

A Humble Discussion on Spatial Linkage Effect between Labor Mobility and Regional Economic Growth in China

Zongliang Zhang

Linyi University, Shandong Linyi, 276000

hunter2011@foxmail.com

Keywords: Labor Mobility; Regional Economic Growth; Spatial Linkage

Abstract. With the pace of China's reform and opening up, the regional economic growth is further promoted and the influence of the labor mobility on the regional economy is also increasingly deepening. But at the same time, the enlargement of the regional economic gap is becoming the main problem in the development process, if let it happen, which will be harmful to our economic development in the future. In this paper, the spatial linkage effect between the labor mobility and the regional economic growth is studied and some development suggestions are put forward based on the study of main characteristic of Chinese labor mobility and in terms of industrial distribution, enterprise location, regional growth effect, regional gap, regional employment, income backflow and price transfer.

Introduction

From the point of view of the basic theory of new classical growth model, the realization of the economic growth for one region should be made not only from the capital and technical investment, but also, more important from the labor input. With the growth of economy, the role of human factor in the economic growth is increasingly prominent, and the impact on the economic growth is becoming more and more profound. However, different regions have different human capitals and different regional economic growth speed, and the economic gap between regions becomes larger in the process of economic development, which then further promotes the mobility of human capital. Thus, the labor mobility has the great influence on the regional economic growth.

The main characteristic of labor mobility in China

Quantity Growth. According to the 6th population census data in 2010, the population size of nonlocal registered permanent residence has been beyond 100 million, and has greatly promoted after compared with 6.575 million in 1982. Currently, the floating population has become a main far-reaching factor in the process of the regional economic development[1].

Region Flow. In the process of population mobility, the main reasons of the rural population mobility are the imbalance of economic development and the large economic income gap between regions. In this case, most of rural labors have flowed into the coastal cities with a relatively high economic development level.

Distance Transport. In the view of the population flow direction, several main labor inflow areas have already been formed currently in China, including the eastern coastal regions of Jiangsu, Zhejiang, Shanghai, Beijing, Tianjin and Guangdong, and the western regions of Yunnan, Sichuan, etc.. For these regions are regarded as the center of the current economic development, a large number of labors are attracted, and the labors in the surrounding regions with close distance are attracted highly. While, the railway is a kind of relatively cheap transportation mode, and it also becomes the main labor transportation way.

Outing Way. For the rural labor has not smooth information channels and has poor information analysis ability, the labor outing "network" effect is gradually formed, that is, the labor mobility chain is formed through the interaction between the relatives and friends, and the "network" effect is still very obvious until now[2].

Employment Structure. In general, the rural floating labors are normally engaged in construction, manufacturing, trade and service industry due to the education background. Take Shanghai as an example, the rural floating labors are largely employed in construction, manufacturing and commercial industry, and the labors in these three fields account for 75% of total rural floating labors.

Education Structure. The labors are regarded as the skill-oriented ones if they are with the secondary school degree or above. Thus, the education background of junior high school is the boundary of skill-oriented labor and unskilled labor. From the classification standard, the proportion of the skill-oriented and unskilled labors and the migration population in China is 1:3.1, the proportion of the skill-oriented and unskilled labors and the floating population in China is 1:6, and the latter is higher than the former about one time[3]. This phenomenon shows that the characteristic of labors attracted for the coastal regions with the rapid economic development is that the mobility growth rate of labors with lower education level is relatively fast.

Inflow and Outflow. In view of the overall economic development, the eastern coastal areas are the main regions of labors inflow, and the population ratio between inflow and outflow is 8.94:1. The population in central regions is more 4 times than the western regions although less 1/16 than that in the eastern coastal areas, and the population ratio between inflow and outflow is 9.74:1[3].

Mobility Stage. From above analysis, it can be found that Chinese labor mobility shows the stage characteristics, and the mobility direction is the same and the mobility speed is fast for the skill-oriented labors and the unskilled labors.

The influence of labor mobility on regional economic growth

Industrial Distribution and Enterprise Location. In the process of production, the labor is indispensable and key production factor, the labor mobility has great influence on the selection of enterprise location, and then affects the layout of the whole industry. The eastern coastal areas is the main inflow regions of current labors in China, the industrial enterprise quantity in the eastern coastal regions rises sharply in the process of labor mobility, and the high-tech industry develops rapidly, accounting for 86% of the whole industrial enterprises. Also the development of the traditional industry shows the positive state[4]. However, the resource of the eastern coastal areas, and the development of resources industry shows relatively falling. A large number of labors are flowed out, which creates favorable conditions for the development of the foreign capital enterprises. Currently, the foreign capital enterprises in the eastern coastal regions have accounted for 90% of the whole foreign capital enterprises in China. The inflow of the foreign capital enterprises has further promoted the economic growth of the coastal regions, benefited the strategic adjustment of the economic structure, and attracted more labors for the coastal regions.

