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Gap between Urban and Rural Economic Development in Less Developed Areas

—A Case of Northern Jiangsu Area, China

CHENG Hong-ru*

College of Economics, Law and Politics, Yancheng Teachers University, Yancheng 224002, China

Abstract Taking northern Jiangsu area as an example, economic disparity between urban and rural areas is described according to the data in 2000–2009 *Jiangsu Statistical Yearbook*. Result shows that there are significant differences in the rural and urban economic development in less developed areas, which are mainly reflected in the differences in per capita income, living standard, and Engel coefficient. Reasons for urban and rural economic disparity in less developed areas are analyzed. The asymmetry and immobility of rural and urban resources have objectively caused the income gap between urban and rural residents; urban industrial development, which is faster than agricultural development, has widened the income gap between urban and rural residents; and the differences in comparative labor productivity in rural and urban areas have enlarged their income gap. Countermeasures to minimize the urban and rural economic development gap are put forward, such as deepening the reform, realizing the free flow of economic resources between urban and rural areas, developing rural areas through urban development, exerting the function of urban areas in the coordinated development of urban and rural areas, paying attention to the agriculture and rural areas, and improving the comparative labor productivity of agriculture.

Key words Urban-rural economy, Gap, Comparative labor productivity, Dual structure intensity, Northern Jiangsu area, China

After entering the 21st century, economy has developed rapidly in both urban and rural areas in China. But the gap between rural and urban economy is widening and there are obvious characteristics of the dual economic structure. In order to effectively analyze the gap between urban and rural economic development in less developed areas, northern Jiangsu area is taken as an example. According to the data in 2000–2009 *Jiangsu Statistical Yearbook*⁽¹⁾, comparative analysis on the industrial and agricultural development and the economic situation of urban and rural residents in less developed areas is carried out, in order to find out the economic reasons for economic gap, and to discuss the specific measures for minimizing the economic development gap between urban and rural areas in less developed areas.

1 Economic disparity between urban and rural areas in less developed areas

1.1 Per capita income gap between urban and rural areas

Per capita disposable income of urban residents and per capita net income of rural residents reflect the income level of urban and rural residents, respectively. Income level of urban and rural residents directly reflects the different levels of economic development. Table 1 reports the economic gap in less developed areas according to the per capita disposable income of urban residents and per capita net income of rural residents in northern Jiangsu area in the years 1999–2008.

1.1.1 Per capita net income of rural residents in less developed areas is less than the per capita disposable income of ur-

ban residents. In the 20th century, per capita disposable income of urban residents in less developed areas is higher than the per capita net income of rural residents. Taking northern Jiangsu area as an example, per capita disposable income of urban residents is 5 687 yuan in the year 1999, and the per capita net income of rural residents is 3 048 yuan, an absolute gap of 2 639 yuan. In the first ten years of 21st century, this situation has not changed, but the gap has further enlarged. In the northern Jiangsu area, per capita net income of rural residents increases from 3 132 yuan in the year 2000 to 6 038 yuan in the year 2008, an increase of 2 906 yuan and 322.88 yuan per year. Hence, the average annual growth rate is 3.5%. At the same time, per capita disposable income of urban residents in less developed area boosts from 6 611 yuan in the year 2000 to 12 536 yuan in the year 2008, an increase of 5 925 yuan and 658.33 yuan per year. The average annual growth rate is 7.3%. Thus, average annual increase of per capita disposable income of urban residents in less developed area is 2.03 times of that of the per capita net income of rural residents. The result is obtained according to the data provided by the Statistic Bureau. But in fact, the actual gap is larger. This is because a great part of peasants' net income is used for expanded reproduction; while urban residents have no production expenditure and enjoy a variety of social welfare and benefits. Some of the urban residents even earn hidden income, or gray income.

1.1.2 According to the income ratio of urban resident to rural resident, per capita income gap between urban and rural residents shows a tendency of expansion in general. With the reform of economic system, income of both urban and rural residents grows in less developed area with different growth amount. Thus, the gap is further widened. In northern Jiangsu area, per capita income ratio of urban resident to rural resident

is 2.55 in the year 2007, which is far greater than the ratio of 1.86 in the year 1999. Since the year 2008, affected by the US Subprime Mortgage Crisis, income of urban residents decreases; while the peasants' income increases due to new countryside construction. Although the income gap narrows between rural and urban residents, the ratio of urban resident to rural resident is still greater than 2.

