

Can E-Commerce Policies Drive Common Wealth Levels — A Study Based on County-Level Data in China, 2012-2020

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Abstract. Based on national county panel data from 2012 to 2020, this study systematically examines the impact of the comprehensive e-commerce into rural areas demonstration project implemented in rural China on promoting the level of common wealth by applying the multi-period double-difference method (DID). It is found that the e-commerce policy significantly enhances the level of common wealth. Further analysis of the impact mechanism shows that the policy effectively promotes the goal of common prosperity by enhancing the level of rural employment. In addition, the positive effect of the e-commerce policy is strengthened by the increase in the level of local government fiscal expenditure, however, the driving effect of the policy is weakened by the higher level of social consumption. Heterogeneity analyses indicate that the policy's promotional effect is particularly significant in the demonstration counties of the Yangtze River Economic Belt. This paper fills the research gap on the relationship between rural e-commerce policy and the level of common wealth, and provides empirical evidence and policy recommendations for related policy formulation.

Keywords: Rural e-commerce; common wealth; Yangtze River Economic Belt; multi-period double-difference approach.

1. Introduction

The rise of the digital economy has provided new perspectives and tools for promoting common prosperity in urban and rural areas. Digital transformation, especially the development of rural e-commerce, has become an important force in promoting structural reform of the agricultural supply side and activating the rural revitalisation strategy. Rural e-commerce not only innovates the transaction mode of agricultural products, but also provides new channels for farmers to increase their income and upgrade the agricultural industry. In recent years, China has actively pursued a comprehensive rural e-commerce demonstration project aimed at promoting the development of the rural e-commerce sector and facilitating the modernisation of rural areas. The policy has not only broadened the scope of rural e-commerce practice, but also injected an innovative impetus into local economies. As the cornerstone of regional development, high-quality economic growth in counties plays a central role in China's overall prosperity in the new era (Li Jiao, 2023) [1]. Rural e-commerce, an emerging model, has effectively narrowed the digital divide between urban and rural areas by promoting the deep integration of information technology and the rural economy, enhancing the development potential of agriculture and rural areas, and providing a new opportunity for rural modernisation and high-quality growth of county economies.

However, with further research on rural e-commerce in recent years, some studies have argued that while it can promote farmers' income growth, it may also increase the income gap between regions and negatively affect the realisation of the goal of common prosperity (Zeng Yiwu et al., 2018; Li Yi et al., 2021) [2-3]. E-commerce policies, depending on the region in which they are implemented, may result in differences in income promotion effects, which may lead to a widening of the economic gap between regions. However, the data used in existing empirical studies are usually provincial panel data with large data granularity, making the results inconsistent (Chen Xiangguang et al., 2021) [4]. In addition, the data used in existing studies are less current, and few studies use economic data from recent years to explore the latest effects of e-commerce policies.

This paper explores the impact of e-commerce policies on the level of common wealth by analysing national county panel data from 2012 to 2020 and taking the comprehensive demonstration project of e-commerce into rural areas as the research object, and contributes in the following aspects:(1) Empirically testing the impact of e-commerce into rural areas policies on the level of common wealth, enriching the research on the effects of rural e-commerce policies. (2) It explores the heterogeneous characteristics of the policy implementation effects of e-commerce demonstration counties inside and outside the Yangtze River Economic Belt, providing a new perspective for understanding the mechanism of e-commerce policies for common prosperity in different regional economic environments. (3) Reveals the specific mechanisms through which e-commerce policies promote common prosperity by influencing key factors such as the proportion of rural employment, local government fiscal expenditure and social consumption levels. (4) The use of county-level data and multi-period double-difference analysis method solves the problems of data granularity and endogeneity, and improves the accuracy and credibility of the study.

