ISSN: 2688-9323

Study on the Influence of Digital Economy on the Gap between Urban and Rural Income Gaps in the Yangtze River Economic Belt

Rui Wang

Anhui University of Finance and Economics, Bengbu, China

Abstract

The article is based on the panel data of 11 provinces in the Yangtze River Economic Belt in 2015-2022, and uses the intermediary effect model to deeply explore the relationship between digital economy and urban and rural income gaps. The results show that there is a "U" relationship between the gap between the digital economy and the income of urban and rural areas, that is, there is a non -linear relationship between the two. In terms of regions, the eastern region is already on the right side of the "U" relationship, the central and western regions are located on the left side of the "U" relationship, and the reduction effect of the digital economy in the central region on urban and rural income is greater than the western region. Further research has found that the digital economy can affect the gap between urban and rural income through intermediary variables such as urbanization and high -quality agricultural development, and weaken the impact of the "digital gap" on the gap between urban and rural income. Based on the above conclusions, the article proposes to implement regional differentiated digital development strategies, improve digital literacy in rural areas, and promote high -quality agricultural development.

Keywords

Yangtze River Economic Belt; Digital Economy; Gap in Urban and Rural Income; Intermediary Effects.

1. Introduction

In 2020, my country's poverty alleviation achieved a comprehensive victory, absolutely poverty has been fundamentally resolved, and a solid step towards the goal of common prosperity. However, since the reform and opening up, most of our country has relied on urban development to drive national economic development, urban residents 'income has continued to grow, while rural residents' income has grown slowly, and the gap between urban and rural income has continued to enlarge. "The official printing, establishing a new pattern of" one axis, two wings, three poles, and multiple points "of the Yangtze River Economic Belt. Guide, leading ecological priority and green development, relying on the Golden Waterway of the Yangtze River to promote coordinated development of the upper and middle and lower reaches of the Yangtze River and the high -quality development of the riverside area. It has a pivotal position in the overall situation of modern construction in the country. But like other parts of the country, the coverage of the Yangtze River Economic Belt is also facing the problem of too much urban and rural income. The "Outline of the Development Planning of the Yangtze River Economic Belt" proposes to actively promote the new urbanization. This requires that the coverage of the Yangtze River Economic Belt must take relevant measures to reduce the gap between urban and rural income and promote rural rejuvenation and common prosperity.

Today, with the rapid development of information technology, data has become a new element of economic growth, and the digital economy has become a new round of development driving force. Since entering the 21st century, my country's digitalization level has been continuously

ISSN: 2688-9323

improved, and the digital economy has been cultivated as a new engine of regional economic growth across the country. Many cities in the Yangtze River Economic Belt have made good achievements in the digital economy. According to the data of the "White Paper of the Chinese Urban Digital Economy Index", in the top 100 digital economy city development list in 2021, Shanghai ranked second, Hangzhou fifth, Nanjing seventh, Suzhou ninth, Hefei fourteen, Ningbo tenth Fifth, the 19th Wuxi is relatively developed in the eastern region. However, the Yangtze River Economic Belt across the three major areas of the east, middle, and west, and the level of digital economy between various regions is extremely uneven.

Based on the above background, how to seize the opportunity of digital economic development, break through the urban and rural income gap between the Yangtze River Economic Belt, restrict the bottleneck, accelerate and realize the urban and rural development of the Yangtze River Economic Belt, promote rural revitalization and common prosperity, and reduce the urban and rural income gap in the Yangtze River Economic Belt. It is necessary to systematically study and analyze the development of the development of the digital economy and the narrowing effect of the urban and rural income gap between the Yangtze River Economic Belt. Through the research on the impact of the digital economy on the gap between urban and rural income gaps in the Yangtze River Economic Belt, proposed a positive role in the development of the corresponding policy to exert the development of the digital economy on narrowing the gap between urban and rural income.

2. Theoretical Analysis and Assumption

The gap between urban and rural income is one of the important criteria for measuring the gap between the rich and the poor, and it is related to the people's life happiness index. Lu Xingjie [1] adopted the Terian index to measure the income gap between urban and rural income. The results showed that the gap between urban and rural income was generally a reduction in the trend of urban and rural income, and the income gap between urban and rural income led to the main factor of China's income gap. However, some scholars hold other views, such as LiuHuan [2] that the industrial intelligence brought by intelligent manufacturing equipment is not conducive to the stability of the agricultural population, reducing the income level and work stability of the agricultural transfer population, which will further lead to expanding urban and rural income gap.