Table 1 Changes in per capita income of rural and urban residents in northern Jiangsu area in the years 1999 – 2008

Year	Per capita disposable income of urban residents Yuan	Fluctuation %	Per capita net income of rural residents Yuan	Fluctuation %	Income ratio of urban resident to rural resident
1999	5 687	–	3 048	–	1.86
2000	6 611	16	3 132	2	2.11
2001	6 988	5	3 295	5	2.12
2002	7 388	5	3 476	5	2.12
2003	8 152	10	3 527	1	2.31
2004	9 116	11	3 906	10	2.33
2005	10 303	13	4 297	10	2.39
2006	11 799	14	4 733	10	2.49
2007	13 655	15	5 352	13	2.55
2008	12 536	–8	6 038	12	2.07

1.1.3 According to the growth rate, per capita net income of rural residents has smaller growth rate than the per capita disposable income of urban residents in less developed areas. According to the change trend, the growth rate is relatively great before the 20th century. In northern Jiangsu area, per capita disposable income of urban residents has a growth rate of 16%; and per capita net income of rural residents is only 2%. Since the 21st century, growth rate of per capita disposable income of urban residents has been larger than that of per capita net income of rural residents in general.

1.2 Gap of living standard between urban and rural residents Income gap between urban and rural residents ultimately reflects the consumption gap between urban and rural residents. Table 2 reports the gap of living standard between urban and rural residents in less developed area by comparing the per capita consumption expenditure levels of urban and rural residents in northern Jiangsu area in the years 1999 – 2008.

Table 2 Comparison of per capita consumption expenditure between urban and rural residents in northern Jiangsu area in the years 1999 – 2008

Year	Per capita consumption expenditure of urban residents Yuan	Per capita consumption expenditure of rural residents//Yuan	Ratio of urban consumption level to rural consumption level
1999	4 104	1 652	2.48
2000	4 563	1 809	2.52
2001	4 780	1 847	2.59
2002	4 691	1 875	2.50
2003	5 844	2 064	2.83
2004	6 278	2 262	2.78
2005	7 154	2 770	2.58
2006	7 881	3 046	2.59
2007	8 820	3 534	2.50
2008	8 253	4 010	2.06

1.2.1 According to the absolute difference, there is increasing gap in absolute value of per capita consumption expenditures between urban and rural residents in less developed areas. Absolute value of per capita consumption expenditure of urban residents has increased from 4 104 yuan in the year 1999 to 8 253 yuan in the year 2008 in northern Jiangsu area. And consumption level of rural residents has risen from 2 452 yuan in 1999 to 4 010 yuan in 2008. According to the absolute difference of expenditure, the value has grown from 2 452 yuan in 1999 to 4 243 yuan in the year 2008, an increase of 1 791 yuan.

1.2.2 The ratio of urban consumption level to rural consumption level fluctuates in less developed area. In the years 1999 – 2008, narrowing the gap between rural and urban residents in northern Jiangsu is a tortuous and difficult process. The gap of consumption expenditure in northern Jiangsu has increased from 2.48 times in the year 1999 to 2.59 times in the year 2001. In 2002, gap between the urban and rural consumption expenditure falls. In 2003, it rises rapidly to 2.83 times. In 2005, it falls back to 2.58 times and rises in 2006. In 2007, the gap narrows and reaches 2.06 times in the year 2008.

1.3 Wealthy disparity between urban and rural residents Engel coefficient is calculated according to the food expenditure and total consumption expenditure, which is in inverse proportion to the social productive force and the income level of residents. Generally, with the increase of income, proportion of food expenditure in total household income gradually decreases. Table 3 shows the Engel coefficients of urban and rural residents in northern Jiangsu in the year 2000, and the years from 2004 to 2008. It indicates that the wealthy disparity between the urban and rural residents in less developed area is fairly obvious.

Table 3 Comparison of Engel coefficient between urban and rural areas in northern Jiangsu in the year 2000, and the years from 2004 to 2008

Year	Engel coefficient of urban residents	Engel coefficient of rural residents
2000	39.6	46.7
2004	39.0	47.4
2005	37.1	44.8
2006	35.9	43.8
2007	37.3	42.1
2008	39.4	41.7

Table 3 reports that Engel coefficient of urban resident is between 35% and 40% in northern Jiangsu in recent years. It achieves the level of affluence of life but this affluence is still relatively low. In the years 2000 and 2008, Engel coefficients are 39.6% and 39.4%, respectively, which means the initial stage of wealthy. However, Engel coefficient of rural residents is always above 41%. In the years 2000 and 2008, Engel coefficients are 46.7% and 41.7%, respectively. Gap of Engel coefficient between urban and rural residents in less developed areas has a total change trend of reduction. But the gap of Engel coefficient between urban and rural residents is very significant. Quality of life for urban residents is improving in less developed areas and the Engel coefficient has reduced to less than 40%. It is generally in a well-off level and is at the transition phase to

the wealthy stage. However, rural residents are still at a well-off level and the Engel coefficient is gradually decreasing, which is still significantly higher than the urban residents.

