Research on Influencing Factors of Coordinated Development of Regional Economy Based on City-country fringe Income Gap

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Abstract. At present, China is affected by the decline of international market demand, and the export growth rate is slowing down, so it is urgent to rely on domestic demand to stimulate economic growth. The widening income disparity intercity and countryside is not conducive to releasing the consumption power of rural residents and building a harmonious society in China today. The regional economic development gap is a universal and international problem in the process of economic development in all countries of the world, which has always been concerned by all countries of the world. The existence and expansion of regional economic development gap will inevitably have a great impact on the economic development and social stability of various countries (or regions). This paper mainly focuses on the problem of city-country fringe income disparity between regions. First, it makes a comparative analysis of the city-country fringe income disparity between regions in China. In the analysis of the income composition of urban and rural residents, it is found that the wage income disparity has the largest contribution to the overall income disparity intercity and countryside; Although the contribution rate of operating income is negative, the role of operating income disparity in narrowing the overall income disparity intercity and rural residents is decreasing; Property income accounts for a small proportion of urban and rural residents' income, and its contribution rate is low; The transfer income disparity has a large contribution rate to the city-country fringe income disparity, which is due to the long-term city-country fringe division in China.

Keywords: City-country fringe income disparity; Regional economy; Coordinated development; Influence factor

1. Introduction

Since the reform and opening up, China's economy has developed at a high speed, and people's living standards have been gradually improved. However, the problems of unbalanced and insufficient development in China still exist, such as the city-country fringe gap, regional gap and industry gap. Among them, the income disparity intercity and countryside, as an important part of the income disparity in China, has attracted much attention. According to the data of the National Bureau of Statistics, the income disparity intercity and countryside in China has experienced an inverted "U" development path at a high level in the past decade [1]. Since 2002, the income ratio intercity and countryside in China has been above "3". In 2007, the income disparity intercity and rural residents expanded to the highest level of 3.33:1 since the reform and opening up. However, since 2010, the income growth rate of rural residents has exceeded that of urban residents for many years in a row, and the income disparity intercity and countryside has dropped from 3.33 times in the previous year to 3.23 times for the first time, and then to 3.13 times in 2011 [2]. In 2012, the income of rural residents once again "outperformed" urban residents, and the income disparity intercity and countryside dropped to 3.10 times. In 2013, it continued to drop to 3.03 times. However, judging from the current situation, the per capita income ratio of urban and countryside in China is still far higher than that of most countries, and the problem of city-country fringe income disparity in China is still very prominent. Regional disparity has always been one of the core issues in regional economics research, and it is also a universal problem in the process of economic development in all countries of the world [3]. As a country with a vast territory, China's economic base, cultural background and resource endowment vary greatly among regions. In the process of economic growth, the imbalance and gap of economic development between regions are more obvious [4]. China's three decades of reform and opening up have led to the rapid improvement of the country's economic strength, overall productivity and people's living standards, but the problem of unbalanced regional development has also become increasingly prominent. The eastern coastal areas have developed rapidly, while the central and western regions have developed slowly, and the development gap,
especially the economic development gap, continues to expand. In addition to having a direct impact on the social economy, the city-country fringe income disparity has also had an indirect impact on the harmony and stability of Du Hui [5]. When a social economy develops rapidly, only a few people can enjoy the fruits of economic development, while a considerable number of people can not enjoy the benefits. When the poor people realize such unfairness, their outlook on life and values will become negative or even distorted, and they themselves may become unstable factors of society. Today's society is full of hate for the rich and frequent group events, which have a direct relationship with it [6].