2. Literature Review and Research Hypothesis

2.1. Literature Review

Rural e-commerce broadens the sales channels of agricultural products by breaking down geographical restrictions and provides farmers with more opportunities to increase their income. Guo et al. (2022) [5] establish a system of indicators for evaluating rural e-commerce in China and identify the main barriers and development countermeasures, highlighting the potential of rural e-commerce for rural development. Li's (2022) [6] study points out that e-commerce is able to break down the information barriers and increase poor farmers' participation and thus increase the income level of farmers. Yan et al. (2022) [7] discussed the impact of e-commerce on agricultural productivity. The study found that the adoption of e-commerce improves agricultural productivity by optimising the allocation of agricultural resources, thus promoting farmers' income. Yin et al. (2022) [8] demonstrated that e-commerce can help to increase farmers' income and reduce the urban-rural income gap in China, and that e-commerce has a better effect on reducing the income gap in areas with higher levels of public expenditure and education. Yu et al. (2021) [9], in analysing the impacts of rural e-commerce development on rural households' digital credit behaviour found that e-commerce has a positive impact on the digital credit and actual credit scale obtained by farmers, which is more conducive to farmers' entrepreneurship and income generation. Su et al. (2021) [10] explored the impact of e-commerce on farmers' participation in the financial market in China, and pointed out that e-commerce can, through the intermediary role of digital financial literacy, increase farmers' participation in and influence, thereby improving farmers' income. The above studies provide insights into the impact of rural e-commerce on shared prosperity by focusing on the information gap in rural markets, resource allocation, and farmers' digital credit behaviour and financial markets. Other studies have found that government-led e-commerce expansion projects can increase the incomes of rural households, especially low-income households (Chen et al., 2024) [11]. Positive impacts are attributed to reductions in information-seeking costs and transport costs, as well as government interventions such as the promotion of Internet-related skills and the expansion of formal financial credit support (Li et al., 2017) [12]. In addition, the growth of e-commerce can be effective in narrowing the rural-urban income gap, especially when factors such as urbanisation rate, industry ratio, dependency ratio and human capital are controlled for (Kokkai et al., 2022) [13]. Overall, the impact of e-commerce on the level of shared wealth in rural areas depends on various factors and policy interventions. However, some studies have shown that while e-commerce raises rural incomes, urban dwellers benefit more than rural dwellers from e-commerce development thus widening the urban-rural income gap (Yang et al., 2023) [14]. Nonetheless, most of the literature argues that the development of rural e-commerce has helped to raise the income level of farmers, thereby promoting common prosperity.

Existing studies suffer from deficiencies in data timeliness and empirical testing. Most of the literature adopts data with poor timeliness, failing to reflect the latest development of current rural e-commerce and its impact on the level of common wealth in a timely manner. In addition, existing empirical analyses tend to ignore the possible bidirectional causality between rural e-commerce development and farmers' income (Zheng et al., 2023) [15], as well as deficiencies in heterogeneity analyses and a lack of in-depth studies in specific regions, such as the Yangtze River Economic Belt.

Therefore, this paper will use newer and less granular county data for empirical tests, focusing on exploring the impact of the Yangtze River Economic Belt on the promotion of related policies. At the same time, the impact mechanism of rural e-commerce on the level of common prosperity will be comprehensively analysed from the perspectives of rural employment level, local government financial expenditure and the overall consumption level of the society

2.2. Research hypothesis

There is a serious information asymmetry problem in the agricultural economy, which has a direct impact on the operational efficiency of agricultural markets and farmers' incomes. Especially in extensive rural areas, farmers and consumers face high transaction costs due to limited access to information and poor logistics (Fang Shile et al., 2024) [16]. The rise of e-commerce and its entry into rural areas provide new ways to address these issues. E-commerce platforms have effectively facilitated direct contact between the supply and demand sides of agricultural products by optimising the flow of information and enhancing transaction transparency, reducing price inequity caused by information imbalance and thus promoting farmers' income (George et al., 2016; Qin Fang et al., 2022) [17-18].

The direct market access of e-commerce platforms not only improves the bargaining power of farmers and reduces the friction costs of intermediate links, but also provides more diversified marketing channels for agricultural products and expands the scope of sales. This flexible market responsiveness helps farmers adjust their production strategies according to market demand, improves the market adaptability and responsiveness of agricultural production, which creates more jobs, reduces the cost of rural labour and improves the shortage of rural human resources (Wang Jinjie et al., 2017) [19].