With the emergence and development of the digital economy, people have begun to move the relationship between the gap between the digital economy and the income of urban and rural areas, and try to prove that the digital economy can affect the inherent mechanism of urban and rural income gaps. Huang Qinghua [3] uses panel models for empirical testing to obtain the digital economy can significantly reduce the gap between urban and rural income, and this reduced effect is more obvious in areas with large urban and rural income. However, there are other scholars with different views. Gong Qiaohui [4] pointed out that the development of the digital economy will increase the "digital gap" and further expand the gap between urban and rural income. Some scholars believe that there is a non -linear relationship between the two. For example, Wang Jiang [5] uses the system GMM model and threshold regression model for measure The regional digital economy can converge the gap between urban and rural income, while the convergence effect of the western region is not obvious.

Based on the above analysis, the following assumptions are proposed:

H1: There is a "U" relationship between the gap between the digital economy and the income of urban and rural areas.

As the first industry, agriculture is an important industrial foundation in my country and an important source of income for farmers. Wang Anqi [6] believes that promoting the high -quality development of agriculture and rural areas has become an important part of the

ISSN: 2688-9323

realization of common prosperity and reducing urban and rural income gaps. Ling Zongjing [7] Empirical analysis of the impact of the "gap" of the digital economy on the gap between urban and rural income, and found that through urbanization, strengthening infrastructure construction in rural areas, and promoting high -quality agricultural development, such as intermediary paths can achieve the role of regulating the gap between urban and rural income, and then make suggestions. Promote common prosperity as soon as possible.

Based on the above analysis, the following assumptions are proposed:

H2: Promoting high -quality agricultural development can reduce the gap between urban and rural income.

3. Research Design

3.1. Model Settings

According to the above analysis, set up the following model:

$$theil(i,t)=\alpha 0+\beta 1\ digf(i,t)+\mu i\ X(i,t)+\varepsilon(i,t). \quad (1)$$

In order to further explore whether there is a non -linear relationship between the gap between the digital economy and the income of urban and rural areas, the following models are set up:

$$theil(i,t)=\alpha 0+\beta 0\ digf(i,t)+\beta 1\ digf(i,t)2+\mu i\ X(i,t)+\varepsilon(i,t). \quad (2)$$

Among them, i represent the area, t represents the year, theil represents the gap between urban and rural income, digf represents the level of digital economy development, x(i, t) means control variables, ε(i, t) indicates random disturbance items.

3.2. Variable Design

3.2.1. Explained Variables: Urban and Rural Income Gaps

In the literature of urban and rural income gaps, the methods of commonly used urban and rural income gaps are: the ratio of the Gini, the ratio of people's consumption expenditures in urban and rural areas, and the factories of Terr. The Gini coefficient can only reflect the changes in the income gap between the residents at a certain point, and it does not show that the specific changes of families with different income levels at a certain point of revenue can be sensitive to the changes in high -income and low -income classes. ; Although the ratio of per capita consumption expenditure in urban and rural areas can measure the gap between urban and rural income, the assumptions that need to be met are very stringent and not easy to achieve; the Tel Index is an indicator of income gap between individuals or between regions, because it is because it is because it It can not only consider the changes in the population structure, but also make a sensitive response to the income changes of high -income and low -income classes. Compared with other measurement methods, the Ter index can make up for the lack of other measurement methods. Therefore, this article uses the Ter index to calculate the income gap in urban and rural areas. The formula is as follows:

$$theil_{i,t} = \sum_{j=1}^{2} \left(\frac{Y_{ij,t}}{Y_{i,t}}\right) \ln\left(\frac{Y_{ij,t}}{Y_{i,t}} \Big/ \frac{X_{ij,t}}{X_{i,t}}\right) \quad (3)$$

Among them, the j=1 era represents rural areas. The j=2 era represents towns, t represents the first year, and i represents the first region. Y and X represent income and population.

