the base, adjusting the data for each year. To eliminate heteroscedasticity, logarithms of time series data were calculated, represented by ln ($y1$), ln ($y2$), ln ($y3$), ln ($y4$), and ln ($x1$), respectively. Take F [ln ($y1$)], F [ln ($y2$)], F [ln ($y3$)], F [ln ($y4$)], and F [ln ($x1$)] to represent the difference after logarithm. The process of taking logarithms does not change the skew relations between variables, and the trend of change can be obtained.

2.2. Data Stationarity Analysis. In order to understand the stationarity of the data, Augmented Dickey-Fuller test was used and unit root stationarity test was performed on variables, based on the critical value of 5% significance level. The test results are shown in Table 1. The ADF statistics of ln ($y2$), ln ($y3$), ln ($y4$), and ln ($x1$) are all greater than the critical value, indicating that there is a unit root in the sequence and it is not stationary. However, the unit root test of the sequence after the difference of variables shows that, except ln ($y2$), the ADF statistics of other sequences are less than the baseline critical value, indicating that the first-order time series is stable.

2.3. Skew Test of Data. According to Johansen's skew test (Table 2), a skew relationship exists between variables ln ($x1$), ln ($y1$), ln ($y3$), and ln ($y4$) at a significant level of 5%. That is to say, there is a long-term and stable relationship between financial support for agriculture expenditure and annual per capita net income of farmers' families, net operating income of farmers' families, and transfer and property income. The skew test is performed with each variable.

($y1$) and ln ($x1$) pass Johansen's skew test, as shown in Table 3. At the significant level of 5%, the critical value is 25.87211, and the statistic of this hypothesis is 36.63311. The statistic is greater than the critical value, so the null hypothesis is rejected. Then observe the null hypothesis that there is at most one skew relationship. The statistic under this hypothesis is 5.642221, and the critical value less than 5% is 12.51798, so the null hypothesis cannot be rejected. The statistical test results show that there is a skew relationship at 5% level.

The integral equation of ($y1$) and ln ($x1$) is

$$\text{Ln}(y1) = 1.188169 + 0.28\text{Ln}(x1). \tag{1}$$

A coefficient of 0.28 indicates that when Guangdong province's fiscal expenditure on agriculture has an impact on the annual per capita net income of rural households, that is, every 1% increase in fiscal expenditure on agriculture will increase the annual per capita net income of rural households by 0.28%. Therefore, Guangdong province's fiscal expenditure policy to support agriculture has an impact on the annual per capita net income of farmers.

($y3$) and ln ($x1$) pass Johansen's skewness test, as shown in Table 4. At the significant level of 5%, the critical value is

Table 1: Fiscal agricultural expenditure and related agricultural income variables of Guangdong province.

Variable	Test form (constant term, time trend term, lag order)	The ADF statistics	P value	Stationarity
ln ($y1$)	(c, 0, 4)	−2.204229	0.2157	Unstable
F [ln ($y1$)]	(c, 0, 4)	−2.988177	0.0700	Stable
ln ($y2$)	(c, 0, 4)	−5.705740	0.4034	Unstable
F [ln($y2$)]	(c, 0, 4)	−4.669838	0.1019	Unstable
ln ($y3$)	(C, t, 4)	−0.684876	0.8388	Unstable
F [ln($y3$)]	(C, t, 4)	−3.601637	0.0256	Stable
ln ($y4$)	(C, 0, 4)	−0.651713	0.8230	Unstable
F [ln($y4$)]	(c, 0, 4)	−2.969734	0.0457	Stable
ln ($x1$)	(c, 0, 4)	−4.168655	0.0105	Stable
F [ln($x1$)]	(C, t, 4)	−3.239641	0.0480	Stable

Table 2: Each variable of Johansen cointegration test.

Hypothesized no. of CEs	Eigen value	Trace statistic	0.05 critical value	Prob.
None*	0.989307	54.45797	32.11832	0.0007
At least one cointegration relationship	0.755888	27.86583	42.91525	0.6301

*denotes rejection of the hypothesis at the 0.05 level

Table 3: ($y1$) and ln ($x1$) in Johansen cointegration test.

