The Long-term Effects of Migration Within China

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ABSTRACT

China has had considerable economic growth over the decades with the rapid increase of the population, especially in those big cities like Beijing, Shanghai, and so on. Since China’s implementation of the reform and opening policy in 1978, more and more people were attracted by metropolises and chose to migrate to those cities to seek better wages and personal development. As a result, urban-rural migration has become more and more popular, which has had a significant impact. This paper will focus on the effects of internal mobility in China and its influences on economic growth. We will mainly study the long-term effect of population mobility (urban-to-rural) by figuring out how factors like the empty nest and aging population, the hukou system, education, and remittances will be influenced by urban-rural migration. In addition, we will compare the differences between domestic and foreign cases in terms of the migration issue. From our perspective, migration from rural to urban areas in China will generate positive effects in the short term, while in the long term, the results stay elusive.

Keywords: migration, urbanization, Hukou system, remittances, the left-behind

1. INTRODUCTION

Along with the rapid economic growth in China, there has been an increasing number of job opportunities offered majorly in big cities, and have attracted a great number of rural residents to migrate and seek better opportunities in urban areas. In China, domestic migration is no longer a novel concept: ever since the founding of the People’s Republic of China in 1949, there has been documentation of migration records and corresponding policies. People choose to migrate based on their different reasons, while the majority of them make their decisions because of better job opportunities so that they can improve their rural families’ economic status [1]. Many economists have studied closely the effects of migration on inequality, and stated an overall positive effect that migration can bring to alleviate the inequality between the rural and the urban [2]. Nevertheless, we think there remain multiple long-term factors that were emitted in those previous studies, such as the issue of the empty nest, the left-behind children, the Hukou system, and remittances. Any one of those factors can cause drawbacks of migration, and thus we would encourage a deeper look at the long-long terms of migration, to more precisely analyze whether it successfully palliates inequality in the end.

To present our argument, we will firstly introduce the historical background of migration policies in China, then we will conduct a literature review and show some of the popular findings of migration. We will also analyze the effects of several results that migration has on the rural area to make our argument, and finally, we will compare the domestic case of migration within China with international migration, to see if similar consequences exist.

2. LITERATURE REVIEW AND BACKGROUND INTRODUCTION

Since China implemented the reform and opening policy in 1978, urban-rural migration has become an important driving force for rapid economic growth and urbanization. Rural residents hope to find more employment opportunities and higher income in cities, while problems have arisen as a result of that, such as the increasing economic gap between urban and rural areas, the neglect of rural construction, and the imbalance of rural population structure.
First, She pointed out that from 1949 to 2013, China's urbanization rate increased from 10.6 percent to 53.7 percent, bringing an average annual growth of more than 10 percent to China's GDP [2]. However, in this process, the economic gap between urban and rural areas has expanded. More specifically, from 1985 to 2011, the income ratio of urban residents and rural residents increased from 1.53:1 to 3:1 [3]. However, the rural economy does not receive enough support as it should, which intensifies the inequality between urban and rural areas [4].

Second, the rural population structure is out of balance. When the middle-aged agricultural labor force enters the city, the remainder in the rural areas is usually either old or the young, weakening the main body of the rural labor force. This phenomenon is even more prominent in the central and western regions. The shortage of agricultural labor in some agricultural areas has resulted in insufficient utilization of agricultural natural resources, and some farmland has been abandoned. At the same time, when migrant farmers are over 50 years old, it is difficult for them to maintain high-intensity jobs in the city, and since they are not familiar with traditional agricultural labor, they might face the risk of becoming unemployed [5].

Moreover, the urbanization process has compressed the room of agricultural production, resulting in a continuous decline in the area of agricultural land, especially high-quality farmland, and directly leads to a decrease in agricultural production. From 2000 to 2005, China’s agricultural arable land decreased by 89.6 percent, reaching the fastest stage after the urbanization policy [6]. Additionally, Jiang and He pointed out that agricultural food safety, rural ecological environment, and rural culture have also been harmed by urbanization [7][8].