ISSN: 2688-9323

3.2.2. Core Explanation Variables: the Level of Digital Economy Development

The digital economy is a new economic form. The level of its development level cannot be measured with just one single indicator. According to the "China Digital Economy Development Index Report" released by the Ministry of Industry and Information Technology in 2022 and the “Digital economy and its core industry statistics classification (2021)” released by the National Bureau of Statistics, the index system of the digital economy is divided into five categories, namely the digital industry, respectively Aviation, industrial digitalization, digital economic infrastructure, digital technology, digital talents. At present, scholars have not yet formed a unified view of the measurement of the development of the digital economy, but he measurement and measuring measurement of digital industrialization, and digital economic infrastructure have basically reached an agreement. With reference to the practices of Pang Limin [8], Pan Ting [3] and others, this article closely buys the core of the development of the digital economy, and builds a digital economic indicator system from three aspects: digitalization and digital industrialization, and digital infrastructure.

This system includes three major first -level indicators, including digital industrialization, digital industrialization, and digital infrastructure. In terms of the setting of secondary indicators, this article refers to Liu Cuina [9]. Measurement of quantity, number of Internet broadband access users, and software product revenue are measured as a second -level indicator. At the same time, the capacity of mobile phone switches is included in the indicator system, and digital industrialization is measured from these four aspects. In terms of industrial digital indicators, refer to the practices of Wang Jun [1], Pan Ting [3] and others, and measure the retail sales of agricultural networks, e -commerce transactions, etc. as a secondary indicator. The income is included in the indicator system, which is measured from the four aspects of retail sales of agricultural products, e -commerce transactions, number of domain names, and courier business revenue. In terms of digital infrastructure index selection, this article selects four indicators of Internet broadband access port, optical cable line length, mobile Internet users, and rural broadband access users. This study draws on the entropy value method evaluation model of Wei Yanyan [11], etc., standardize the indicators, measure the attributes of the indicator, and bring the above indicators into the corresponding formula according to the calculation step of the entropy value method. the weight of. It should be noted that due to the availability of the data, referring to the practices of Wu Guoyong [12] and others, replacing the retail sales of agricultural products in the selected indicators with the online retail sales of physical goods. The second -level indicator in digital infrastructure rural broadband access to users has a few years of statistics in Shanghai. This article uses a single interpolation method to supplement the missing value.

3.2.3. Control Variable

In order to more accurately measure the impact of the digital economy on the income gap between urban and rural income in the Yangtze River Economic Belt, and at the same time, the important variables are prevented from causing errors. This study refers to Sun Xiangxiang [13]. The specifics are as follows: (1) The level of economic development is measured by the per capita GDP of various regions. (2) Traffic levels, the number of passenger transportation in various regions is taken. (3) Fiscal expenditure is measured by the ratio of fiscal expenditure to GDP in various regions. (4) The degree of economic openness is measured by the proportion of imports and exports in various regions to account for its GDP. (5) The structure of the tertiary industry is measured by the proportion of the third industry in each region to account for its GDP.

3.3. Data Source

The sample data of this study selected panel data of 11 provinces in the Yangtze River Economic Belt in 2015-2022. The source of data mainly includes statistical communiqués, statistical

ISSN: 2688-9323

yearbooks, and "China Statistical Yearbook" in various provinces. The Development Report ", China Information Yearbook, and EPS database, part of the data from Yunnan Province comes from the Yunnan Provincial People's Government Network. For individual missing data, the interpolation method is used to make up. Variable description statistics are shown in Table 1:

Table 1. Variable descriptive statistics

Variable	Number	Average	Standard deviation	Maximum	Minimum
theil	88	0.1340	0.0665	0.2872	0.0146
digf	88	0.2515	0.1880	0.7703	0.0131
pgdp	88	7.3344	3.4125	18.04	2.9953
traffic	88	6.6298	0.7147	7.5791	3.8989
tert	88	0.5208	0.0702	0.7410	0.3390
sse	88	0.13567	0.0283	0.2109	0.0815

It can be seen from Table 1 that the average value of urban and rural income is 0.1340, the maximum value is 0.2872, and the minimum value is 0.0146. From this, it can be seen that the urban and rural income gaps show a large difference between the area of the Yangtze River Economic Belt. The average value of the digital economy development is 0.2515, the maximum value is 0.7703, and the minimum value is 0.0131. It can be seen that there is a large difference in the level of digital economy between 11 regions in the Yangtze River Economic Belt. The minimum value is 0.7387, and the difference between the two is 3.1134. In addition, there is a large gap between the per capita GDP and the level of social security.