2 Analysis on the formation factors of urban and rural economic gap in less developed areas

Urban and rural economic gap in less developed areas is the result of long-term accumulation of economic development. The gap is mainly caused by locational disadvantage factor and economic factor.

2.1 Asymmetry and immobility of resources possession between urban and rural areas objectively leads to the income gap between urban and rural residents The significant economic gap between urban and rural areas in less developed area is determined by the asymmetric substitutive characteristics between urban and rural economy. Rural economy is mainly based on agricultural production, relying on the growth function of plants and animal. It has a major characteristic of separate management of agricultural producers. However, urban economy takes the agglomeration economy of non-agricultural production as the main feature. Thus, rural economy and urban economy are two different modes of resource distribution. Objectively, human resource, capital, technology, information and other economic resources of the whole society are centralized from rural areas to urban areas, showing the asymmetric distribution of rural and urban economic resources. This asymmetry of resources possession between urban and rural areas inevitably leads to the income gap between urban and rural residents. For instance, in the early days of the foundation of China, isolation policy is implemented in employment, education and household registration, which forms dual structure, leads to the immobility of economic resources, and widens the gap between urban and rural areas.

2.2 Industrial development is faster than the agricultural development which widens the income gap between urban and rural residents The gap between industrial and agricultural development inevitably leads to the income gap between urban and rural residents. Table 4 reports the proportions of primary, secondary and tertiary industries in the GDP of northern Jiangsu in the years 1999–2008.

Table 4 indicates that in the year 1999, proportion of primary industry in GDP is relatively low in northern Jiangsu area, which is only 28.2%. Proportion of secondary industry in GDP is 40.8%, which is 1.44 times of that of primary industry. In the year 2008, proportion of primary industry declines to 14.9%, and that of secondary industry increases to 49.8%. Thus, proportion of secondary industry is 3.34 times of that of primary industry in the year 2006, which increases by 2.31 times compared with that in the year 1999. Proportion of primary industry in GDP declines year by year in less developed area, while that of secondary industry increases every year, which indicates that the increasing gap between industrial and agricultural development widens the income gap between urban and rural residents.

According to the change tendency of industrial structure, proportion of primary industry is decreasing, while that of sec-

ondary industry is increasing. Thus, development gap between urban industry and rural agriculture is widened. Taking northern Jiangsu area as an example, Table 4 reports that proportion of primary industry has decreased from 28.2% in 1999 to 14.9% in 2008; proportion of secondary industry in GDP has increased from 40.8% in 1999 to 49.8% in 2008, showing a slight upward trend.

Table 4 Proportions of primary, secondary and tertiary industries in the GDP of northern Jiangsu in the years 1999–2008

Year	%		
	Proportion of primary industry	Proportion of secondary industry	Proportion of tertiary industry
1999	28.2	40.8	31.0
2000	26.4	41.4	32.2
2001	25.2	42.0	32.8
2002	24.0	43.0	33.0
2003	21.2	45.3	33.5
2004	20.2	46.6	33.3
2005	19.9	46.4	33.9
2006	17.8	47.9	34.3
2007	16.2	48.9	34.9
2008	14.9	49.8	35.3

2.3 Labor productivity gap enlarges the income gap between urban and rural residents Labor productivity of non-agricultural industry has greater growth rate than that of agricultural industry in less developed area, which enlarges the income gap between urban and rural residents. Since workers of primary industry are mainly peasants, we can compare the labor productivity of primary industry with that of secondary and tertiary industries. If the growth rate of labor productivity of secondary and tertiary industries is greater than that of primary industry, it is more possible that the income gap between urban and rural residents will increase^[2]. Table 5 reports the intensity of urban-rural dual structure in northern Jiangsu in the years 2000–2008.

Table 5 reports that since the year 1999, comparative productivity of agricultural GDP in less developed area has shown a decreasing trend. In the year 1999, comparative productivity of agricultural GDP is 0.471 and that in the year 2008 is 0.442, showing that dual contrast has not yet reached its highest point. At the same time, comparative productivity of non-agricultural GDP has also shown a decreasing trend. In the year 1999, comparative productivity of non-agricultural GDP is 1.677, and that in the year 2008 is 1.284. Changes of the comparative productivity of two kinds of GDP indicate that the dual structure intensity is at a relatively great value in less developed area.