Taken together, the application of e-commerce as an innovative technology not only directly promotes the economic development of rural areas and reduces the urban-rural economic disparity, but also provides an important impetus for the realisation of common prosperity by promoting rural employment and entrepreneurship. Therefore, this paper proposes the following hypotheses:

Hypothesis 1: E-commerce into rural areas policy can promote the increase of common wealth level.

Hypothesis 2: E-commerce into rural areas policy can promote the level of common prosperity by increasing the level of rural employment as a channel.

The implementation effects of policies vary in different regions, and the rural e-commerce policy is no exception. The high degree of regional integration in the Yangtze River Economic Belt region ensures an efficient response to policy implementation and optimal resource allocation, which further enhances the effectiveness of e-commerce application. In addition, residents in the Yangtze River Economic Belt generally have a high level of education, which provides a solid foundation for the effective use of e-commerce technologies and the maximisation of benefits (Zhou Yahong et al., 2023) [20]. Together, these factors contribute to the unique advantages of the Yangtze River Economic Belt in e-commerce development. Therefore, this paper makes the following hypotheses:

Hypothesis 3: In the e-commerce into rural areas policy, the demonstration counties located in the Yangtze River Economic Belt will show a more significant policy promotion effect in terms of promoting the level of common wealth compared to non-Yangtze River Economic Belt regions.

According to the theory of consumer behaviour, purchase decisions are influenced by factors such as income level, personal preference, and product quality and price. As the level of social consumption rises, consumers tend to pursue high-quality goods and services as the mainstream. However, China's

agricultural products market has a large uncertainty of product quality due to the problems of insufficient regulation and asymmetric market information (Zhu Xiumin, 2024) [21]. This situation reduces the public's expectation of the quality of agricultural products, which in turn undermines the market reputation and brand building of rural commodities. In this context, the increase in the level of social consumption has prompted consumers to pay more attention to product quality and branding. However, due to the challenges faced by rural e-commerce platforms in terms of product quality enhancement and branding, consumer spending has favoured products from urban and high-end markets over those from rural areas. This undermines the effectiveness of rural e-commerce in promoting local economic growth and realising the goal of shared prosperity. Therefore, the paper proposes the following hypothesis:

Hypothesis 4: The increase in the level of social consumption has a negative moderating effect on the e-commerce in rural areas policy to promote the level of common wealth.

The level of fiscal expenditure of local governments plays a crucial role in promoting regional economic development, especially the growth of the rural economy and common prosperity. Investment in infrastructure creates the necessary physical and technological prerequisites for the distribution and marketing of agricultural products. This infrastructure improvement not only provides fundamental support for the rise and expansion of rural e-commerce, but also opens up new economic growth points for rural residents (Chan and Al-Hawamdeh, 2003) [22]. Further, substantial investment in education, training and innovative technologies by local governments in their fiscal expenditures is the key to upgrading rural human capital and empowering rural areas for e-commerce adoption. Based on the above analyses, this paper makes the following hypotheses:

Hypothesis 5: The increase in the level of local government fiscal expenditure has a positive moderating effect on the e-commerce in rural areas policy to promote the level of common wealth.

3. Model Setting and Variable Selection

3.1. Model Setting

The multi-period DID model constructed in this paper is as follows

$$Y_{it} = \beta_0 + \beta_1 \text{treated}_i \times \text{time}_t + \sum \mu X_{it} + \delta_i + \nu_t + \varepsilon_{it} \quad (1)$$

In Equation (1), i denotes county, t denotes time. y is the explanatory variable, denoting the level of common wealth. treated represents whether the sample is an e-commerce demonstration county, assigning a value of 1 if it is, and 0 otherwise. time represents whether the sample is in the year of policy implementation, assigning a value of 1 if it is, and 0 otherwise. x represents all the control variables. δ represents the area fixed effects, and ν represents time fixed effects. ε represents the unexplained random error term. ε represents a random error term that cannot be explained.

3.2. Variable selection

1. Explained variables. The common wealth level in this paper refers to the practice of Pan Zejiang and Shi Ziming (2023) [23], and is expressed as the logarithm of the ratio of per capita disposable income in rural areas to per capita disposable income of urban residents.