Hypothesized no. of CEs	Eigen value	Trace statistic	0.05 critical value	Prob.
None*	0.940236	36.63311	25.87211	0.0016
At least one cointegration relationship	0.401261	5.642221	12.51798	0.5070

*denotes rejection of the hypothesis at the 0.05 level.

Table 4: ($y3$) and ln ($x1$) in Johansen cointegration test.

Hypothesized no. of CEs	Eigen value	Trace statistic	0.05 critical value	Prob.
None*	0.852633	21.06315	19.38704	0.0283
At least one cointegration relationship	0.485595	7.312178	12.51798	0.3130

*denotes rejection of the hypothesis at the 0.05 level.

19.38704. The null hypothesis is rejected since the statistic for this hypothesis is 21.06315, which is bigger than the critical value. Then consider the null hypothesis, which states that there is only one skew connection. The null hypothesis cannot be rejected since the statistic under this hypothesis is 7.312178 and the critical value less than 5% is 12.51798. The statistical test results show that there is a skew relationship at the level of 5%.

$$Ln(y3) = 2.100651 + 0.38389 Ln(x1). \quad (2)$$

A coefficient of 0.38 indicates that when Guangdong province's fiscal expenditure on agriculture has an impact on the net operating income of farmers' families, that is, every 1% increase in fiscal expenditure on agriculture will increase the net operating income of farmers' families by 0.38%. Therefore, Guangdong province's fiscal expenditure policy for agriculture has a driving effect on the increase of net income of farmers' family operation.

($y4$) and ln ($x1$) pass Johansen's skew test, as shown in Table 5. At the significant level of 5%, the critical value is 25.87211. The statistic of this hypothesis is 45.70315, and the critical value is less than the statistic, so the original hypothesis is rejected. Then observe the null hypothesis that there is at most one skew relationship. The statistic under

this hypothesis is 12.31377, and the critical value less than 5% is 12.51798, so the null hypothesis cannot be rejected. The statistical test results show that there is a skew relationship at the level of 5%.

$$Ln(y4) = -1.700546 + 0.24232 Ln(x1). \quad (3)$$

In Guangdong province, a coefficient of 0.24 reflects the impact of fiscal spending on agricultural transfer and property income; that is, for every 1% rise in agricultural fiscal expenditure, farmer transfer and property income increases by 0.24 percent. As a result, in Guangdong province, fiscal spending on agricultural assistance has a driving influence on the improvement of transfer and property income. Fiscal spending on agriculture in Guangdong province has a driving influence on yearly per capita net income of farmers, net operating income of farmers, and transfer and property income and has a considerable impact on net operating income of farmers, as can be seen from the above.

3. Model Building and Estimation

Since ln ($y1$), ln ($y3$), ln ($y4$), and ln ($x1$) are first-order stationary sequences and have a skew relationship, VAR

TABLE 5: ($y4$) and ln ($x1$) in Johansen cointegration test.

Hypothesized no. of CEs	Eigen value	Trace statistic	0.05 critical value	Prob.
None*	0.964525	45.70315	25.87211	0.0001
At least one cointegration relationship	0.485595	12.31377	12.51798	0.0541

*denotes rejection of the hypothesis at the 0.05 level.

model is used to test the dynamic impact of fiscal agricultural expenditure on the annual per capita net income of peasant households, net operating income of peasant households, and transfer and property income.

$$Y_t = A_1 Y_{t-1} + A_2 Y_{t-2} + A_3 Y_{t-3} + \ldots + A_g Y_{t-g} + \varepsilon_t,$$

$$Y_t = \begin{pmatrix} \Delta \ln(x1_t) \\ \Delta \ln(y1_t) \\ \Delta \ln(y3_t) \\ \Delta \ln(y4_t) \end{pmatrix}, A_1, A_2, A_3 \ldots A_g. \quad (4)$$

It is parameter with estimation, g is lag intervals for endogenous variable, and $\varepsilon\_(t)$ is intervening variable.

As shown in Table 6, according to the principle of AIC and SC minimization, the optimal lag order is 2, that is, $g= 2$. Therefore, the second-order lag VAR model is established.

