Current Situation, Reasons and Suggestions of Income and Consumption of Rural Residents

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Abstract Based on the empirical analysis of rural residents' income and consumption, we are going to discuss the reasons for the weak income growth and lagging consumption of rural residents in China. Finally, we propose relevant suggestions and measures to increase rural residents' income, promote rural residents' consumption and develop rural markets.

Key words Rural residents' income, Consumption level, Engel coefficient

1 Introduction

In recent years, the income and consumption of rural residents have been growing relatively slowly, which is very negative for the current Chinese economy to expand domestic demand and stimulate high-quality economic development. Consumption has always been a hot content of social and economic research, and China's economy has entered a new normal with a significant slowdown in economic growth. As one of the "troika" of economic growth in the traditional sense, the lack of demand for resident consumption is an important reason for the lack of pulling force for the economy. Therefore, the importance of resident consumption in social and economic development has become more prominent. As rural residents occupy half of China's population, the impact of their consumption capacity on economic and social development should not be ignored, especially the huge consumption potential of rural residents. How to effectively increase rural residents' income and stimulate rural residents' consumption is a matter concerning overall economic development and an important element in building a happy China, realizing the "Chinese dream" and accomplishing the Two Centenary Goals^[1].

2 Analysis of the current situation of rural residents' income and consumption

2.1 Income of rural residents From the perspective of the per capita disposable income of rural residents' households, if we take 1978 as the base period for indexing, the index was 489.6% in

To provide a more detailed and clear description of the sources of income increase for rural residents, we gave the elasticity coefficients between wage income, net operating income, transfer income, net property income, and disposable income (2015 – 2020).

2000, 1 020.10% in 2010 and 2 144.2% in 2020, and the corresponding indexes of per capita disposable income of urban

residents' households in the same period were separately 382.3%,

948.5%, and 1728.4%. In other words, the growth of per capita

income of rural residents is slightly higher than that of urban resi-

dents, but due to the overwhelming difference between the two ba-

ses, the urban-rural income gap instead rose from 2.74 times in

2000 to 2.99 times in 2010 and decreased to 2.56 times in 2020.

The per capita disposable income of rural residents mainly comes

from wage income and net operating income, while net transfer in-

come accounts for a relatively low proportion, and the proportion

of net property income in the disposable income of rural residents

is negligible, and the proportion of net property income was only

about 2% during 2000 - 2021, so we mainly examined wage in-

come, net operating income, and transfer income. The share of

wage income increased from 31% in 2000 to 40% in 2010 and

slightly rose to 41% in 2020, and after 2010, wage income stayed

around 40%, occupying nearly half of the total. The share of net

operating income decreased from 63% in 2000 to 48% in 2010

and further decreased to 35% in 2020. The share of income from transfer payments rose from 3% in 2000 to 7.6% in 2010, and to

21% in 2020. Thus, it can be seen that the income growth of ru-

ral residents is mainly driven by wage income and transfer income

Calculating formula is as follows:

$$e_i = \frac{\beta_{t_i} - \beta_{t_i-1}}{\beta_{t_i-1}} \bigg/ \frac{\alpha_i - \alpha_{t-1}}{\alpha_{t-1}}$$

as important forces.

where β_i denotes wage income, operating income, and transfer income, respectively, α denotes disposable income and t denotes period.

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Table 1 Elasticity coefficients of different income sources in 2015 - 2020

Year	Wage	Net operating	Transfer	Net property
	income	income	income	income
2020	0.345	0.323	0.651	0.389
2019	1.014	0.785	1.345	1.056
2018	1.029	0.748	1.384	1.462
2017	1.105	0.701	1.374	1.342
2016	1.116	0.645	1.546	1.052
2015	1.212	0.705	1.131	1.467