Owing to the rapidly economic growth, the relatively concentrated enterprise areas, and the higher income level and employment opportunity in the eastern coastal regions, the eastern coastal regions have more attraction for the labors. Meanwhile, the rapid labor mobility offers the sufficient human resources basis for the economic development, the labor wage growth speed is slow, and a lot of unskilled labors in the area has limited the gradient shift of the traditional industry. All these factors have caused the common development for the traditional industry and the high-tech industry in the coastal regions.

Regional Growth Effects. At present, there are still a lot of surplus labors in our labor mobility regions. Under this condition, the labor outflow has little influence on this region. Therefore, the labor inflow regions shall be mainly researched for the regional growth effect. Take Shanghai as an example, the contribution rate of migrant labor on the economic growth from 6.7% in 1990 to 21.2% in 2013. It can be seen that the economic growth generated from the labor mobility is very considerable. With the further development of economy, the industrial structure of regional economy in China is adjusted accordingly, and the impact of labor on the economy will further deepen[5].

Moreover, the tertiary industry in China is developing rapidly in recent years, and the employment elasticity is also increasing gradually. With GDP increasing year by year, the growth

rate of labor employment is also accelerating. Due to the trend of negative population growth already displaying in many coastal areas in recent years, the local labor quantity is also declining. In order to guarantee the sustainable growth of economy in the coastal areas, the migrant labors have become the indispensable and important factor to promote the economic development[6].

Regional Disparity. From a theoretical point, the rural labor in our country still remains in the surplus at present stage, that is, there still exists zero labor output in a part of the rural. Thus, the flow of the rural labor into the developed areas can promote the family income to some extent. According to the analysis of the labor mobility in the developed regions and undeveloped regions, the following two conclusions can be obtained. The first is that the income gap of labor mobility is relatively large, and the gap between lowest income and highest income still shows the expanding trend. The second is that the income gap between labor inflow region and labor outflow region shrinks, but only the relative gap, the absolute gap has no shrinkage, while shows the expanding trend, which can result in the rural labors still transferring from the economically backward areas to the economically developed areas[7].

Regional Employment. There exists more distinctive dual labor market in our developed areas at present, which is the reason of the industrial cluster of coexistence of the traditional industry and the high-tech industry. The industrial gradient transfer cannot play the role under this condition, but the labor flow and transfer can play the role, and then this way can maintain the dual industrial structure for the coastal areas[8]. From a theoretical point of view, the living costs of the local labors are relatively high. Thus, the labors from other places have more competitive advantages, and the latter one may have crowding-out effect or substitution effect on the former, but the specific investigation situation is different from the theory, and the specific performance is shown in the following two aspects.

The first is the educational degree. Generally, the economy is more advanced in the labor inflow regions, and the education level is relatively high. Take Beijing as an example, more than 80% of senior high school students shall go to university after graduating from the high school and more than 90% of the students can graduate from the technical secondary school. While in the view of the proportion of unemployment, there is low unemployment for the secondary school. Therefore, the crowding-out effect of the migrant labor on the local labor is limited in the relatively high industry requirements on education background and skill.

The second is the employment departments. According to the survey data, the migrant labors are mainly concentrated and employed in the collective enterprises and the state-owned enterprises and institutions, and the proportion of employment in the private and individual enterprise and the self-employment is also large. While the urban labors are mainly engaged in the state-owned enterprises and institutions, accounting for 70% of all employment sectors[9]. That shows that the substitution effect of the migrant labors is also very limited to the local labors.

Fundamentally, there is no substitution and crowding-out but supplement relation between the migrant labors and the local labors, and the migrant labors in the primary industry are hard to have the substitution effect on the local labors, which mainly occurs in the part of occupation of the secondary industry and the tertiary industry.

Income Backflow and Price Transfer. There generally exists the family relationship between the temporary migrant labor and the labor outflow. Thus, most of incomes of flow labors are returned to the labor outflow location, and the specific effects are mainly shown in the following aspects. The first is the investment capital backflow. This backflow is mainly based on the business income, and the backflow way is the capital labor or the investment labor, which is also a major way of primitive accumulation of capital in the region. The second is the cash capital backflow, which currently is the main economy source for most of the rural households.