The results of VAR model estimation, such as residuals in Table 6, were tested for normality, autocorrelation, and heteroscedasticity. The results showed that, at the significance level of 5%, residuals met normal distribution, and there was no sequence autocorrelation or heteroscedasticity. In the stationary test, the modules of all the reciprocal roots of the VAR model are less than 1; that is, they are located within the unit circle, which means that the VAR model meets the stable condition. Because of the stable statistical properties of VAR model, it is possible to analyze the impulse response function and variance decomposition.

4. Impulse Response Function and Variance Decomposition

4.1. Impulse Response. The influence of the standard deviation of random disturbance terms on the present and future values of endogenous variables is measured by impulse response, which allows us to understand how the impacts of different endogenous variables in the model change over time. Using impulse response function analysis, fiscal expenditures for supporting agriculture in Guangdong province for year of the family per capita net income of farmers, farmers' net income of household operation, and transfer, as well as the influence of the property income, were studied. Figure 1 shows the response of each variable to the impact of endogenous variable, the vertical axis is the response of dependent variable to the variable, the horizontal axis is the number of tracking periods of 10 periods, the solid line in the figure is the response function curve of response impulse, and the two curves represent two confidence intervals of standard deviation.

Figure 1(a) results show that the influence of fiscal expenditure variables on the annual per capita net income of rural households in Guangdong province is positive. There

comes a time lag in this impact. The impact of Guangdong's fiscal expenditure on agriculture has no direct impact on the annual per capita net income of farmers in the current period. This influence reaction gradually shows a positive growth trend after the first period and reaches the maximum in the third period and then declines. Figure 1(b) shows the positive impact of 1 unit of annual per capita disposable income of peasant families. This impact has a positive effect on Guangdong province's financial agricultural expenditure, and there is no time lag, and it responds immediately in the contemporary period. The annual per capita net income of rural households shows a downward tendency as a whole in response to the impulse response of fiscal expenditure on agriculture in Guangdong province.

Figure 1(c) shows that the impact of fiscal agricultural expenditure variables in Guangdong province on the net operating income of farmers' families is positively correlated. There is a time lag in this effect. In the recent time, the influence of fiscal spending on agricultural assistance in Guangdong province had little effect on the net operational income of farmers' families. This effect did not appear until the second period, and it had an increasing trend until the third period, when it peaked, and then declined. On the other hand, the beneficial effect of 1 unit of net operational income of farmers' families may be shown in Figure 1(d). This effect is directly related to Guangdong province's fiscal spending on agricultural subsidies; there is no time lag, and the reaction is prompt in the present era. The impact on net operating income of farmers' families on the fiscal expenditure on agriculture in Guangdong province was negative in the first period and explicit in the second period, with the largest reaction. After the third period and until the 10th period, the overall stability approached 0.

Figure 1(e) shows that the impact of fiscal expenditure variables on farmers' transfer and property income in Guangdong province is positive. There comes a time lag in this effect. The impact of fiscal expenditure on agriculture in Guangdong province has no impact on farmers' transfer and property income in the current period. The impact slightly shows and increases after the second period and reaches the maximum in the third period, while it decreases from the third period to the tenth period. On the other hand, as showed in Figure 1(f), there is a positive impact of 1 unit of transfer and property income. This kind of influence has a positive correlation effect on Guangdong province's financial agricultural expenditure, and there is no time lag, which is reflected immediately. The impact of farmers' transfer and property income on fiscal agricultural expenditure of Guangdong province is positive in the first stage, negative in the second stage, positive in the third stage, and positive in the third stage to the tenth stage and gradually approaches 0.