2.Explanatory variables. The explanatory variables in this paper are expressed as the product of TREATED and TIME (DID) in equation (1).

3.Control variables. The control variables selected in this paper are the level of agricultural development (arg), expressed as the ratio of the value added of the primary industry to the local GDP; the level of industrial development (ind), expressed as the ratio of the value added of the secondary industry to the local GDP; the level of financial development (loan), expressed as the ratio of the balance of the loans of each institution to the local GDP at the end of the year; the government tax

revenue (*ltax*), expressed as the logarithm of the regional government tax revenue; and the population tax revenue (*lntax*). government tax (*lntax*), expressed as the logarithm of regional government tax revenue; population size (*lnpopulation*), expressed as the logarithm of regional resident population [24-25].

4. Other variables. The variables used in this paper to analyse the impact mechanism are the level of rural employment (*lnemployment*), the level of local government fiscal expenditure (*lngov*) and the level of social consumption (*lncon*). The level of rural employment is expressed as the logarithm of the ratio of the number of rural employees to the total population at the end of the year, the level of local government fiscal expenditure is expressed as the logarithm of the ratio of the general budget expenditure of the local finance to the regional gross domestic product (GDP), and the level of social consumption is expressed as the ratio of the total retail sales of consumer goods to the regional gross domestic product (GDP).

3.3. Data sources and descriptive statistics

The selection of demonstration counties in this paper is based on the list of comprehensive demonstration counties published on the official website of the Ministry of Commerce, with a total of 482 demonstration counties recorded. Other data come from urban and rural residents' income data in the statistical yearbook of each province in the corresponding year and the statistical bulletin of each county (city and district), as well as economic data. After screening and processing the data, the descriptive statistics of the variables are shown in Table 1.

Table 1. Descriptive statistics.

variable	sample size	mean	standard deviation	minimum value	maximum values
<i>arg</i>	8172	0.1694	0.1024	0.0039	0.7111
<i>ind</i>	8172	0.4323	0.1562	0.013	3.1262
<i>loan</i>	8172	0.7131	0.4748	0.0165	6.0985
<i>lnpopulation</i>	8172	3.7521	0.7838	0.0932	5.3236
<i>lntax</i>	8172	11.0453	1.2054	3.4657	15.5806
<i>lnemployment</i>	8172	-0.4106	0.5335	-4.2388	0.0432
<i>con</i>	8172	0.5591	0.5309	0.0537	13.2878
<i>lngov</i>	8172	-1.5866	0.6573	-5.3045	0.7302

4. Empirical findings

4.1. Baseline regression results

Table 2. Benchmark regression results.

variable	(1) Level of shared prosperity	(2) Level of shared prosperity
<i>did</i>	0.01991*** (0.0036)	0.0184*** (0.0035)
control variable	No	yes
Fixed area	Yes	Yes
Fixed time	Yes	Yes
sample size	8172	8172
R ²	0.4563	0.4652

Note: *, **, *** denote 10%, 5%, and 1% significance levels, respectively; clustering robust standard errors are in parentheses

The analysis of the data in column (1) of Table 2 shows that e-commerce policies into agriculture exhibit a significant positive relationship with the level of common wealth with a significance level of 1% under the condition of considering only region and time fixed effects. This suggests that e-commerce policies have a significant contributory role in promoting common wealth. After adding other control variables, the results still show that the policy has a significant positive impact on common wealth and can increase the level of common wealth by 1.69 per cent, with a significance level of 1 per cent still. Technological innovation is one of the main driving forces of endogenous economic growth. As a manifestation of technological innovation, e-commerce platforms enable rural products to directly reach a wider market by improving information transparency and reducing transaction costs. This effectively narrows the information gap between rural and urban areas, enabling farmers to have instant access to market dynamics, thereby reducing economic losses.