4. Empirical Research and Analysis

4.1. Base Regression

Use the panel data of 11 provinces in the 11 provinces of the Yangtze River Economic Belt 2015-2022 to return the benchmark. The return result is shown in Table 2. This article uses fixed effects, random effects, and the minimum of OLS for the benchmark regression, and has been tested by HAUSMAN. The P value of the test results is 0.0029. Reject the original hypothesis and use a fixed effect model. From the column (1), it can be seen that the one-item coefficient of the variable digital economy is negative -0.03, indicating that there is a negative relationship with the gap between the digital economy and the income of urban and rural areas. The level, and its secondary item coefficient is 0.012, indicating that there is a positive correlation between the digital economy and the income gap between urban and rural income, that is, the higher the digital level, the greater the gap between urban and rural income, and a significant level through 1%. This illustrates that there is a "U" relationship between the gap between the digital economy and the income of urban and rural areas, that is, when the digital economy has begun to develop, the higher the level of the digital economy development, and the gap between urban and rural income continues to narrow, and when the digital economy develops to a certain stage The higher the level of digital economy, the gap between urban and rural income will continue to expand.

It can also be seen from the results of the column (2) random effect that the one -time coefficient of the digital economy is negative, the secondary item coefficient is positive, and the "U" relationship between the digital economy and the income of urban and rural areas is consistent with the analysis of the fixed effect model analysis results. Essence The reason for the "U" relationship between the two may be: in the early stage of the development of the digital economy, the development gap was large, and a large number of labor force was used to promote the construction of digital infrastructure in rural areas and the development of digital

ISSN: 2688-9323

industrialization and industrial digitalization in rural areas. Increase per capita income in rural areas, thereby reducing the gap between urban and rural income. However, when the digital economy develops to a certain stage, it will face the bottleneck period. The lack of high -quality talents in rural areas and insufficient government funds in rural areas have limited the level of digital economy development. The lack of talents, while the digital economy can achieve further development in urban areas, which has led to further enlarging the income gap in urban and rural areas.

For control variables, the coefficient of the GDP per capita region is -0.116, which is significant at a level of 1%. The higher the GDP per capita region, the smaller the gap between urban and rural income, and the coefficient of transportation levels is 0.109, which is significantly at a level of 1%. The reason is positive, because the more developed the traffic level, the growth of income in rural areas is far lower than the growth rate of income in urban areas, which leads to the expansion of urban and rural income gaps. It may be because the tertiary industry accounts for more in urban areas. The faster the tertiary industry is developing, the higher the per capita income of urban areas, and the greater the income gap between urban and rural areas, the level of social security expenditure is -0.04 and 1 pass by 1 %Of the significant level indicates that the higher the level of social security expenditure, the smaller the income gap between urban and rural areas.

Table 2. Benchmark return

Variable	(1)	(2)	(3)
digf	-0.025***	-0.030***	
	(0.007)	(0.007)	
$digf^2$	0.007*	0.012***	0.021
	(0.004)	(0.004)	(0.009)
pgdp	-0.109***	-0.119***	-0.294***
	(0.014)	(0.017)	(0.046)
traffic	0.155***	0.105***	0.024
	(0.025)	(0.029)	(0.173)
tert	0.187***	0.188***	0.585***
	(0.036)	(0.039)	(0.127)
sse	-0.033***	-0.039***	-0.055
	(0.012)	(0.013)	(0.040)
$lnde^2$			-0.021**
			(0.009)
cons	0.846***	0.949***	1.610***
	(0.069)	(0.088)	(0.391)
N	88	88	88

Note: The brackets in the table are T value, * P <0.1, ** P <0.05, *** P <0.01, the same below.

4.2. Stability Test

In order to ensure the accuracy of the conclusion, this article is inspected from two aspects, and (1) remove samples. The samples of Shanghai, Jiangxi, and Guizhou are eliminated from the model and then returned again. (2) Tailing of the model. Perform 1%tail treatment of the model, and then return again. The return result is shown in Table 3. The result of the regression after the sample is listed. It can be seen that the first item coefficient of the explanation variable is still negative, and the secondary coefficient is still positive. The correlation, the return result is the same as the benchmark regression result, and the verification benchmark regression results

ISSN: 2688-9323

are reliable. The result of the regression after the tail reduction process can be seen that the result is the same as the reference regression result. The above two stable tests have proved that the reference result of the benchmark is reliable.