Despite the challenges that migration brings to the rural, scholars argue that it does enact certain benefits. Sun pointed out that migrants can significantly improve their living conditions through migration [9]. He showed that when the rural population did not migrate, they had huge inequality with the urban population in terms of social factors such as education and higher education; while the labor mobility brought by the migration reduced the degree of inequality of opportunity. Compared with the offspring of the rural population, the income elasticity of demand has doubled. Similarly, Li et al. pointed out that an increase in the proportion of the floating population will increase urban entrepreneurial activity; the larger the urban floating population, the greater the entrepreneurial activity and business opportunities [10].

In addition, Sun also pointed out that although the living conditions of migrants have improved, they still face a lot of inequality in the city, among which institutional factors are the main reason. According to the New National Urbanization Plan promulgated by the Chinese government in 2014, it is estimated that 234 million migrant workers and their accompanying family members in the urban population are The basic public service treatment [9].

To solve such institutional factors, Bonica et al. pointed out that politics can be an effective tool for restoring economic fairness. The government can and should correct the imbalances produced by the market, provide opportunities for employees with insufficient competitiveness, and prevent the wealthy urban from over-occupying social resources [11]. Finally, Sun pointed out that the long-term adjustment strategy lies in education [9]. The government should improve educational resources in underdeveloped areas to weaken the differentiation of children's education levels caused by parents' income differences. The medium-term adjustment strategy lies in medical and health care. By rationally optimizing the allocation of medical resources and guaranteeing basic medical care for residents, the government can reduce the dependence of personal medical care on family income and reduce mobility barriers such as migration costs, so that people have equal opportunities to "re-choose".

3. REMITTANCE

Remittances represent the amount of money that migrant workers send back to their hometowns [12]. Due to the challenging conditions to attain a local Hukou (the Chinese household registration system) and with a minor proportion (7 percent) of migration being family migration, remittances play an important role in migrants’ lives for two reasons. On one hand, migrant workers will send remittances to improve the lives of their rural family members; on the other hand, they send money back as a way to “maintain a stake” if they ever go back to the rural area due to factors such as unemployment or family issues [13]. In this section, we will firstly elaborate on why remittances are essential to the rural economy, and secondly, we will discuss scenarios of non-remittance and how they impede the effects of remittances.

We can take a look at remittances’ influences on income to prove their beneficial role in alleviating inequality. According to a 2004 source, it discovered that remittances contributed 18 percent of total rural income [14]. In addition, a 2005 study found that remittances made up between 20 and 50 percent of recipient households’ total income [15]. To put this in another way, without efficient methods to transfer remittances, rural households’ income will decrease to a great extent, largely affecting the living conditions of the rural population.

Acknowledging the essential share that remittances take in rural households’ income, whether the recipients
make efficient and productive use of the money and successfully improve their living conditions is the main factor deciding the final effects of remittances. According to Rozelle, there are two types of investments that recipient can make with remittances: the productive investment, which refers to activities that boost households’ capacity to earn more money; and the consumptive investment, which increase the immediate well-being of households, that recipients conduct with remittances [16]. In our paper, since we focus more on the long-term effects of migration, we choose to omit the discussion with consumptive investment which generates mostly short-term results.

Productive investments include activities such as agricultural production, land purchase, e, and business creation. Take the agricultural production sector for example, based on a 1999 survey of 585 rural households, no causality between remittances and productive investment was found. In another study done in 1995 with 787 rural household samples [17], the majority of them chose to use remittances to purchase for “additional inputs” to “substitute for the labor lost through migration” [18].

Last but not the least, despite the importance of remittance there exists a large proportion of non-remittance. According to Li Quang’s research in 2001, almost one quarter (29.7) of 451 targeted households in rural Sichuan did not receive remittances while similarly, among his 493 migrants in Beijing, nearly one quarter (24.7 percent) of them did not remit [19]. There are several obstacles that migrant workers face leading to such a large proportion of non-remittance, such as ill fortunes in the cities and the high cost of adapting to urban lives. Another issue is the high cost of adapting to urban lifestyles, such as purchasing decent clothes and make-up so that the migrant can obliterate they’re appeared their root of rural and avoid discrimination. Additionally, they also need to accumulate wealth and buy houses in the city, so that they can re settle their families and enroll children in a local urban school. Due to the soaring housing prices in China, it is even challenging for migrant workers to maintain basic living allowances, not to speak sending remittances. Here we can see that, while the rural areas are going through grethe at the loss of labor force d 

4. HUKOU SYSTEM

In the published sources, scholars generally agree on the economic inequality the hukou system brings to the rural areas in China. Ma considers that the hukou system is the most important mechanism in China’s social and economic development in the past sixty years [20]. It has had an enormous impact on the distribution of internal resources among the citizens and has caused a huge and expanding social and economic isolation between the urban and rural regions.