Based on the "inverted U-shaped theory", the theory of urbanization effect and the research of related scholars, this paper divides the current city-country fringe income disparity of China provinces and municipalities into four types: low-level city-country fringe income disparity, low-level high-level city-country fringe income disparity, high-level low-urban income disparity and high-level high-urban income disparity [7]. On the basis of classification, find out the main causes of various types of income disparity intercity and countryside, and put forward targeted solutions. Therefore, a multi-angle in-depth comparison and systematic study of the changing trend and influencing factors of the city-country fringe income disparity between regions, and discussion of the changing track and formation mechanism of the city-country fringe income disparity between regions are conducive to providing theoretical and empirical support for the relevant departments to formulate macro-control policies to narrow the city-country fringe income disparity, so the research in this paper has important theoretical and practical significance.

2. Theoretical basis and research summary of regional economic development gap

2.1 Regional development theory
The study of regional economic gap needs the support of regional economic theory. Before in-depth study of regional economic gap, we should first understand the regional economic development theory, which is mainly divided into balanced development theory and unbalanced development theory [8]. Before the 1930s, economists generally believed that the geographical distribution of economic development was determined by the natural environment and could not be changed. The neoclassical theory of regional balanced development holds that regional economic growth depends on three factors: capital, labor and technology, and the return of each factor depends on its marginal productivity. Under the completely free competition market mechanism, all production factors can flow completely and cost-free [9]. Theoretically speaking, regional unbalanced growth is only a temporary phenomenon in the automatic adjustment system of general economic balance. The spontaneous adjustment of market mechanism can realize the rational allocation of resources and achieve the goal of balanced development of regional economy. The spatial interaction in the regional cumulative circular causal model is realized through two opposite effects: one is the "backflow effect", which shows that the factors of production flow from underdeveloped areas to developed areas, which makes the regional gap widen continuously; The second is the "diffusion effect", which shows that the factors of production flow from developed areas to underdeveloped areas, thus narrowing the regional gap. These two effects may cancel each other out, but this balance is not a stable balance, and any change in force contrast will lead to the cumulative movement of the system upward or downward [10].

China's regional development level gap is large, and the city-country fringe income disparity in each region has its own characteristics. In the regions with low development level, the income disparity intercity and countryside coexists with low city-country fringe income disparity. In the regions with high development level, there is also the coexistence of high and low city-country fringe income disparity. Assuming the existence of the "inverted U-shaped theory", the inverted trend is divided into four stages: low level, low city-country fringe income disparity. The income disparity intercity and countryside at a low level, the income disparity intercity and countryside at a high level, and the income disparity intercity and countryside at a high level. The city-country fringe property income disparity is generally positive, but the gap is small. Because of its low level of urbanization, it is difficult for rural residents to obtain rental income, and rural finance is very backward, and it is not easy to obtain property income such as interest, dividends, and so on. Although urban residents can obtain certain property income such as rent, dividends, and interest, but due to the low level of industrialization, rental income is limited. The property income of urban residents is larger than that of rural residents, but the gap will not be too large. According to the classification of income sources, the city-country fringe income disparity in these areas should show the following characteristics: the city-country fringe operational income disparity is negative, but the absolute value of this value should be narrowing, gradually showing the characteristics that the operational income of urban residents is greater than that of rural residents. As shown in Figure 1.

![Figure 1 Kuznets "inverted U" curve](Image)

The transfer income disparity intercity and countryside is still high because the government's transfer payment to rural residents has not kept up in time, but the transfer payment to rural residents in these areas is not in place,
mainly because of the lack of financial resources, because the economic level in these areas is already high, and the government's financial resources are not a problem. The key is whether the government's policies are inclined to countryside. Although the theory and many empirical analyses show that there is an "inverted U" relationship between regional differences and economic development, the "inverted U" theory does not reveal the fundamental reason for its existence, but only attributes the trend of "inverted U" development of regional differences in time to the law of economic development, and there are many factors affecting regional differences, which need further demonstration.

2.2 Formation mechanism of income disparity intercity and countryside in China

The basic function of the system is that it regulates the interest relationship between people through laws, norms or habits and morality, thus effectively restraining the individual behavior that pursues the maximization of interests. The income distribution theory of new institutional economics points out that institution is the most important factor to determine economic efficiency and social progress. As far as the income distribution system is concerned, an efficient and reasonable income distribution system can form an effective incentive and restraint mechanism, which can not only provide sufficient interest incentives for each economic actor, but also have certain constraints to ensure efficient economic growth.