Table 3. Stability test

Variable	(1)	(2)
digf	-0.042***	-0.030***
	(0.012)	(0.007)
$digf^2$	0.016***	0.012***
	(0.004)	(0.004)
pgdp	-0.098***	-0.116***
	(0.031)	(0.016)
traffic	0.116***	0.109***
	(0.033)	(0.028)
tert	0.157***	0.184***
	(0.049)	(0.038)
sse	-0.033*	-0.040***
	(0.019)	(0.012)
cons	0.861***	0.928***
	(0.122)	(0.081)
N	88	88

4.3. Heterogeneity

Table 4. Three Scheme comparing

Variable	(1)	(2)	(3)
digf	0.057**	-0.025***	-0.009*
	(0.021)	(0.008)	(0.005)
pgdp	-0.182***	-0.058**	-0.141***
	(0.034)	(0.024)	(0.019)
traffic	0.175***	0.176***	0.152***
	(0.047)	(0.040)	(0.040)
tert	-0.282**	0.266***	0.222***
	(0.123)	(0.036)	(0.055)
sse	-0.010	-0.094**	-0.041*
	(0.015)	(0.032)	(0.021)
cons	0.798***	0.592***	1.015***
	(0.166)	(0.087)	(0.114)
N	24	32	32

Due to the different levels of digital economy in various regions, there are large differences in digital industrialization, industrial digitalization, and digital infrastructure. In addition The impact of the gap may also be largely different. Therefore, this article divides the 11 provinces of the Yangtze River Economic Belt into three regions in the east, central and western regions for heterogeneity testing. The return results are shown in Table 4 below. (1) is listed as the eastern region, including Shanghai, Jiangsu and Zhejiang provinces. It can be seen that the coefficient of its explanation variable is positive, through 5%significant level. It shows that the higher the level of the digital economy development, the greater the gap between urban and

ISSN: 2688-9323

rural income. The reduction of the difference in urban and rural income gaps has been fully released, resulting in higher requirements for the reduction of the gap between urban and rural income in the digital economy. The more developed the traffic level in the control variable, the more urban and rural income, the more continuously shrink. (2) Line as the central region (3) Line as the western region, the gap between the digital economy and the income of urban and rural are still negatively related, and through the significant level of 1%and 10%, compared with the western region, the higher the level of digital economy in the central region. The greater the impact on the gap between urban and rural income. This may be because although the central region is not as developed in the eastern region, compared with the west, the location advantage and the attractiveness of high -quality talents are stronger, the infrastructure construction is more complete, the digital industrialization is The development potential of digitalization of the industry is greater.

5. Analysis of Intermediary Effects

5.1. Intermediary Effect Inspection of Urbanization

This article is selected as the ratio of urban resident population in the total number of regional populations to indicate the level of urbanization. The higher the level of urbanization, the smaller the proportion of rural people, and the higher the level of urbanization In this way, the gap between urban and rural income is reduced. In this study, the level of urbanization is used as an intermediary variable to study the relationship between it and the gap between the digital economy and the urban and rural income. Its formula is:

$$urban(i,t)=\varphi 0+\varphi 1\ digf(i,t)+\omega 1\ X(i,t)+\mu i+Vt+\varepsilon(i,t) \quad (4)$$

Among them, i represent the region, and t represents the year.

This article uses urbanization as an intermediary variable, and at the same time, the per capita GDP, transportation level, the value -added ratio of the tertiary industry, and the level of social security as the control variable, also control the individual fixation and time fixation of the region. Its formula is:

$$theil(i,t)=\delta 0+\delta 1 digf(i,t)+\delta 2 urban(i,t)+\theta iX(i,t)+\mu i+Vt+\varepsilon(i,t) \quad (5)$$

Among them, i represent the region, and t represents the year.

The return result is shown in Table 5:

Table 5. Return result

Variable	theil	urban	theil
digf	-0.025***	-0.186**	-0.0135**
	(0.007)	(-2.13)	(-3.17)
urban			-0.00237**
			(0.22)
controls	Yes	Yes	Yes
cons	0.846***	-0.186**	1.109***
	(0.069)	(-2.13)	(12.17)
province FE	Yes	Yes	Yes
year FE	Yes	Yes	Yes
N	88	88	88

ISSN: 2688-9323

From the column (2), it can be seen that the level of digital economy development has a significant impact on urbanization, and through 1%significant level. Column (3) indicates that there is a negative correlation between urbanization and urban and rural income gaps. Through 5%significant level, the higher the level of urbanization, the smaller the gap between urban and rural income. The regression coefficient of the digital economy in the urban and rural income gap between the digital economy is -0.0135, and the regression coefficient of the digital economy to urban and rural income in the column (1) is -0.025, and the difference between the two is -0.0115 In the relationship, urbanization, as an intermediary variable, plays a part of the intermediary effect, and has formed a transmission mechanism of "the level of digital economy development → urbanization → urban and rural income gap".

