The Invisible Hand and Visible Feet:

Internal Migration in China

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Ⅰ.Introduction

As a part of traditional planned economy, population migration and labor mobility in China were strictly controlled by the authorities before the 1980s. To be more precise, cross-regional migration was controlled by public security departments and it was almost impossible to make any rural-urban migration without authoritative plans or official agreement; Industrial transfer of labor force was controlled by departments of labor and personnel management, and there was no free labor market at all. But the most strictly controlled were the transfer from rural to urban areas, and from farmers to non-agricultural workers. This control has functioned through the Household Registration System (Hukou System), a typical Chinese registration system of permanent residence that segregates rural and urban areas strictly.

Under such a system, those persons who legally changed their Hukou and migrated to other places with related authoritative permissions were conventionally defined as migrants. These migrants were the results of planned urban area expanding and planned labor force disposition. Besides these migrants, there were also mobile people whom can be divided into 2 parts: (1) Traveling population -- those who travel in between regions and in between rural and urban areas temporarily; (2) Mobile population -- those who entered the black or gray labor market without any authentic permission.

Under the absolute planned system, migrants and mobile population are 2 clearly identified groups of people, who have explicit definition and extension, and have no overlapping parts. So called mobile population then was in a very small size and couldn’t result in long-term or permanent change in place of residence. Hence, it was adequate to use residence registration statistics to understand level of urbanization and regional population distribution.

Since the overall implementation of the rural and urban reforms that started from late 1970s, the planned economic system has been broken in many aspects. The labor market starts developing. The scope and size of migration have been extended and enlarged. Part of these migrants can be reflected in the residence registration statistics as “permanent migrants ”(yongjiu qianyi), and part of them can be reflected in population de jure statistics as “long-duration migrants ”(changqi qianyi). Still is there another part of them who are statistically invisible though they bear some of the characteristics of migrants in terms of economics or demography, these people are called as “floating population”(liudong renkou). So at present, when studying migration and population flow in China, on the one hand the two should be viewed as an integrity with common characteristics and significance and on the other hand, attention should be paid to their differences. In addition, when presenting figures, they often appear both overlapping and independent from each other, because there has no consistent criteria for collecting data related. In the recent years, a lot of studies have been undertaken on migration and population mobility accompanied by surveys on an ever-growing scale and covering more and more aspects .[1]

There have been some official surveys, which estimate the magnitude of migration. Migration statistics of the 4th Population Census of China included those who had stayed in the enumeration areas for more than 1 year during the period of July 1st, 1985 - July 1st, 1990. Data from the 4th Census show that there were totally 34130 thousand in-migrants or out-migrants in China in 1990, among whom 16720 thousand were rural-urban migrants. Rural-urban migrants constituted 59.24 percent of the total urban in-migrants (PCOSC, 1993). Because the 1 percent National Population Sample Survey in 1995 excluded those persons who moved within the boundary of city from its migration statistics, the total in-migrants or out-migrants during 1990-1995 was 36,430 thousand.[2] Compared with the figure for 1985-1990, there seemed no much increment in migration for 1990-1995. In consideration of the changed concept of migration for data collection, which has neglected large volume of intra-city migration, the figure for 1990-1995 obviously underestimated the real situation of migration, and then underestimated the increment in migration volume in these years.

This paper tries to provide a general picture of migration/labor mobility in post-reform China. Rest of the paper is arranged as follows: Section II

documents the institutional root for both the causes why migration had been restricted before the reform and how it emerged after the reform started. Section III describes demographic, social and economic characteristics of migration in post-reform China. Section IV reveals main geographic features of the migration, relating to regional
disparity of incomes after the reform. Section V reviews the positive impact of migration on the Chinese economy, answering some questions towards the overwhelming migration process. Section VI is a brief conclusion with some policy implication.

Ⅱ. Institutional Root and Its Changes

During the pre-reform period, the central government formed and pursued a development strategy that gave a priority to the development of the heavy industry, which is the root for China's rural-urban divide. This strategy aimed at achieving rapid industrialization by extracting agricultural surplus for capital accumulation in industries and for supporting urban-based subsidies. The main enforcement mechanisms were a trinity of institutions that included the Unified Procurement and Unified Sale of agricultural commodities (tonggou tongxiao), the People's Communes (renmin gongshe), and the Household Registration System (hukou). Shortly after the founding of the People's Republic, the state acquired agricultural products with lower prices in the commodity markets. When the purchases became increasingly difficult in 1953, the state initiated the Unified Purchase and Unified Sale system with its completion occurring in 1958. Under this system, the government monopolized the whole process of production and procurement of agricultural commodities in rural areas and, at the same time, controlled the distribution of food and other agricultural products through rations in cities. Because this system lowered the cost of living in urban regions, the government had to implement corresponding policies to manipulate inter-sectoral labor movements. At that time, the People's Communes were already established, which became effective institutions for carrying out the government's economic as well as administrative plans. Because the control of labor flows was a key link for implementing the development strategy, a formal system of Household Registration System was established in the late 1950s that in effect designated the legal place of residency and work for the entire population. A rural registration status would restrict a family and its future generations to live in the countryside. This package of policies and

institutions enabled the state to effectively lower down agricultural prices and to tightly control the mobility of productive factors, especially for labor.