First of all, the original intention of hukou is a system that uses the family as a unified unit to report its behavior to the state. Zeng et al convey that, in 221 BC, the Qin Dynasty unified China and implemented a family registration system across the country: everyone must register at the place of birth and report their place of residence, age, gender, and occupation to the local authority [21]. At the same time, the migration of residents requires official approval, and unauthorized spatial migration would be prosecuted and punished. In the later dynasties, such a system has undergone many reforms and adjustments, but it has maintained its main function: control and exploitation. Currently, Ma also points out that today’s hukou system is to a large extent a continuation of the ancient government organizational structure, and as a social mechanism, it profoundly consolidates its reasonable status [22].

After China was founded in 1949, it needed a profound economic revolution to provide enough food for its growing population and sufficient savings for its industrialization process, where rural labor was an elementary factor. In other words, the successful realization of China’s development plan requires a necessary precondition: the spatial mobility of labor must be restricted. Farmers must stay in rural areas far away from cities to prevent social chaos, surplus labor, and poor economic development due to overpopulation caused by urban migration [22]. Beijing and Shanghai experienced a huge rural migration from 1978 to 1980. As a result, the urban infrastructure could not withstand the surge in population and provide necessary living space, and eventually, the government began to strictly monitor rural migration [23].

In modern society, the hukou system is the fundamental reason for the dual economic structure. According to Zhang and Wang, the dual economic structure mostly exists in developing countries, which refers to the economic structure in which different forms of economic and social organizations coexist (that is, traditional agriculture with backward technology and modern industry coexist) [24]. The urban infrastructure is relatively developed, and the consumption level is much higher than that in the rural areas. However, the rural surplus labor cannot be effectively transferred. With the rapid development of marketization and the continuous
expansion of capital scale, the originally small regional economic differences have begun to widen, and the differences in social welfare in different regions have become increasingly obvious [25]. Fortunately, the Chinese government has made the integration of urban and rural areas one of the four goals in The National Plan for New-type Urbanization [26]. When urban and rural equality is realized, this dual situation will be broken, and rural inequality will gradually decrease.

5. EMPTY NESTS AND THE AGING POPULATION

With the rapid development of China's economy, the medical and health conditions are in the process of continuous improvement, and people's living standards have greatly improved. Thus, the average life expectancy of China's population increased, which makes China rapidly enter the ranks of an aging society. Empty-nest families, as the main problem arising in the process of population aging, have received extensive attention since the 1990s. Empty nest family is defined as a family with no children and an elderly person alone, or a family where the children leave their parents when they grow up and the elderly live alone [27].

According to the seventh population census issued by the National Bureau of Statistics in 2020, among the national population, there are 19.065 million people aged 65 and over, accounting for 13.50%. Compared with the sixth national census in 2010, the proportion of the population aged 15-59 dropped by 6.79 percentage points, the aging of the population has intensified, and the proportion of the population aged 65 and above has risen by 4.63 percentage points [28].

The increase in the proportion of China’s population aging has become a severe social problem. The census results show that the population of 65 years and over in China has increased from 150 million to 176 million in 2016-2019, and the proportion has risen from 10.8% to 12.6%. (Data source: China Business Industry Research Institute Database)

The empty nest’s issue makes it impossible for the elderly left in the countryside to enjoy the social welfare they deserve. As the number of such people increases, the negative impact of the empty nest problem on the rural economy will intensify in the long run. To be more specific, when a large number of rural youth and middle-aged laborers leave the agricultural industry in their hometown and move to cities, the ratio of agricultural income to household income will decline, and farmers' investment in agriculture would also decrease. This may lead to a lack of agricultural productivity and insufficient stamina in future China. The main population of the labor force is occupied by middle-aged and elderly people, and young people rarely appear. The Human Capital and Labor Economics Research Center of Central University of Finance and Economics released the "China Human Capital Report 2020" in Beijing. The report shows that between 1985 and 2018, the average age of the labor force (including students) across the country (excluding Hong Kong, Macao, and Taiwan) has risen from 32.2 to 38.4. According to figure 1, the average age of the working population in Heilongjiang, the province with the highest average age, is even more than 40 years old [29].