TABLE 6: Parameter estimation results of VAR model.

|	$\ln(x1_t)$	$\ln(y1_t)$	$\ln(y3_t)$	$\ln(y4_t)$
$\ln(x1_{t-1})$	0.128564 (0.13071)	0.112864 (0.14413)	−0.017328 (−0.00324)	0.123858 (0.37886)
$\ln(x1_{t-2})$	−0.388652 (0.20019)	−0.291462 (0.22074)	−0.150859 (0.02737)	0.754361 (0.58024)
$\ln(y1_{t-2})$	−0.276519 (0.53073)	−0.937558 (0.58519)	−0.862170 (0.07256)	2.890458 (1.53828)
$\ln(y3_{t-1})$	−0.114917 (0.74095)	−0.881119 (0.81698)	−1.251722 (0.10130)	3.963950 (2.14757)
$\ln(y3_{t-2})$	−2.355992 (0.70239)	−1.347374 (0.77447)	−1.290444 (0.09603)	2.966032 (2.03582)
$\ln(y4_{t-1})$	−0.193354 (0.15998)	−0.276362 (0.17639)	0.519264 (0.02187)	−0.018846 (0.46368)
$\ln(y4_{t-2})$	1.348782 (0.49202)	1.241125 (0.54251)	0.902525 (0.06727)	−2.344535 (1.42607)
c	4.148311 (5.68509)	10.26823 (6.26849)	15.56484 (0.77726)	−32.26640 (16.4778)
F-statistic	111.3480	28.29598	2721.911	38.25993
Adjusted R-squared	0.988799	0.956211	0.999541	0.967541
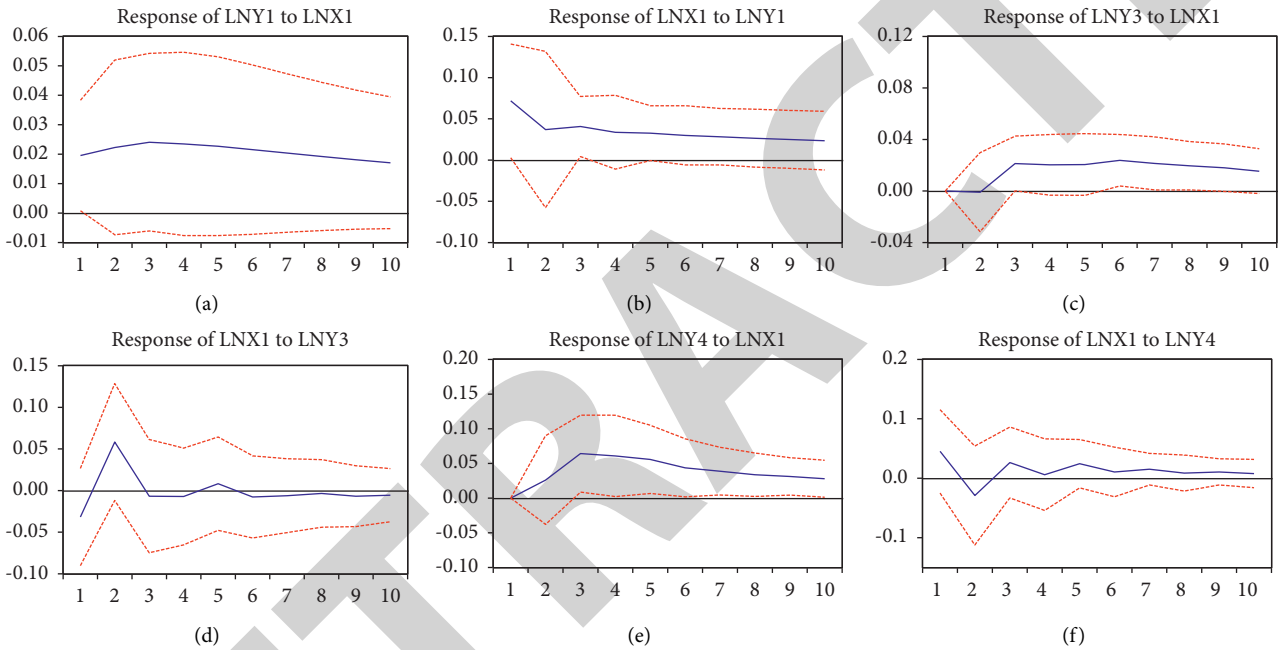
FIGURE 1: Pulse balance effect of each variable. (a) Response of LNY1 to LNX1, (b) response of LNX1 to LNY1, (c) response of LNY3 to LNX1, (d) response of LNX1 to LNY3, (e) response of LNY4 to LNX1, (f) response of LNX1 to LNY4.