4.2. Parallel trend test

This study verifies the basic hypothesis of the multi-period double-difference (DID) analysis: The figure 1 shows that there is no significant difference or a similar trend of change in the level of common wealth between the demonstration counties and the non-demonstration counties before the implementation of the policy. Before the implementation of the policy, the effect of increasing the level of common wealth between the demonstration counties and non-demonstration counties is not significant; however, in the second year after the implementation of the policy, this effect is significantly enhanced; by the fourth year, the dynamic effect of the policy is gradually weakened, and the effect of the increase in common wealth is no longer significant. Therefore, the sample data of this paper fulfils the conditions of the parallel trend hypothesis.

4.3. Robustness test

Table 3. Results of replacing explanatory variables.

variable	(1) Level of shared prosperity	(2) Balance of deposits per inhabitant (in logarithms)
<i>did</i>	0.0184*** (0.0035)	0.0411*** (0.0076)
Control Variables	yes	yes
Fixed area	yes	yes
Fixed time	yes	yes
variables	(1) Level of shared prosperity	(2) Balance of deposits per inhabitant (in logarithms)
Sample size	8172	8118
R ²	0.4652	0.8691

Note: *, **, *** denote 10%, 5%, and 1% significance levels, respectively; clustered robust standard errors in parentheses

In order to investigate the robustness of the benchmark regression, this paper replaces the explanatory variables with the logarithm of the per capita deposit balance of residents to represent the level of common wealth (Chen Lijun et al., 2021), and excludes outliers. Table 3 Column (1) and Column (2) show the results after the explanatory variables are replaced before and after the control variables are added, respectively. The results show that before and after the addition of control variables, the e-commerce in rural areas policy and the level of common wealth are positively related at 1% level of significance, and can be the level of common wealth increased by 2.94%. According to the above results, the regression results after replacing the explanatory variables are consistent and significant with the results before replacement, confirming the robustness of the benchmark regression results.

4.4. Placebo test

This study conducted a placebo test to ensure the validity of the findings. By simulating the same number of counties as the "pseudo" treatment group and randomly assigning them the time of policy implementation, the study re-estimated the multi-period DID model and repeated the process 1,000 times. Figure 2 show that the estimated coefficients on actual policy are significantly outside the range of the placebo distribution based on random fluctuations and are in the right tail of the placebo distribution. This suggests that actual policy has a significant positive effect on the study indicators, validating Hypothesis 1

4.5. PSM-DID methodology test

In order to ensure the robustness of the findings and to reduce potential sample selectivity bias, the impact of rural e-commerce policies was reassessed in this study using the PSM-DID methodology. In selecting the sample, the counties and districts where the e-commerce demonstration policy was implemented were used as the treatment group and the other districts as the control group. The intra-caliper nearest-neighbour matching method was used, where $k = 1$ and the caliper radius was 0.05, and the control variables from the previous paper were used as the matching variables. Figure 3 shows that the standardised deviation for each variable is less than 10% for both the treatment and control groups after matching; Figure 4 demonstrates that the propensity scores of the two groups are similarly distributed within the common support area. Combining these results, the samples in this paper passed the balance test and the common support test, and the matching results are valid. After completing the matching, only the samples that support common support are retained and re-estimated with the multi-period DID. As shown in column (2) of Table 4, the coefficient of DID is still significantly positive, indicating that the promotional effect of e-commerce policies on the level of co-support is robust. In the parallel trend test in Figure 1, the dynamic effect of the policy is not highlighted in every period due to the way the year-by-year test is conducted. But does not indicate that the policy has no effect, this paper through Stata in the `lincom` command, the policy implementation after the coefficient minus the coefficient of the policy implementation before the implementation of the policy implementation of the effect of the test, the results show that in the 1 per cent level is significant. This shows that: the effect of the policy after implementation exists and is significant.