From the results of the table, it can be clearly learned that the improvement of urbanization levels can reduce the gap between urban and rural income. However, as the digital economy has further developed, higher requirements have been put on regional infrastructure construction and labor quality. Most of the personnel have a low quality level, and the ability to accept modern digital equipment is weak. The threshold for the development of the digital economy will exclude this part of the workers and expand the digital gap between the digital economy to reduce the gap between urban and rural income. The obstacles to narrowing the digital gap to the development of urbanization are still a problem that needs to be solved urgently.

5.2. Inspection of Intermediary Effects for High -quality Agricultural Development

Improve the level of high -quality agricultural development is one of the effective ways to reduce the gap between urban and rural income. Increasing the level of high -quality agricultural development, it can rely on the digital economy to promote modern agriculture, improve the efficiency of agricultural production, increase farmers' income, thereby reducing the gap between urban and rural income and reducing the impact of digital gaps on the gap between urban and rural income.

There are many measured indicators of high -quality agricultural development. According to the point of view of Ma Bo (14), the contribution rate of incremental increase in the total production value of the first industry as an important measure indicator of the agricultural economy can better indicate the level of high -quality agricultural development. This study uses the contribution rate of the total production value of the first industry as an intermediary variable. At the same time, the per capita GDP, the value -added ratio of the transportation level, the value -added ratio of the tertiary industry, and the social security level are used as the control variable. effect. The formula is as follows:

$$theil(i,t)=\sigma 0+\sigma 1\ digf(i,t)+\sigma 2\ argicultural(i,t)+\gamma i\ X(i,t)+\mu i+Vt+\varepsilon(i,t) \quad (6)$$

Among them, i represent the region, and t represents the year.

The return result is shown in Table 6.

From the column (2), it can be seen that the digital economy has a significant impact on the high -quality agricultural development, and through the significant level of 5%. The higher the level of the development of the digital economy, on the one hand, the development of modern agriculture is promoted. On the other hand, farmers can effectively identify risks through big data and digital financial platforms to solve the problems of rural economic financing difficulties, inject new vitality into the high -quality agricultural development, help Instant the gap between income from urban and rural areas. From the column (3), the gap between the

ISSN: 2688-9323

digital economy and the income of urban and rural are still a negative relationship. The difference between the regression coefficient of the (1) column (1) is -0.01693. It can be seen that the high-quality agricultural development has played an intermediary effect. The impact of high -quality agricultural development on the gap between urban and rural income has promoted a 5%significant level, indicating that the higher the level of high -quality agricultural development, the smaller the gap between urban and rural income. The conduction mechanism.

Table 6. Return result

Variable	theil	agriculture	theil
digf	-0.025***	0.119**	-0.00807*
	(0.007)	(2.85)	(-2.10)
agriculture			-0.0445**
			(-3.52)
controls	Yes	Yes	Yes
cons	0.846***	-3.323***	0.889***
	(0.069)	(-3.62)	(10.04)
province FE	Yes	Yes	Yes
year FE	Yes	Yes	Yes
N	88	88	88

6. Policy Suggestions

First, according to the location advantages of different regions, a differentiated digital economic development strategy is implemented. First of all, due to non -linear relationships between the gap between the digital economy and the income of urban and rural areas, it is required to implement a phased digital economic development strategy in various regions. According to the current development status of the digital economy in different regions, it is required to rationally innovate the digital economic development policy and follow its objective laws. Secondly, the implementation of regional differentiated digital economy development strategies. For the developed regions of the eastern part, digital infrastructure has been relatively complete. The impact of the digital economy on the gap between urban and rural income has been located on the right side of the "U" relationship. Therefore, it is necessary to promote the development of the digital economy development. Innovate strategy, strengthen the digital innovation capabilities of enterprises, build a stronger and stronger digital platform, and play a strong role in the digital economy on the development of rural areas and the increase in farmers' income. The central and western regions are still located on the left side of the "U" relationship. Therefore, we must continue to strengthen the construction of digital infrastructure and accelerate the construction of transportation facilities in rural areas, thereby enhancing exchanges between urban and rural areas. Secondly, the government should also give qualified rural enterprises and farmers 'policy fund support that develops digital agriculture, accelerate the construction of new modern agricultural infrastructure, increase farmers' income, and reduce the gap between urban and rural income.