![Figure 1. The average age of the national working population in China [28]](image-url)

In addition, the phenomenon of empty nests hinders China's long-term agricultural operations on a large scale and further excludes young laborers interested in agricultural operations. Since the elderly farmers who are
left in the countryside have no other living security and complete medical insurance besides land, most of them have to farm beyond their age (Juan & Di, 2008).

The large number of rural young laborers moving to cities has brought about a more serious problem, the aging of the population in rural areas. The underdeveloped rural economy promotes the surplus of rural labor [32]. Young people go to the city to make a living while the elderly stay at home, resulting in a rapid increase in the proportion of the elderly in the rural areas. The elderly are left unsupported for a long time and can only be funded by the government. However, the rural economy is originally underdeveloped, and the infrastructure construction is weak, and thus it is difficult to guarantee the medical and housing conditions of the elderly in the region [33]. Northeast China is the region with the greatest pressure of pension income and expenditure gap and fiscal subsidy. In 2018, Heilongjiang became the first province in the country whose pension balance was spent. The "Annual Report on China's Social Insurance Development 2018" compiled by the Social Security Management Center of the Ministry of Human Resources and Social Security shows that Heilongjiang Province's cumulative balance has bottomed out, with a debt of 23.2 billion yuan [34]. China has introduced a delayed retirement plan in the hope of alleviating the huge pressure on pension payments. However, from a long-term perspective, this policy only addresses the gap in pension funds. It is not very helpful to the problem of empty nests in rural areas and the aging of the population. The economic inequality of development between China's urban and rural areas caused by internal population migration will intensify.

6. THE LEFT-BEHIND CHILDREN

In this section, we will discuss the obstacles faced by the left-behind children. Increasing workers' mobility will cause negative long-term inequality between urban and rural young generations, especially in terms of education. Among the rural children, the left-behind children (children who live separately from one or both parents for more than six months) are considered the most unprivileged.

Firstly, the migrant workers’ children are restricted by the tight, unequal enrollment policies in the cities. According to the Chinese Ministry of Education, the number of primary school-age children has been steadily increasing for decades, and has exceeded 100 million for two consecutive years during 2018 to 2019 due to the enforcement of the free nine-year compulsory education. However, among 150 million students enrolled, only 14 million were children of migrant workers in cities. More specifically, 10 million were enrolled in primary schools and merely 3.7 million in junior high schools. Given the approximate 169 million registered migrant workers in the nation according to Report on Monitoring of Migrant Workers in 2020 published by the national bureau of statistics (when the actual number could be a lot larger), there was 59.3 percent of them aged between 21 and 40 (which are the age intervals where people are likely to have children in the compulsory education), and thus the enrollment of a total 14 million children is considerably low. Such a low number can be attributed to the restricted hukou system in China. To ensure the local children get best educated first, migrants’ children may be hindered from enrolling in the cities due to a variety of limitations, including parents’ educational background, social insurance, and housing property [33]. For example, Shenzhen, one of the well-known cities with a large inflow of migrant workers, states that, only children with parents holding the functional Shenzhen Special Economic Zone residence permit could be registered for the enrollment. However, one must have a college degree or above or a stable legal residence and social security paid for 12 consecutive months to be eligible. Even when their children can successfully enroll, only the top 20 percent of them in the high-school entrance examination can enroll in a high school, whereas up to 70 percent of children with a Shenzhen hukou can go to high schools. Since the enrollment policies for migrant children are more or less similarly strict in the popular cities where most migrant workers choose to work in, their children are more likely to be left out in the hometown without the company of their parents.