For the income backflow generated from the labor mobility can lead to price and demand rising in the local market, the transfer effect of price is caused, which is not only shown in the promotion of the rural production efficiency, but also shown in the improvement of the rural housing level. These changes all can lead to the price rise in the labor outflow regions, with no serious influence.

However, the impact is obvious in the fields of production means market and construction market with large demand of income backflow.

The relevant suggestions

Under the guidance of the urbanization strategy, our country need to develop a series of relevant policies to promote the labor mobility, and the following aspects should be paid attention in the process of policy-making. The first is the human capital policy. We shall give priority to the vocational and technical education and the secondary education, attach importance to the cultivation of talents with high-quality and high-skills, and change the current education system. The second is that the skilled talents should be attached importance to introduction in the labor inflow regions on the basis of the high-tech talents. In addition, the government should also give full consideration to the social service demand and actively recruit the unskilled labors. The third is that the government should build perfect social security system with all its strength, provide favorable conditions for the labor inflow and promote the labors to flow into the developed areas. The fourth is that the current urban and rural dual structure should be broken through, and the fair competitive market of labor should be created. And the fifth is to strive to build a sound public infrastructure in order to drive the steady progress of industrialization and form a virtuous circle of economic growth with the rapid development of urbanization.

Conclusion

At present, the economic development cannot do without the labor mobility in China, the regional economic development causes the labor mobility, which gradually becomes the indispensable endogenous variable in the process of economic growth in China. Therefore, our country must fully considerate the urbanization development strategy and attach importance to the urban agglomeration development on the basis of the current development situation and the urbanization development characteristics in China. Only in this way, Chinese economy can be further promoted to develop.

References

- [1] Y. Pan, X.M. Du. Labor Mobility, Industrialization Process and Regional Economic Growth: Based on the Empirical Research of Nonparametric Additive Models. *Journal of Quantitative and Technical Economics*, 2010, 05:34-48.
- [2] R.C. Hu, X.L. Liu, W. Li, et al. The impact of Labor Mobility and Industrialization Process on Regional Economic: Based on the Provincial Dynamic Panel Model. *Population and Economics*, 2011, 02:45-51.
- [3] S.D. Fan. Is the Contribution of Labor Mobility to Chinese Economic Growth Significant: Based on the Experience Validation of Regional Recursive Perspective. *Finance and Economics*, 2014, 01:61-70.
- [4] L.Z. Xiao, W. Xiao. Agriculture Technology Progress, Labor Mobility and Economic Growth in the Dual Economy: Based on the Empirical Analysis of Provincial Dynamic Panel Model in 1992-2012 in China. *Shanghai Journal of Economics*, 2014, 06:23—33.
- [5] R.Y. Zhao, C. Liu. Labor Mobility and Regional Economy Concentration of Japanese Prefectures: Based on the Empirical Study on Spatial Econometrics. *Population Journal*, 2012, 02: 32-42.
- [6] Q. Wang, Q.X. Jiao. An Empirical Analysis of the Contribution of Rural Population Flow to Regional Economic Growth: Taking Henan Province as an Example. *Hubei Agricultural Sciences*, 2014, 20:5033-5037.

- [7] P. Cheng. The Rural Labor Mobility, Industrial Structure Adjustment and Economic Growth: Based on the Empirical Study of Provincial Dynamic Panel Model in 1993-2012. *Industrial Economic Review*, 2014, 06:113-126.
- [8] J. Li, Y.L. Zhou, Nie Hongzhi, et al. Study on Regional Difference of Chinese Rural Labor Mobility on Service Industry Growth: Based on the Empirical Study of Provincial Dynamic Panel Model in 2002-2010. *Economic Survey*, 2015, 02:1-6.
- [9] J.H. Zhang, F.W. Wu, Y.L. Wang, et al. Wage Discrimination, Economic Overflow and Regional Economic Growth: Theoretical Framework and Empirical Study on Wage Discrimination of Rural Labor Transfer. *Journal of Jiangxi University of Finance and Economics*, 2015, 02:3-11.
- [10] H.Y. Shen, W. Shu. Analysis of the Contribution Made by Labor Mobility to Economic Development of the Provinces: Based on the Data of Sichuan Province. *Journal of Southwest Jiaotong University (Social Science Edition)*, 2013, 02:48-52.