From a dynamic and developmental perspective, an efficient income distribution system can also encourage people to continue to adopt new technologies and encourage people to continue technological innovation. Therefore, on the premise that the property right system or the ownership system of means of production is reasonably arranged, the income distribution system determined and formed thereby also has a very important role and impact on the efficiency of economic operation. In order to make up for the shortcomings of the single statistical indicator and reflect the economic gap of the studied region more comprehensively and objectively from the social, economic, environmental and other aspects, many researchers have proposed different, more scientific and reasonable comprehensive statistical indicator systems, and achieved good research results. Although the comprehensive index system is more objective and comprehensive than a single index, there are also some problems, such as it is not convenient to reflect the dynamic changes, the information intersection between index variables, and the subjectivity of artificially determining the index weight, which affect the reliability of the research conclusion. Therefore, when adopting the multi-index system, we should deal with each variable index accordingly. Because when urbanization matures, rural land is gradually expropriated, and the operational income of rural residents is naturally greatly reduced, thus making the gap intercity and rural operational income in these areas gradually change from negative to positive; The wage income disparity intercity and countryside will still be very obvious, because the more developed the economy is, the more obvious the stratification of talents is. In the short term, urban residents’ human capital investment is generally greater than that of rural residents, and naturally they can get more generous salaries than rural residents in the employment field. Therefore, the wage income disparity intercity and countryside still contributes greatly to the total city-country fringe income disparity.

3. An empirical study on the relationship intercityization and city-country fringe income disparity

3.1 Study on the dynamic relationship intercityization and city-country fringe income disparity

According to Kuznets' inverted "U" curve theory, economic growth has a significant impact on the city-country fringe income disparity, and the city-country fringe income disparity will increase first and then decrease with economic growth. Therefore, this paper adds economic development factors when studying the impact of urbanization on the city-country fringe income disparity. The process of urbanization is generally accompanied by urbanization and population urbanization, and population urbanization is a more important goal. Therefore, this paper uses the proportion of urban population in the total population to reflect the degree of urbanization. The urban population here not only includes the registered residence population in cities and towns, but also includes the permanent residents who have lived in cities and towns for more than half a year. Through the previous theoretical analysis, we found that the city-country fringe income disparity has an important relationship with the level of economic development.

In this paper, Johansen cointegration test is used to test, which can accurately test the number of cointegration vectors in multivariate cointegration test. Var model is constructed, and the lag order is determined by Akachi Information Criterion (AIC) and Schwartz Information Criterion (SC), so that the values of AIC and SC are minimum at the same time. If the lag order determined by the two criterions is different, LR detection method is used. After many experiments, the lag order is determined to be 4. Table 1 shows Johansen cointegration test results.

<table>
<thead>
<tr>
<th>Null hypothesis</th>
<th>Eigenvalue</th>
<th>Trace statistics (p value)</th>
<th>Maximum eigenvalue statistics (p value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is no cointegration relationship.</td>
<td>0.7542</td>
<td>67.8826</td>
<td>42.1596</td>
</tr>
<tr>
<td>There is at most one</td>
<td>0.5241</td>
<td>24.4562</td>
<td>23.4359</td>
</tr>
<tr>
<td>There are at most two</td>
<td>0.1424</td>
<td>1.3457</td>
<td>1.34499</td>
</tr>
</tbody>
</table>
The test results show that at the significance level of 1%, the model rejects the original hypothesis that there is no cointegration relationship and at most one cointegration relationship, and accepts the original hypothesis that there are at most two cointegration relationships. The impact of the city-country fringe income disparity on itself gradually narrowed and remained at about 52%, while the impact of urbanization on the city-country fringe income disparity was relatively small at the initial stage, and began to accelerate after the fifth stage, and finally stabilized at about 34%, while the impact of economic growth on the city-country fringe income disparity was below 5% in the pre-stage, and then slightly increased and finally maintained at 13.8%. This also verifies the estimation results of cointegration equation. In the long run, the impact of economic growth on city-country fringe income disparity is not obvious, while the impact of urbanization on city-country fringe income disparity is obviously greater than economic growth. It may be because the government policy intervention in the eastern and western regions has a strong tendency of urbanization, while the government policy intervention in the central region has a tendency of agriculture because it is mostly a large agricultural province.