Looking at the elasticity coefficients of wage income, net operating income, transfer income, and net property income (Table 1), the four types of income always have a positive effect on disposable income, and the elasticity coefficient of wage income was always greater than 1 between 2015 and 2019, which indicates a relatively strong pulling power on disposable income, and the sudden drop to 0.345 in 2020 was due to the special situation in 2020, not the result of normal economic operation. The elasticity coefficient of net operating income was always less than 1, which indicates that the pulling power of disposable income is insufficient and needs to be further strengthened. The elasticity coefficient of transfer income was always greater than 1, and was larger among the four types of income, indicating that the pulling-up capacity of disposable income was relatively strong, and the reason for the sudden decline in 2020 was the same as that of wage income. The elasticity coefficient of net property income was always greater than 1 and was the largest among the four types of income, indicating the strongest pull-up ability to disposable income, but the proportion of net property income to rural residents' per capita disposable was very low, so in terms of the absolute number of rural residents' income, the role of net property income in increasing rural residents' disposable income was negligible. Overall, in recent years, the growth of rural residents' disposable income is related to all four types of income, but in terms of the degree of pulling effect, wage income and transfer income have the most effective effect, followed by net operating income and finally net property income.

2.2 Rural residents' consumption

2.2.1 Consumption structure. Consumption structure refers to the proportion of various types of consumption expenditure to the total living consumption expenditure. German economic statistician Engel believed that the relative proportion of food expenditure would decrease as the living standard improved, and later, people called the ratio of food expenditure to total consumption expenditure as Engel coefficient.

The Engel coefficient of rural residents declined from 0.48 in 2000 to 0.38 in 2010 and 0.33 in 2020, with an obvious downward trend, which is partly due to the government policy tendency and urbanization providing more jobs for rural residents, and the income of rural residents showing a significant and welcome change of rising, and partly due to the change in consumption concept of rural residents, gradually pursuing high efficiency. On the other hand, it is due to the change in the consumption concept of rural residents, who gradually pursue high efficiency and consumption diversification [2]. According to the standards of the Food and Agriculture Organization (FAO) of the United Nations, the

overall consumption situation of Chinese rural residents has achieved affluence in terms of numbers, but it should be seen that this is a low level of affluence, or numerical affluence, not real affluence.

The top three rural residents' consumption in order was food, housing, and clothing or education and entertainment in most years before 2010, specifically, food, housing, and clothing before 1990, food, housing, and education and entertainment from 1990 to 2010, and food, housing, and transportation and communication after 2010. In terms of changes in the main components of rural residents' consumption, food, and housing remained by far the two most important expenditures, with the sum of their shares in 1990, 2000, 2010, and 2020 being 76%, 65%, 60%, and 54%, respectively. The decrease in food and housing expenditures is mainly used to subsidize the three major areas of transportation and communication, culture and education, and health care, especially transportation and communication expenditures increased very rapidly after 2010. The changes in rural residents' consumption expenditures indicate that their consumption is shifting to a higher level and diversified direction of change, rural families are paying more and more attention to their children's education, and they have more and more connections with the outside world, and the openness of rural areas is increasing [3].

2.2.2 Marginal propensity to consume. Based on the time series data of rural residents' disposable and subsistence consumption expenditures, the one-dimensional linear regression is conducted to obtain the aggregate demand function as (Statistics with t in parentheses):

$$\sum P_i X_i = 499. \ 14 + 0.523 Y$$

 $R^2 = 0.912 \ (3.50) \ (7.88)$

The equation shows that the marginal propensity to consume of rural residents is 0.523, which means that 52.3% of the increase in net income of rural residents will be spent on subsistence consumption. This is quite different from the marginal propensity to consume of 0.779 for urban residents. On the one hand, it indicates that the current rural consumption market in China has not been effectively developed, and the consumption intention of rural residents is relatively insufficient, which may be related to the current structure and total supply of rural products and services [4]; on the other hand, it indicates that the burden of rural residents is relatively heavy, and at the same time, the income level of rural residents is still relatively low, so increasing the income of rural residents and reducing the burden is the current government's "three rural issues". Therefore, increasing the income of rural residents and reducing their burden are the top priorities of the current government's "three rural works".

3 Analysis of the reasons for slow income growth and lagging consumption of rural residents

The rural market has several times the number of consumers than the urban market, but the total consumption is much lower than the urban market, if we look at the per capita consumption, the difference between urban and rural areas is even more dramatic, the marginal consumption tendency between urban and rural areas reached 0. 256, almost half of the marginal consumption tendency in rural areas. There are many reasons why the consumption of rural residents lags so much at this stage, the most fundamental one being the slow growth of rural residents' income.