Under the traditional system, farmers not only could not change residence or work unit unless these changes were part of the economic plan formulated by the state, but also were concentratedly allocated to the cropping sector in line with State agricultural policies that emphasized grain production over non-grain and non-cropping production. As a result, residential movement could only take place within an officially approved registration change that came to the meaning of migration during this period. Until the beginning of rural reform, there were no noticeable labor flows among sectors and regions. This strategy resulted in massive distortions in the factor market with an excessive concentration of capital in urban areas and of labor in rural areas. In 1978, the urban sector employed 95 million workers while the rural sector had approximately 306.4 million labor force. In contrast, the total value of fixed assets in the state-owned enterprises (primarily urban) counted for 448.82 billion yuan while the value of the fixed assets in agriculture was only about 94.98 billion yuan (SSB, 1993). These numbers indicate a ratio of 3.2:1 in labor and 1:4.7 in capital between the rural and urban sectors. Prior to the reforms in 1978, urban workers' productivity and earnings far exceeded that of their rural counterparts.

The above discussions suggest that the traditional institutions introduced a level of segmentation between rural and urban residences in the Chinese economic system. Therefore, along with reforms that began correcting certain elements of the inefficient system, we would expect an increase in migration and population flow between rural and urban areas. That is what happened in the post-reform period.

China's economic reforms started with the introduction of The Household Responsibility System ("jiating chengbao zhi") in rural areas in the late 1970s. As a consequence of the increase in labor productivity of agriculture, a large part of farm labor force moved from the cropping sector to other sectors such as forestry, husbandry, fishery and, most importantly, to the rural industrial sector. In the 1980s, flows in rural labor were confined within rural areas. Migration to urban areas had not yet become a common phenomenon, in accordance with the state policy "leaving the land but not the hometown" ("litu bu lixiang"). In this period of development of township and village

enterprises (TVEs), one can see a clear feature of TVEs in labor absorbing. Output value per worker in TVEs as a whole had increased in real term since the beginning of reforms although at a relatively slower rate during the 1980's. In the period of 1985-1991, annual growth rate of labor productivity of TVEs was some 3.9 per cent, while growth rate of total factor productivity of TVEs was estimated by different scholars from 4.6 per cent to 6.4 per cent. [3]

As the TVE sector grows, so has the requirement to upgrade quality of products and level of technology in the sector. As a result, the growth of capital has been faster than growth in number of laborers in the TVE sector. Original value of fixed assets per worker of TVEs in real term increased from 812 yuan in 1978 to 1312 yuan in 1989 and 2896 yuan in 1998. During the periods of 1978-1989 and 1989-1998, this indicator increased annually 4.5 percent and 9.2 percent, respectively. This shows that the capacity of the TVE sector to absorb rural labor has decreased. More recently, the absolute numbers of employees in TVEs have even declined. Rural laborers engaged in TVEs were 92.65 million in 1990, then the number increased to 128.62 million in 1995, and declined as 125.37 million in 1998. At the same time, the household registration system has been relaxed gradually, making it possible for residents of both rural and urban areas to move freely without having to change their household registration. In consequence, rural labor has begun to move in a much greater range and migration in China is taking its present shape. For instance, with the development of small towns, a series of policy changes have been made to approve for residence registration in towns with fulfilling certain conditions such as giving up contracted land in home village, finding a stable job and housing steadily. The removal of rationing and reforms in urban welfare provision has also made it more feasible for rural labor migrants to make a living in the cities. A division of agricultural and non-agricultural household registrations no longer exists after the removal of rationing system of food distribution in early 1990s, while the division of rural-urban residency now is still identical.

Ⅲ. Characteristics of Migrants

Since labor mobility and population migration is a new phenomenon in China, so migrants or mobile labor force have some special characteristics in comparison with those non-migrants or immobile labor force. Many

individual surveys have revealed different characteristics of migrants and concluded similar results. By reviewing those researches, I summarized these main characteristics as follows while adding some evidences from a survey in Ji'nan city, Shandong province.[4]

First, migrants have higher quality than non-migrants in human capital, e.g. they have received more formal education in average. According to the statistics, migrants and rural-urban labor migrants have a lower rate of illiteracy and higher rate of primary and secondary educational attainment in average than that of the national total in average and that of the rural labor force total in average. For example, the 1 percent sampling survey conducted in 1995 shows that among the migrants,[5] 30.8 percent had received senior high and higher formal education, comparing to 11.3 percent for the national average (Yang, 1997). Table 1 shows the results from different sources in order to compare educational level of migrants with that of other categories of population.