Second, improve digital literacy in rural areas. First, the government should improve the relevant policies to improve digital literacy in rural areas, organize demonstration projects for the improvement of digital literacy improvement in rural residents, and give full play to the leading role of demonstration projects. The second is to establish a related digital skills training platform, integrate online and offline training resources, and provide diversified digital skills training through field research, online teaching, and offline training courses to meet the study requirements of digital skills in rural areas. The third is to give full play to the leading role of

local people in rural areas, and give commendation and encouragement to local people who promote the development of the rural digital economy, in order to inspire rural residents to learn the enthusiasm and motivation of digital skills, accelerate human resources in rural areas Human capital conversion.

Third, accelerate the modernization of agriculture and rural areas, and promote high -quality agricultural development. The first is to strengthen the core driving force for scientific and technological for promoting high -quality agricultural development, build a digital technology -based agricultural production system, and accelerate the promotion of agricultural modernization technology. The second is to promote the development of digital inclusive finance in rural areas, strengthen the promotion and publicity of digital inclusive finance in rural areas, help farmers, small and micro enterprises in rural areas to solve the problems of difficulty in financing, high loan thresholds, and difficulty loans. The breadth and depth allows all regions to build a set of agricultural development system that matches the local development through the use of digital technology on the basis of its own development gap.

References

[1] Lu Xingjie. Turning urban and rural income gap measured [J]. Cooperation economy and technology, 2019, No.618 (19): 7-9.doi: 10.13665/J.CNKI.Hzjjykj.2019.19.002.

[2] Liu Huan. How does industrial intelligence affect the gap between urban and rural income-an explanation from the perspective of agricultural transfer labor employment [J]. China Rural Economy, 2020, No.425 (05): 55-75.

[3] Huang Qinghua, Pan Ting, Shi Peihao. The impact of the digital economy on the income gap between urban and rural residents and its mechanism of action [J/OL]. Reform: 1-17 [2023-05-02].

[4] The impact of Gong Qiaohui. The development of digital economy on the gap between urban and rural income [d]. Shandong University, 2021.DOI: 10.27272/d.cnki.gshdu.2021.001750.

[5] Research on the impact of Wang Jiang, Qi Ziyan. Digital economic development on the gap between urban and rural income-analysis of system GMM and threshold effects [J]. Xinjiang Agricultural Reclamation Economy, 2023, No.360 (02): 38-48.

[6] Wang Anqi. Under the background of rural revitalization, the high-quality development analysis of agricultural and rural development [J]. Rural practical technology, 2021, No.237 (08): 19-20+25.

[7] Ling Zongjing. Digital economy and urban and rural income gaps: Analysis of the perspective of "digital gap" [J/OL]. Operation and management: 1-13 [2023-05-02].

[8] Pang Limin. Research on the impact of digital economy on the gap between urban and rural income [D]. Shanxi University of Finance and Economics, 2022.DOI: 10.27283/d.cnki.gsxcc.2022.000258.

[9] Liu Cuihua. The impact of the digital economy on the upgrading of industrial structure and entrepreneurial growth [J]. China Population Science, 2022, No.209 (02): 112-125+128.

[10] Wang Jun, Zhu Jie, Rosie. China's digital economy development level and evolution measurement [j]. .2021.07.002.

[11] Wei Yanyan, Ma Xue. Measure and analysis of the level of digital economy in the six provinces in the central part [J]. Industrial innovation research, 2022, No.100 (23): 18-20.

[12] Wu Guoyong, Pang Guoguang, Tang Junhui, etc. The measurement of the level of digital economic development in China, regional differences, timely and timely evolution [J]. Journal of Hunan Agricultural University (Social Science Edition), 2022,23 (04): 15-27. Doi: 10.13331/J.CNKI.JHAU (SS) .20222.04.002.

[13] Sun Xiangxiang, Chen Zhangwang. Research on the impact of digital infrastructure gaps on urban and rural income under the perspective of common wealth [J]. j.1008-8105 (2022) -4008.

[14] Ma Bo, Lu Jianping. Research on the coupling coordination relationship between high-quality development and digital inclusive finance [J]. China Price, 2023, No.408 (04): 34-37.