Dual structure intensity, also called the comparative labor productivity, refers to the ratio of the output value of a given department to total output value divided by the ratio of labor of the department to the total labor. It is usually used to judge the coordinated development of industry and agriculture. Greater comparative labor productivity indicates stronger duality. Dual structure intensity of northern Jiangsu area since the year 1999 shows that development of agriculture is slow, transfer of agricultural surplus labor is relatively slow, or the price of agricultural products is greatly lower than the value.

Table 5 Dual structure intensity of northern Jiangsu area in the years 2000 –2008

Year	Proportion of agricultural GDP//%	Proportion of agricultural employees//%	Comparative productivity of agricultural GDP	Proportion of non-agricultural GDP//%	Proportion of non-agricultural employees//%	Comparative productivity of non-agricultural GDP	Comparative labor productivity between urban and rural areas
2000	26.4	56.1	0.471	73.6	43.9	1.677	3.563
2001	25.2	54.7	0.461	74.8	45.3	1.651	3.584
2002	24.0	52.4	0.458	76.0	47.6	1.597	3.486
2003	21.2	47.9	0.443	78.8	52.1	1.512	3.417
2004	20.2	44.2	0.457	79.9	55.8	1.432	3.133
2005	19.9	40.3	0.494	80.3	59.7	1.345	2.724
2006	17.8	37.4	0.476	82.2	62.6	1.313	2.759
2007	16.2	35.0	0.463	83.8	75.0	1.117	2.414
2008	14.9	33.7	0.442	85.1	66.3	1.284	2.903

3 Countermeasures to minimize the gap between urban and rural economic development in less developed area

Due to the asymmetry and immobility of resources possession between urban and rural areas in less developed region, development of industry is significantly faster than that of agriculture. Growth rate of labor productivity of non-agricultural industry is greater than that of agricultural industry, which leads to the great imbalance in living standards of urban and rural residents. The main aspects of this contradiction are the backward agricultural production and the not prosperous rural economy. Based on this, less developed area can minimize the gap between urban and rural economic development as soon as possible by accelerating the free flow of rural resources, exerting the agglomeration and driving effectiveness of cities, improving the productivity of agriculture, and speeding up the development of agriculture.

3.1 Deepening the reform; realizing the free flow of economic resources in urban and rural areas Economic resources in urban and rural areas are mainly the capital and human resources. The key to solve the asymmetry and immobility of resources possession between urban and rural areas is to deepen the reform and to guide the rational allocation of resource elements between urban and rural areas.

3.1.1 Deepening the reform of household and employment system; ensuring the free flow of human resources between urban and rural areas. Marx and Engels argue that regularly-distributed population and large industry is a condition for eliminating the urban and rural isolation, as well as the differences between urban and rural areas…… Only the society with coordinated arrangement of its own productivity according to the overall plan can allow industry to select the most suitable development and allow the maintenance or development of other factors of production in the whole country^[3]. Therefore, reform must be deepened to realize the free flow of human resources between rural and urban areas. Firstly, reform the household registration system and realize the full employment of migrant workers. Low-income people can obtain the basic labor income through economic development and more job opportunities. Due to the reduction of labor forces in rural areas, income of the remaining peasants should be further increased according to the law of diminishing marginal productivity of agriculture^[4].

Affected by the traditional dual structure in urban and rural economy, transfer of rural labor force is not sufficient in less developed areas, which directly leads to the low income level. Therefore, household registration system must be reformed in order to achieve the equilibrium of supply and demand of labor force, to make workers have the competitiveness of normal income, to form the free flow of surplus labor force between urban and rural areas, and to provide equal employment opportunities for migrant workers. Secondly, reform the employment system. Through the policies of "three supports and one assistance" and "College-graduate Village Official", more and more youth with knowledge will service in rural areas and offer intellectual support for the development of rural economy and the cultivation of new type peasants. Only when the effective flow between urban and rural areas is realized, can we eventual change the countryside, increase the income of peasants, and minimize the income gap between urban and rural areas.