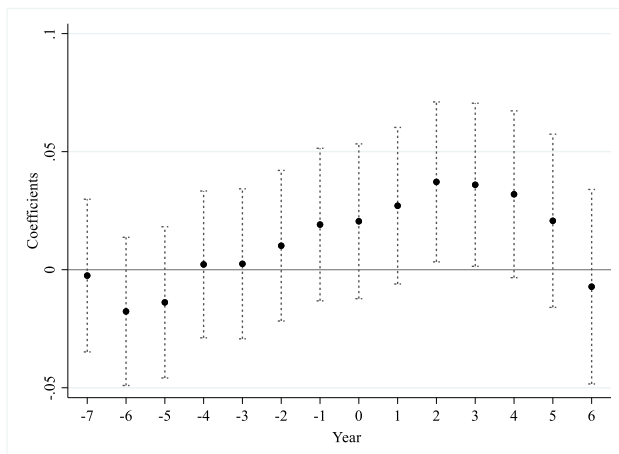


Figure 1. Parallel trend test.

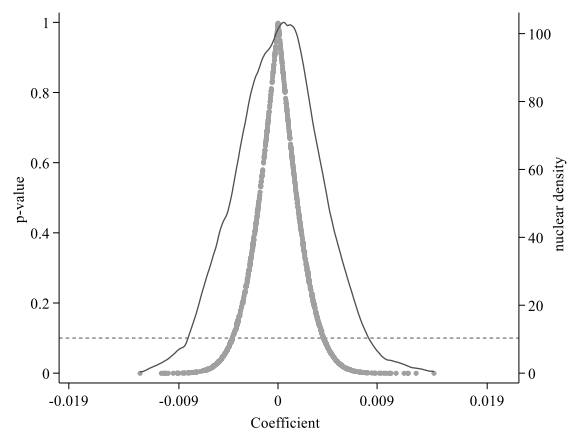


Figure 2. Placebo test.

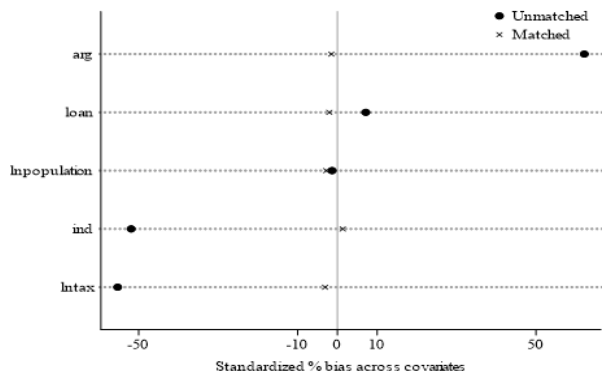


Figure 3. Balance test.

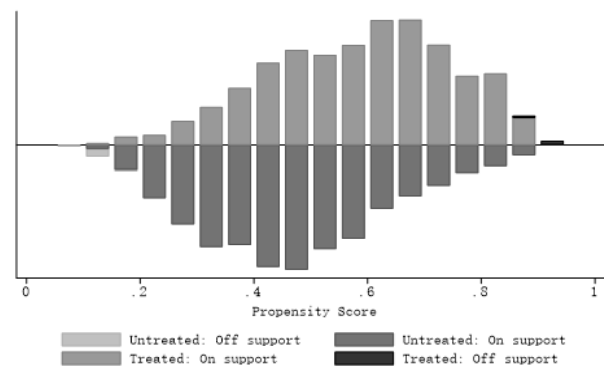


Figure 4. Co-support test.

Table 4. PSM-DID results.

variable	(1) Level of shared prosperity	(2) Balance of deposits per inhabitant (in logarithms)
<i>did</i>	0.0184*** (0.0035)	0.0182*** (0.0035)
Control Variables	yes	yes
Fixed area	yes	yes
Fixed time	yes	yes
sample size	8172	8098
R ²	0.4652	0.4639

5. Heterogeneity Analysis

As an important economic development belt in China, the Yangtze River Economic Belt has unique natural resources, geographic advantages and policy support compared to other regions, creating favourable conditions for the transformation and upgrading of rural industries. This study analyses the samples inside and outside the Yangtze River Economic Belt through group regression to explore the impact of their geographical and economic conditions on e-commerce in promoting rural common wealth. The regression results in Table 5 show that the Yangtze River Economic Belt has a significant positive impact on promoting the level of rural common wealth through e-commerce, and especially in the analyses in Table 6, its promotional effect is significantly higher than that of non-Yangtze River Economic Belt regions, highlighting the heterogeneous characteristics of e-commerce policies in the region. The convenient river transport and dense railway network in the Yangtze River Economic Belt provide strong support for e-commerce logistics in the region. In addition, through the e-commerce platform, agricultural products in the Yangtze River Economic Belt are able to reach consumers directly, reducing intermediate links and related costs, and raising the income level in rural areas.