3.1 Reasons for the slow growth of rural residents' income

The effect of the national policies on increasing the in-

- come of rural residents has yet to be enhanced. Since 2000, the state has introduced several policies on agricultural restructuring, and the 19th National Congress of the CPC and 20th National Congress of the CPC have put forward many guidelines on increasing the income of rural residents in the hope of improving the income of rural residents, but so far the actual effect of increasing the income of rural residents has yet to be strengthened. In addition, one of the policies related to the income of rural residents is the industrialization of agriculture, which is intended to unite the scattered small farmers through large leading enterprises, so that rural residents can share part of the value-added income, and enhance the competitiveness of agriculture. However, the real problem is that the leading enterprises are not cooperative organizations of rural residents, and they follow the principle of self-interest in market transactions, so the benefits to rural residents are very limited. **3.1.2** Insufficient implementation of economic policies related to the "three rural issues". For a long time, China has been developing some urban industries such as industry at a high speed, and to a certain extent, the implementation of economic policies related to agriculture, rural areas, and rural residents has been insufficient, which is the root cause of the low and slow increase of rural residents' income. The specific manifestations of this are the vigorous development of industry and economic sectors such as transportation, construction, and mining that serve the industry, while relatively neglecting the agricultural sector; adequate provision of public goods for cities and citizens by the state to ensure the basic living, education, medical care, and pension needs of workers and citizens, but insufficient provision of corresponding public
- **3.1.3** Agricultural development is lagging, and the level of education in rural areas is seriously low. The level of education severely restricts the growth of rural residents' income, and the transfer of rural labor and upgrading of agricultural industries are positively correlated with the level of education of rural residents^[6]. Therefore, providing educational support to rural areas, providing free vocational training, and implementing free compulsory education are major initiatives to change the backwardness of rural areas and increase the income of rural residents.

goods for rural and rural residents, making rural residents only

self-reliance; in terms of credit funds, there is a capital outflow

from the rural areas that originally lack capital, while there is cap-

ital inflow from the capital-rich cities, making rural areas lack

gravitational force^[5].

3.2 Reasons for the lagging consumption of rural residents

Income directly constrains consumption. The fundamental reason for the lagging consumption of rural residents is the slow growth of income, which leads to insufficient effective demand and purchasing power of rural residents. By the end of 2021, China's rural population accounted for 35. 28% of the total population, while rural retail sales accounted for only 12.6% of the national

retail sales, *i. e.*, the rural population, which accounts for more than 1/3 of the total population, purchased only 1/8 of the total retail sales of goods. Therefore, achieving income growth for rural residents is closely related to increasing rural residents' consumption.

In addition, the lack of optimistic consumption expectations and confidence of rural residents is an important constraint to the lack of rural consumption demand. With the increasing importance of education, rural residents are paying more and more attention to the cultural quality of their children, and education expenditure has gradually become one of the main expenditures of rural residents. It has become a big burden for rural families.

Finally, the backwardness of rural infrastructure and the supply of rural public goods have posed serious constraints on rural residents' consumption. The infrastructure closely related to the life of rural residents is relatively backward, such as the power grid, communication facilities, water supply, roads, etc., which to varying degrees limit rural residents' demand for high-end home appliances, communication services, automobiles, and other goods. The following problems exist in the supply of rural public goods: excessive supply that exceeds the demand of rural residents, resulting in an excessive burden on rural residents; supply structure that is not suitable for the demand structure of rural residents and insufficient effective supply, increasing the undue burden of rural residents; and unfair cost sharing of public goods, exacerbating the burden of low-income rural residents.

4 Countermeasures to increase rural residents' income and enhance rural residents' consumption

As the largest income and consumption group in China, the income and consumption of rural residents is a major problem plaguing China's economic development. The slow income increase and lagging consumption of rural residents are the primary problems, and in this regard, the following countermeasures are suggested.