4.2. Variance Decomposition. In the VAR model, variance decomposition can not only analyze the causality test outside the sample period, but also decompose the unit change of each variable into a certain proportion of its own variation factors and the contribution of other variables, mainly for the dynamic representation of the research model. The variance decomposition of the original model is performed, and the influence of fiscal expenditure on the annual per capita net income, net operating income, and transfer and property income of rural households is judged.

The variance decomposition results are shown in Tables 7–9. The fiscal expenditure on agriculture in Guangdong province has a significant impact on the annual per capita net income of farmers' families, net operating income of farmers' families, and transfer and property income. In terms of the annual per capita net income of rural migrant workers' families from fiscal expenditure on agriculture in Guangdong province, according to Table 7, the contribution has been significant since the second period, and the

contribution of this impact shows an increasing phenomenon. In the 10th phase, the contribution reached 8.34%. It shows that fiscal expenditure on agriculture has a long-term effect on promoting the increase of annual per capita disposable income of households in Guangdong province, and this result is in agreement with impulse response analysis.

Table 8 shows the variance decomposition of the variables of fiscal agricultural expenditure in Guangdong province to the net operating income of farmers' families. As the second phase progresses, the contribution becomes more important, and the disturbance contribution becomes more noticeable. The contribution reached 36.02 percent in the tenth period, demonstrating that agricultural fiscal spending in Guangdong province has a long-term boosting influence on farmers' net operating income, which is consistent with impulse response analysis.

Variance in Guangdong province: decomposition of fiscal agricultural spending factors on farmers' transfer and property income (Table 9) reveals that the contribution has

Table 7: Variance decomposition of ln ($y1$).

Period	S.E.	LNY1	LNX1
1	0.034070	100.0000	0.000000
2	0.045471	97.87930	2.120700
3	0.054777	95.89167	4.108326
4	0.062082	94.57534	5.424659
5	0.068050	93.62533	6.374667
6	0.072971	92.96972	7.030277
7	0.077093	92.49074	7.509259
8	0.080577	92.13615	7.863847
9	0.083547	91.86482	8.135184
10	0.086095	91.65320	8.346805

Table 8: Variance decomposition of ln ($y3$).

Period	S.E.	LNY3	LNX1
1	0.062847	100.0000	0.000000
2	0.070796	99.98306	0.016938
3	0.074899	91.89123	8.108774
4	0.080570	86.66012	13.33988
5	0.083767	81.66711	18.33289
6	0.087212	75.62589	24.37411
7	0.089933	71.42140	28.57860
8	0.092041	68.20065	31.79935
9	0.093794	65.67916	34.32084
10	0.095047	63.97111	36.02889

Table 9: Variance decomposition of ln ($y4$).

Period	S.E.	LNY4	LNX1
1	0.118151	100.0000	0.000000
2	0.144424	96.78134	3.218663
3	0.166441	82.75314	17.24686
4	0.178716	73.51450	26.48550
5	0.188646	67.50303	32.49697
6	0.194712	64.49021	35.50979
7	0.199829	62.52396	37.47604
8	0.203619	61.17828	38.82172
9	0.206822	60.09860	39.90140
10	0.209286	59.26360	40.73640

been large since the second period, and the effect contribution is growing. In the 10th phase, the contribution reached 40.73%. It shows that fiscal expenditure on agriculture in Guangdong province has a long-term promoting effect on farmers' transfer and increase of property income, which also accords with the results of impulse response function analysis.

Through the variance decomposition, it can be seen that the fiscal expenditure on agriculture in Guangdong province has a positive impact on the annual per capita net income of farmers, the net operating income of farmers, and transfer and property income, among which the net operating income of farmers and transfer and property income are more significant.