Secondly, unable to get enrolled in the cities, rural children are relatively backward in the countryside, where the teaching resources are mostly deficient. In recent decades, the government expenditures on rural compulsory education, especially for the national-level ones, kept increasing, which has greatly improved the past situations where rural regions often lacked sufficient revenue to mitigate the educational imbalance between rural and urban schools. In fact, according to the Chinese Rural Education Development Report in 2019, national-level government expenditures on education have reached 3.4 trillion yuan in total, accounting for 80.37 percent of the country’s total spending on education. Therefore, the gap of educational infrastructures between rural and urban schools is decreasing from certain aspects: it is now common to find brand-new desks, chairs, and computers as well as school Internet in the rural schools [33]. Nevertheless, the insufficient software, teaching resources, could not keep up the pace with the improvements in hardware facilities. Although the newly trained teachers are most likely to be distributed in the public rural schools by the authorities due to the great demands, many of them only consider those positions as the cornerstones for the promotion to the urban schools. According to The People’s Daily, the rural teachers’ mobility to the cities has been 30% to 40% and even reached 46% in 2019. Although rural teachers have similar, sometimes even higher, income compared to that of urban teachers largely due to the government...
subsidy, their workload is much larger: some teachers have to teach more than one subject and approximately 20 classes per week while assisting the students’ daily life. Additionally, while most well-performed students have been offered a place in the urban schools, the rural teachers often face students with weaker academic background, adding more burden on their shoulders.

Last but not least, compared with their rural counterparts, the left-behind children have no sufficient parental supervision and care, harming their education as well as generating more social stability. According to the official report from Chinese Civil Affairs Bureau, in 2016, there were 6.97 million left-behind children nationwide. According to other non-official reports, however, the estimated left-behind children are even greater -- Beijing News, for example, in 2017, estimated the number of rural left-behind children nationwide was 15.5 million. According to the China Family Panel Studies between 2012 and 2018, left-behind children generally have worse school performance [31]. The studies look into the Chinese and Mathematics score disparity among left-behind children and discover that both male and female children of both migrant workers and children of female migrant workers had worse scores, compared to children staying with parents. The lack of supervision not only had negative cognitive impacts on the growth of left-behind children, but also increased social instability. For instance, Shao Wenhong, director of the Research office of the Supreme People's Court, pointed out that in recent years the number of juvenile crimes that courts at all levels had increased by an average of about 13 percent each year, among which the crime rate of left-behind children accounted for about 70 percent of juvenile crimes, and the trend was likely to increase year by year [34]. Although the number could partially be attributed to the increased supervision of police, the left-behind children without proper instructions are indeed more susceptible to disturb the social orders, who will face more restrictions than urban children without crime records in the future.

7. COMPARISONS BETWEEN FOREIGN AND DOMESTIC FINDINGS ON MIGRATION

As mentioned before, the domestic migration of laborers would bring benefits as well as impediments. The following part will mainly introduce the basic information of Chinese immigrants on a global scale and discuss the effects of immigration on their education level, income, remittance, crime rate and so on.

Take the Chinese immigrants in the US as an example since the US has been the top destination for Chinese immigrants, accounting for almost 27% of the more than 12 million Chinese who live outside mainland China (United Nations Population Division, 2019). In the US, Chinese immigrants have grown nearly seven-fold since 1980 which reached nearly 2.5 million in 2018, 5.5 percent of the overall foreign-born population as is shown in Figure 2. In 2018, Chinese immigrants to the US increased to the third largest group in the US foreign-born population [36].

In terms of the destinations of those Chinese immigrants, almost half of them reside in those 2 states:
California (32%), and New York (19%) as shown in Figure 3, with the deepest color. The common point of the two states is that they are both relatively highly-developed [37].

Figure 3. Top Destination States for Chinese Immigrants in the US, 2014-2018 (American Community Survey, 2014-2018) [37]

Among the immigrants to the US, Chinese immigrants have relatively higher levels of education attainment. In 2018, nearly half of Chinese ages 25 or above reached at least a bachelor’s degree which is essentially higher than that of other immigrants. They are also more than twice as likely to have a graduate of professional degree than other immigrants. Immigration does bring those Chinese immigrants higher income than staying in mainland China, especially for those in STEM fields. This is indicated by the fact that about 45 percent of Chinese students were enrolled in science, technology, engineering, and math (STEM) fields in the 2018-19 school year [37]. The high levels of education attainment mostly lead to the result that most employed Chinese immigrants in the US have management, business, science, and arts occupations as is shown in Figure 4.