Table 5. Heterogeneity analysis based on the Yangtze River Economic Belt.

variable	Level of shared prosperity	
	(1) Located in the Yangtze River Economic Belt	(2) Not located in the Yangtze River Economic Belt
<i>did</i>	0.0214*** (0.0055)	0.0119*** (0.0045)
Control Variables	yes	yes
Fixed area	yes	yes
Fixed time	yes	yes
Sample size	2970	5175
R ²	0.3639	0.5734

6. Validation of the impact mechanism

In the first half of this study, it has been verified that the policy of e-commerce into rural areas has a significant positive impact on promoting the level of common wealth through the results of the benchmark regression of multi-period DID and a series of related tests. Following this foundation, it is particularly important to further explore the specific mechanism behind this impact. In this paper, we will explore the factors affecting the implementation of this policy from the perspectives of rural employment level, local government financial expenditure level and social consumption level.

In order to avoid the endogeneity problem, this paper adopts the interaction term model to test the mechanism. The model mainly refers to the approach of Shi Dan and Li Shaolin (2020), and the specific model is set as follows:

$$Y_{it} = \beta_0 + \beta_1 (treated_i \times time_t \times M_{it}) + \beta_2 (treated_i \times time_t) + \beta_3 M_{it} + \sum \mu X_{it} + \delta_i + \nu_t + \varepsilon_{it} \quad (2)$$

In equation (2), Y represents the level of common wealth. m represents the level of rural employment, the logarithm of the level of local government fiscal expenditure, and the level of social consumption. The focus of attention in the model is the positive and negative of the coefficient β_1 of $treated \times time \times M$ and its significance. The settings and definitions of other variables in the model are the same as in equation (1).

The results of the validation of the mechanism of action are shown in Table 6. In terms of rural employment level, column (1) of Table 6 shows that the coefficient of the cross-multiplier term is significantly positive at the 1% level, implying that the promotion effect of rural e-commerce policy on the level of common wealth is more obvious in areas with higher levels of rural employment. This indicates that rural e-commerce policy can effectively increase the overall income level in rural areas by increasing the number of people employed in rural areas, which in turn promotes the level of common wealth. Therefore, hypothesis 2 is verified.

In terms of the level of local government fiscal expenditure, column (2) of Table 6 shows that the coefficient of the interaction term of the three variables is 0.0438 and is significant at the 1% level, indicating that the level of local government fiscal expenditure has a positive moderating effect on the e-commerce policy to promote the level of common wealth, and enhances the promotional effect of e-commerce policy on common wealth. In terms of the level of social consumption, the coefficient of the interaction term in column (3) of Table 6 is significantly negative, indicating that the level of social consumption exhibits a negative moderating effect on the promotion of the level of common wealth, and that the promotion effect of e-commerce policy on common wealth is weakened by the moderating variable of the level of social consumption. Increased levels of government fiscal spending are often accompanied by increased investment in infrastructure and human capital, which is critical for promoting e-commerce in rural areas. Improvements in infrastructure provide the physical basis for the expansion of e-commerce. At the same time, investment in education and training improves the digital literacy of rural residents, enabling them to make better use of e-commerce platforms and increasing their marginal efficiency, thus increasing the positive impact of e-commerce on economic activity in rural areas. An increase in the level of social consumption usually represents an increase in the income of the population, and this change tends to reflect a shift in consumer preferences towards higher-value and higher-quality goods and services. When consumers' purchasing choices tend to favour higher-end products, the market attractiveness and effectiveness of rural e-commerce will decline. In addition, traditional retail channels in areas with higher levels of consumption are usually more mature and reformed prior to the implementation of rural e-commerce policies, achieving an effective integration of online transactions and offline distribution, and being able to provide more diversified and high-quality goods and services. The development of this retail environment not only undermines the competitive advantage of e-

commerce over traditional retailing, but may also motivate consumers to continue to spend through the shopping channels to which they are already accustomed. The emergence of this trend leads to a weaker effect of rural e-commerce policies on raising incomes in rural areas than in urban areas themselves, thus weakening the promotion of shared prosperity, especially when consumers in urban areas already rely on well-established retail markets and well-developed logistics systems. In summary, hypotheses 4 and 5 are verified.