5. Conclusions and Suggestions

From 1998 to 2019, the Guangdong finance support agriculture expenditure has been conducting a dynamic impact study on farmers' income. And using relevant statistical

analysis and measurement, it is concluded that there is a long-term stable relationship between fiscal expenditure on agricultural support and the per capita net income of farmers, the net operating income of farmers, and the long-term stable transfer and property income of farmers. This driving effect did not occur in the first period of financial support for agriculture expenditure but lagged behind, after the second period of contribution to an increasing trend. The research shows that although the fiscal expenditure of Guangdong province has no obvious effect on promoting the growth of annual per capita net income, net operating income, and transfer and property income of farmers' families in the short term, it has an increasing trend year by year in the medium and long term. On behalf of Guangdong province, in addition to continuously increasing agricultural expenditure policies, we should also pay greater attention to the structure and direction of fiscal agricultural expenditure and improve the efficiency of agricultural fund use.

We will continue to enhance government spending on agricultural support in Guangdong province. Fiscal expenditure for supporting agriculture to increase family annual per capita net income of farmers, farmers net income of household operation, and transfer and property income has a positive impetus effect, driving the effect as the function of the accumulated year by year, so the fiscal expenditure for supporting agriculture can guarantee family annual per capita net income of farmers, farmers net income of household operation, and transfer and property income. Among them, we should set the scope of financial support for agriculture expenditure, strengthen the strength of financial support for agriculture expenditure, standardize financial support for agriculture expenditure from the system, make the policy of more efficient implementation, construct a more perfect agricultural product sales channel, improve agricultural production efficiency, and accelerate the construction of agricultural infrastructure and other diversified financial support for agriculture expenditure policy.

Establish thorough guidelines for agriculture project appraisal. Currently, the fiscal agricultural expenditure in Guangdong province is primarily focused on maximising agricultural output value; that is, the limited agricultural expenditure is invested in agricultural projects that produce excellent results, but it ignores agriculture's sustainable development characteristics, which has an impact on the driving effect of fiscal agricultural expenditure on farmers' income. As a result, when investing financial agricultural expenditure, it is necessary to consider the current situation, consider the order of input, form effective agricultural expenditure, and improve the efficiency of capital investment and use; only in this way can farmers' income be sustained and stable. We will vigorously develop agriculture with rural characteristics. The government's financial input to agriculture should consider the agricultural development characteristics of prefecture-level cities, promote the overall rural economic growth with fiscal expenditure policies, and make more financial support to use the multiplier effect for agricultural production with characteristics. More attention should be given to understanding the pastoral characteristics

of prefecture-level cities, and funds should be invested in appropriate characteristic agriculture, so as to improve the allocation efficiency of funds and affect the improvement of farmers' income in the long run.

Data Availability

The data used to support the findings of this study are included within the article.

Conflicts of Interest

The author declares that are no conflicts of interest.

Acknowledgments

References

[1] Z. Wu and Y. Hu, "An empirical study on the relationship between financial support for agriculture and farmer income," *Jianghan Forum*, vol. 1, pp. 58–62, 2013.

[2] W. Y. Xing, "The impact of China's fiscal expenditure in agriculture on farmer's income," *Asian Agricultural Research*, vol. 2, no. 5, pp. 1–4, 2010.

[3] Z. W. Yu, "Co-integration analysis of urban resident's income agricultural financial expenditure and farmers' income," *Asian Agricultural Research*, vol. 1, no. 11, pp. 8–12, 2009.

[4] J. P. Wang, "Demonstration on effect of agricultural finance expenditure on farm income," *Journal of Anhui Agricultural Sciences*, vol. 35, no. 10, pp. 3098-3099, 2007.

[5] L. Yuan, L. Zhao, and H. Chenzhi, "Analysis of the impact of fiscal agricultural inputs on agricultural output in China: quantile regression based on inter-provincial panel data," *Journal of southwest university of science and technology*, vol. 36, no. 1, pp. 93–99, 2019.

[6] J. S. Luo, "Enlightenment of agricultural poverty alleviation policies in developed countries from the perspective of agricultural modernization," *World Agriculture*, vol. 413, pp. 63–66, 2013.

[7] M. W. Li, "Research on agricultural poverty alleviation in Zhangjiakou from the perspective of targeted poverty alleviation," *Shanxi Agricultural Economics*, vol. 5, p. 26, 2018.