Figure 4. Employed Workers in the Civilian Labor Force (aged 16 and older) by Occupation and Origin, 2018 (American Community Survey, 2018) [38]
As a result of the higher income, immigrants are sending accordingly increasing remittances back to mainland China. According to Figure 5, the annual remittance flows to mainland China has been spotted a considerable increase since 2002. It was also the period Chinese immigrants were increasing considerably as is shown in Figure 5. This shows that one of the obvious long-term effects of immigration is the increase in the total remittances to mainland China, which is the same as mentioned in the domestic cases that the our-immigration population will bring an increase in the remittances from urban areas to rural areas.

![Figure 5. Annual Remittance Flows to Mainland China, 1982-2019 (World Band Prospects Group, 2019) [38]](image)

Furthermore, as is shown in Figure 6, Chinese immigrants are more likely to have health coverage with either private health insurance (69%) or public coverage (30%) compared to other immigrants (80%). The likeliness of having health coverage indicates the health condition to a certain extent.

![Figure 6. Health Coverage for Chinese Immigrant, All Immigrants, and the Native Born, 2018 (American Community Survey, 2018) [38]](image)

In the previous part, in China, as the population of immigrants increases, the crime rate increases as well. Nevertheless, contrary to the predictions of traditional criminological theories and stereotypes, immigration generally does not raise the crime rate and the usual case is that it suppresses it [38].
Through the analysis of the factors above, the overall influences of immigration on Chinese immigrants are positive despite potential discrimination reported by those votes on topic like “do you accept immigrants of other races or nationalities.” [38]

8. CONCLUSION

In this paper, instead of focusing on immediate results that migrant workers can bring back to their communities of origin, we chose to focus on studying those relatively long-term factors resulting from migration from rural areas to urban areas in China. More specifically, our paper discussed 4 elements closely related to migration: remittance, Hukou system, empty nests (aging population) and the left-behind children. Remittances represent the effects that recipients are able to receive through migration, the Hukou system indicates migrant workers accessibility to more equalized resources, and the last two topics symbolize the indirect influences brought by migration. As we have shown from our discussion above, all of those factors entailed certain drawbacks to migration’s effects, and thus called into question the real effectiveness of migration on alleviating inequality.

To recall, for the remittance, although it played an important role on rural households income, it has failed to improve living standards of the recipients because firstly, workers were facing conundrums (both internal, which is that they had to save money to purchase house, and external, which means the social pressure forced them to spend more on clothing to disguise their rural root) on their way of sending money back, and secondly due to the loss of labor force for those households (which means that the money they receive was just enough to cover the loss). In terms of the Hukou, in order to maintain a certain level of agricultural production, the State has put great restrictions on accessibility for the rural migrants to get urban Hukous. Even though starting from 2014 the State started to emphasize on the rural interests and call for co-development in both urban and rural, since it is a relatively recent implementation the effects remain elusive. Finally, the indirectly influenced groups, the left-behind children, and the empty nests, were also suffering from the negative consequences brought by migration and resulted in a widening gap between rural and urban. All in all, we see that for the directed influenced subjects, such as the recipients and migrant workers themselves, it is challenging for the former to make efficient use of remittances and for the latter to find footholds; for the indirectly influenced subjects, such as the elderly and the children, the former are unable to make productive use of farmlands while the latter are having lagged education resources due to the overall poor infrastructure in rural China. As a result, we would argue that while immediate results of migration can be pleasing, the long-term effects of migration remain negative due to the mentioned factors.

As abundant as the sources this paper refers to, it embodies certain limitations. Due to the time limitation, we were unable to build a model and analyze the causality relationship between those variables (factors) with inequality. More specifically, despite the plausible correlation relationship between each one of our factors with inequality, conducting a more temporary and precise dataset may enable us to generate a more robust and exclusive regularity. Another restraint that this paper might have is the neglectance of certain factors. In this paper, we merely focused on the most obvious results that migration can bring, and those elements were mostly either created by migrant workers or directly brought by them. For our future research, we shall integrate more institutional policies’ influences on migration, and study the consequences that they enact upon such.

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