3.2 Empirical analysis
According to the previous analysis and model setting, this section uses mixed OLS, fixed effect OLS, random effect OLS and Arellano-Bond GMM estimation methods to test the model (1). In order to reduce heteroscedasticity and improve the robustness of model estimation, all variables are averaged first and then logarithmic. The regression coefficients of per capita arable land area, per capita effective irrigation area, per capita crop sown area and per capita land area of farmers are significantly negative, which shows that traditional agriculture still plays an important role in improving per capita income of farmers, and the increase of agricultural output is conducive to narrowing the income disparity intercity and countryside. On the contrary, the variable farmers’ per capita total mechanical power represents the level of agricultural modernization, and its regression coefficient is negative, indicating that the improvement of agricultural modernization level can not only narrow the income disparity intercity and countryside, but will further widen the income disparity intercity and countryside. Economic and geographical factors, such as per capita domestic highway mileage and whether it belongs to Poyang Lake Ecological Economic Zone, have a significant impact on the income disparity intercity and countryside. Among them, the per capita domestic highway mileage is positively correlated with the income disparity intercity and countryside, and the convenience of transportation within the county can not narrow the income disparity intercity and countryside. The traffic in the county area provides convenience for farmers to work in cities, but if the county economy is relatively backward, the income of farmers after entering cities may not be greatly improved, which is not beneficial to narrowing the income disparity intercity and countryside.

On the contrary, the distance from Nanchang, the provincial capital, will have a significant impact. The estimated results of the panel data and the analysis results of the VAR model can confirm each other. Because the urbanization in the central and western regions started late and the level of urbanization is low, urbanization has a significant effect on the expansion of the city-country fringe income disparity in the short term; The eastern region has a relatively high level of urbanization rate, which is 8 to 10 years ahead of the central and western regions. Therefore, the role of urbanization in reducing the city-country fringe income disparity in the long run appears. Other economists also have similar conclusions. According to the literature review, Zhou Shaofu found that when the urbanization rate is lower than 0.4%, the effect of urbanization on narrowing the city-country fringe income disparity is not obvious, and it will only appear when it is higher than the free level. At present, the urbanization rate in the central and western regions of China has just exceeded this level, while the eastern region is far higher than this level. Therefore, we should accelerate the process of urbanization in the central and western regions and give full play to the role of urbanization in narrowing the city-country fringe gap.

4. Conclusions
Since the reform and opening up, China's social undertakings and economic development have made great progress and development. At the same time, the income disparity intercity and countryside has become increasingly serious, which has become a concentrated expression of the contradiction of China's dual economic and social structure. At the same time, the difference of regional development, especially the income disparity intercity and countryside between regions, is also a hindrance to the development of a harmonious society in China. Urbanization is also at the lowest level in China. Rural residents can't get property income through land expropriation compensation, and the rural financial level is far behind. Rural residents get little property income such as interest, while this part of urban residents' property income is relatively stable, so the city-country fringe property income disparity will also increase the city-country fringe income disparity. Based on the relevant theories of the dual economic structure, this paper takes the whole country, the eastern, central and western regions as the research objects, and through the collection and analysis of the survey data and statistical data, makes a theoretical and empirical analysis of the impact of urbanization on the city-country fringe income disparity. The results show that the policy factor is the fundamental factor affecting the city-country fringe income disparity in China, while the "robustness" factor affecting the city-country fringe income disparity in the eastern, central and western regions is different.

References
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