3.1.2 Deepening the reform of the modern financial system; ensuring the free flow of capital between urban and rural areas. Modern financial system should be designed according to the characteristics of rural areas, which aims to solve the difficulties in loan of peasants and to create financing methods according to the different loan subjects of peasant and rural enterprise. The large enterprises, leading enterprises, small and medium enterprises and large peasant households can solve the mortgage loan in big banks, village banks and credit associations according to the existing financial system. And peasant households can get a mortgage on production equipment, raw materials, semi-finished products, agricultural products and even crops according to the *Property Law* of China. However, these properties are very limited. At present, financial reform of rural areas should immediately solve the problems of limited mortgaged property for peasant households. Firstly, according to the *Opinions of the People's Bank of China* and the *China Banking Regulatory Commission on Promoting the Innovation in Financial Products and Service Modes in Rural Areas* and the *Guiding Opinions of the People's Bank of China and China Banking Regulatory Commission on Further Adjusting the Credit Structure to Promote the Rapid yet Steady Development of the National Economy*, China should deepen the rural financial reform, and try to implement the land management right and homestead mortgage in practice. Secondly, government should rectify and complete relevant legislation as soon as possible,

and allow peasant households to mortgage on homestead and management right, so as to make up for the limited mortgaged property of peasant households to some extent and to meet the financing needs of rural households.

3.2 Developing rural areas through urban development; exerting the function of cities in the coordinated development of urban and rural areas With its formation and development, city gradually becomes the centers of industry and service industry, forms huge concentration effect, and promotes the development of agriculture and rural areas.

3.2.1 Exerting the leading role of economic center of the city. City is a major distribution center for various factors of production, as well as the distribution center for economic and information resources. Marx and Engels point out that a complete industrial system shall be established in order to make use of the new invention, to build high-quality road, to buy cheap machinery and raw materials and to hire well-trained employees. And to establish a complete industrial system, it is necessary to link closely all the industrial departments, and to rely on domestic industrial cities and prosperous coastal cities. This theory has long been stated by economists^[5]. Therefore, less developed areas should make use of city to develop industry, to promote agricultural development and to realize "developing rural areas through urban development".

3.2.2 Exerting the urban agglomeration effects. Big city has better railroad, canal, highroad, and more skilled workers. Therefore, it is more favorable to move in the city. Moreover, customers gathered in the markets and exchanges, and sales markets and raw materials are directly linked. Thus, large factory cities grow rapidly in an amazing speed^[6]. Less developed cities should develop rural economy through urban development, and realize a truly "developing rural areas through urban development".

3.3 Increasing comparative productivity of agriculture by taking rural area and agriculture as the starting points

The main reason for the increasing gap of economic income between urban and rural residents in less developed areas is the relatively slow development and the low comparative productivity of agriculture. To solve this problem, it is necessary to highlight rural area and agriculture, to develop rural economy, and to improve comparative productivity of agriculture.

3.3.1 Integrating urban and rural development; promoting the layout integration. Layout and planning are the premises for the integration of urban and rural development. The principal problems restricting the economic and social development of less developed areas over a long period of time are the dispersed and repeated construction of infrastructure, the disordered layout of villages, the insufficient function cultivation of townships and so on. Therefore, government should carry out functional localization of different districts, strengthen the planning and management of rural-urban integration in less developed areas, make urban system planning, layout planning of industrial parks, basic farmland protection planning, and the overall planning of land use. At the same time, government should regard the downtown in less developed areas as the development center, carry out overall planning of village layout, industrial distribution,

infrastructure construction, and ecological construction, fundamentally change the division status of the urban and rural areas.

3.3.2 Reforming the land system; effectively circulating land use right. In recent years, cities in less developed areas have developed rapidly, which mainly relies on land. Land acquisition causes the land-lost peasants, which further enlarges the economic gap between urban and rural areas. Therefore, on the one hand, government should correctly manage the acquisition of public welfare land, hold the red line of cultivated land, and can not change the land use at will. On the other hand, government should effectively circulate the land use right in accordance with the law and on a voluntary and compensatory basis, allow peasants to transfer the land management right in the forms of lease, subcontract, transfer, and joint-stock cooperative, so as to improve the comparative productivity of agriculture.

3.3.3 Integrating the industrial development of urban and rural areas; minimizing the income gap between urban and rural residents. The Third Plenary Session of the Seventeenth Central Committee of the Communist Party of China points out that we should integrate the industrial development of rural and urban areas, optimize rural industrial structure, develop service industry and township enterprises in rural areas, guide the flow of urban capital, technology, talent, management and other management factors into rural areas. On the one hand, overall planning and rational distribution should be carried out according to local conditions. Less developed areas should improve traditional agriculture by modern industrial technology and equipment according to their own characteristics, promote the secondary and tertiary industries by modern agriculture, accelerate industrial convergence by modern service industry, and carry out planning and adjustment of industrial layout. On the other hand, industrial structure should be optimized in rural areas in order to realize the integrated development of urban and rural industries. Less developed areas should promote the rural industrialization, take a new road to industrialization, vigorously develop township enterprises and cultivate non-agricultural industry through system innovation, and optimize and upgrade the industrial structure in rural areas in order to change the urban-rural dual industrial structures.

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