Table 6. Results of impact mechanism validation.

variable	Level of shared prosperity		
	(1) <i>lnemployment</i>	(2) <i>lngov</i>	(3) <i>lncon</i>
<i>treated</i> × <i>time</i> × <i>M</i>	-0.0419*** (0.0141)	0.0438*** (0.0044)	-0.0973*** (0.0087)
<i>M</i>	0.0143*** (0.0027)	0.0373** (0.017)	0.0001 (0.0026)
<i>did</i>	0.0166*** (0.0036)	0.0726*** (0.0072)	0.06126*** (0.0056)
Control Variables	yes	yes	yes
Fixed area	yes	yes	yes
Fixed time	yes	yes	yes
Sample size	8172	8172	8172
R ²	0.4681	0.4835	0.4769

7. Research Conclusions and Policy Recommendations

7.1. Research Conclusion

In the context of the current booming digital economy, e-commerce, as an important business model, has demonstrated a significant role in promoting rural economic development. Based on the 2012-2020 national county economic data, this study focuses on the impact mechanism of e-commerce in rural areas policy on the level of common wealth, which provides new insights into understanding how digital technology works in the rural economy and realises common wealth. The findings of this study are as follows:(1) E-commerce into rural areas policy can significantly contribute to the level of common wealth. The results still hold after robustness test and placebo test. In terms of the impact mechanism, the e-commerce policy is able to promote the level of common wealth by increasing the level of rural employment. (2) The increase in the level of local government fiscal expenditure strengthens the effect of rural e-commerce policy in promoting the level of common wealth. (3) The increase in the level of social consumption has a negative moderating effect on the promotion of common prosperity level by the e-commerce policy in rural areas. (4) Demonstration counties located in the Yangtze River Economic Belt show a more significant policy promotion effect under the promotion of e-commerce into rural areas policy.

7.2. Policy Recommendations

First, strengthen rural e-commerce training and education: the government should organise professional e-commerce training courses, including e-commerce platform operation, online marketing, and digital payment, to enhance farmers' e-commerce skills, increase employability and create more job opportunities. In addition, the government should encourage the integration of rural e-commerce with traditional agriculture, handicrafts and other industries to expand sales channels through e-commerce platforms and promote industrial upgrading and economic growth.

Second, increase financial investment to optimise rural e-commerce infrastructure: the government should upgrade the transport and logistics network in rural areas through financial expenditure, build efficient logistics centres and distribution systems, reduce the logistics costs of agricultural products and enhance competitiveness. At the same time, it should increase investment in broadband network facilities to ensure that farmers can access high-speed Internet at a reasonable cost, and optimise the payment system to improve transaction security and convenience.

Third, optimise the consumer environment and improve product quality: The government should establish a comprehensive agricultural product quality management system, including monitoring standards, testing processes and traceability systems, to ensure product quality and safety. Meanwhile, it should promote branding of agricultural products, strengthen online and offline promotion, and encourage cooperation with well-known brands to enhance brand value and market competitiveness. In addition, enhance the expertise and operational capabilities of rural e-commerce enterprises and participants in order to develop high-quality products that better meet market demand.

Fourth, implement a differentiated regional development strategy: for regions with regional advantages, the government should introduce innovative technologies, optimise supply chain management and brand influence, and enhance the overall competitiveness of e-commerce. For regions with weaker infrastructure and education and training, the government should increase support to solve infrastructure bottlenecks, improve Internet access and logistics service efficiency, and at the same time strengthen the cultivation of rural e-commerce talents and skills upgrading, so as to stimulate the development potential of the local economy.

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