Increasing agricultural infrastructure investment and changing the backwardness of rural infrastructure oped countries attach more importance to agricultural infrastructure construction and input, and further increase their support in the process of changing the way of protection for agriculture from direct to indirect. Data show that at the beginning of the 21st century in developed agricultural countries such as the United States, Canada, the United Kingdom, and Australia, the financial support provided by the government to agriculture is equivalent to 25% of agricultural GDP, and even higher in countries such as Japan and Israel. It reached 45% - 95%, and even in developing countries like India, the share of agricultural support expenditure in agricultural GDP reached 10% [7]. Data from the China Statistical Yearbook show that the ratio of fiscal agricultural expenditure to agricultural GDP was 5% in 2000, 8% in 2010, and 13% in 2020, and the total amount of financial support for agriculture in China has been insufficient for a long time. Relatively speaking, China's agricultural infrastructure is still weak, and its ability to resist natural disasters is not strong, and only by continuously increasing the construction of agricultural infrastructure can we consolidate and improve agricultural production capacity.

- Reforming the rural financial service system to provide financial support for rural development Rural development needs a large amount of financial support, and relatively speaking, the ability of rural areas to absorb funds is not comparable to that of cities. At present, China's agriculture and rural work are in a new stage of development, showing new characteristics: the market supply and demand of major agricultural products have undergone important changes, from shortage to basic balance of supply and demand, with the surplus in the year of abundance; with the development of marketization and urbanization speeding up, the interdependence between agriculture and industry, rural residents and citizens, and rural and urban areas are getting higher and higher; the main source of income growth of rural residents has changed significantly. The biggest problem brought about by these new changes is that rural residents need financial support to improve their living standards, so the development of rural finance has become an important condition to ensure the development of the rural economy. In the face of a long agricultural production cycle, small scale, weak borrowing ability of rural residents, low guarantee ability and creditworthiness, and high cost of loans, to develop the rural financial service system, the first step is to further deepen the rural financial reform, strengthen the constraint mechanism, enhance the service function, with appropriate state support and local government responsibility. At the same time, it is required to help rural finance around the local conditions, according to their characteristics to choose the appropriate model for different forms of property rights pilot, not to engage in a one-sizefits-all. It should be said, this reform can be more prominent financial services for the "three rural" function.
- 4.3 Improving the supply of public goods in rural areas to create a favorable consumption environment for rural residents. Public products here refer to quasi-public products, including electricity, telecommunications, radio and television, and running water. Electricity companies should renovate rural power grids to ensure the stability of electricity operations in rural areas, which will certainly stimulate the consumption of rural electricity and household appliances. Water supply companies should improve rural water facilities and water quality, popularize piped water, and improve rural residents' access to water. Communication departments should improve signal coverage in rural areas, which will not only promote rural residents' consumption of home appliances but also educate rural residents on consumption through these media and guide them to establish correct consumption concepts, thus promoting the expansion of rural markets.
- **4.4** Establishing a new type of social security system and continuously improving the social security system in rural areas The Report of the 20th National Congress of the CPC points out that "we should improve the social security system, improve the multi-level social security system that covers all people, integrates urban and rural areas, is fair and uniform, safe and sustainable, and we should expand the coverage of social insurance",

which points out the direction for improving the social security system in rural areas. According to this requirement of the central government, efforts should be made to improve three aspects. First, it is necessary to improve the medical insurance system for rural residents, to effectively solve the problems of rural residents' difficulties in accessing medical care and expensive medical care, and to prevent rural residents from becoming poor and returning to poverty due to illness. By increasing financial subsidies for rural residents' medical insurance, building specialized and large-scale medical designated institutions, and providing rural residents with suitable medical insurance, the improvement of the rural residents' medical insurance system will be realized. Second, it is necessary to actively promote the full coverage of pension insurance for rural residents, and promote the reform of the integrated pension coordination system in urban and rural areas. Increase the publicity and promotion of pension insurance, so that rural residents can effectively realize that pension insurance is closely related to their interests and increase their initiative to actively participate in pension insurance. Third, we should formulate supportive policies that favor rural education and eliminate as much as possible the imbalance between urban and rural education resources. Education can effectively improve the level of human capital and promote an increase in income level, and education is a quasi-public good with an increasing marginal rate of return [8], the government supports the children of rural families to complete compulsory education and at the same time, issues special education subsidies to families who have real difficulties in paying for higher education with financial difficulties, to realize the social function of intergenerational poverty truncation in education and gradually realize the balance of urban and rural education resources.

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