Table 1 Education Comparison: Migrants vs. Non-migrants (%)

	Illiterate	Elementary	Junior High	Senior High
(1)Population over age of six	20.9	41.2	28.6	9.2
(2)Migrants average	8.3	23.0	35.7	33.1
(3)Ji'nan migrants	0.8	15.6	71.2	12.4
(4)Rural labor	13.0	33.7	40.1	13.2

Data of line (1) is for total population above age of six in 1990; line (2) is for nation wide average migrants between 1985-1990 staying more than one year; line (3) is for Ji'nan migrants surveyed by IPS, CASS; line (4) is for average rural labor in Shandong province in 1992.
Source: Shandong Provincial Investigation Team, 1993; State Council Census Office and Population Department of State Statistics Bureau, 1993

The other superiority in human capital that migrants do have is their younger age structure. According to the population sample survey conducted by the State Family Planning Commission in 1992, that included 30 provinces and

380 thousand persons, percentage of productive age persons (aged 16-59) for out-migrated population was 81.7 percent in 1992, while the figure for the total population in China was 60.1 percent in the same year. This is more visible for the rural-urban labor migrants. The survey on urban labor in-migrants in Ji'nan City, Shandong Province shows that the percentage of persons under age 35 was 86 percent for the urban labor in-migrants (Table 2).

Table 2 Age Range of Migrants and Rural Labor in Shandong (%)

Age	Migrant Laborers	Rural Laborers
Below 20	21.6	14.8
20-24	35.9	15.6
25-29	16.5	13.9
30-34	12.0	11.7
35-39	7.3	12.3
40-44	3.7	8.9
45-49	2.0	6.4
Above 50	1.0	16.5

Source: Ji'nan survey, 1995; SPSST, 1993

Another notable characteristic of the migrants is their high sex ratio. Because population migration in China is mainly economically motivated nowadays, the percentage of female migrants then depends upon their relative income level to their male counterparts' in urban areas. On one hand, rural labor out-migrants are mainly engaged in physical labor in urban areas, where females are in a relatively inferior position and get relatively less salary; On the other hand, since the decision of migration is usually made by families instead of individuals, and rural women tend to do more family chores such as taking care of children and the elderly in the family, opportunity cost of female migration is likely to be higher than that of male migration. Data from the 1990 Census show that there were more males than female in-migrants population in 1990 with a sex ratio of 123.14. This figure is much higher than that of the national total (106.4) in the same year. Data from the 380,000 population sample survey in 1992 show that the sex ratio of out-migrants was 119.37 for that year, higher than 104.27, the figure for the national total in the same year. The characteristic of sex selectivity in labor migration is more striking: Some survey results show that the sex ratio of rural-urban labor migrants could be as high as 250-450 (Li et al., 1994).

Due to the existence of Hukou system and employment discriminative policy, migrants' social status is very much outsider-liked, living and working in a different way compared with local residents. First of all, migrants occupy mainly in those jobs that are low paying, dirty, tedious, physically heavy, or hazardous to health and that local workers do not want to take (see Table 3). Secondly, with similar education attainments, migrants and local workers receive different wages, partly because the two groups are employed in different mechanisms: local workers are protected and subsidized under the old system, while migrants workers directly face the competition. Thirdly, migrants' working and living conditions are relatively poor because they lack of bargaining power in the employment market, and being discriminated by the community service. In many cases, migrants are lack of access to normal housing, medical care, day caring, and children's education. Thus there is usually a strong demand for self-services in migrants' settlements, which can reduce their daily costs of living. For example, in "Zhejiang Village" in Beijing, the largest settlement for migrants, there are numerous nursery schools and clinics especially for the migrants, not to mention commercial facilities such as restaurants, barber's shops, repair shops and recreational facilities.

Table 3 Occupational Structure of Migrant Workers in Ji'nan (%)

	Male	Female	Total
Construction	54.66	8.80	41.49
Enterprises	16.70	19.91	17.62
Odd jobs in Social Services	16.89	44.91	24.93
Domestic Service	0.00	12.96	3.72
Restaurant	3.17	2.55	2.99
Repairing	2.99	3.47	3.12
Retails	3.26	2.78	3.12
Tailoring	1.40	4.17	2.19
Others	0.93	0.46	0.80
Total	100.00	100.00	100.00

Source: Ji'nan survey, 1995

Ⅳ. Spatial Patterns

Spatial patterns refer to migration patterns such as province-to-province, rural-to-urban, rural-to-rural, and within and among western, central and

eastern regions. [6] What these patterns look like is derived from the characteristics of regional disparity of income. Apart from the push force caused by the increase in labor productivity in agriculture and the reform of the household registration system, external pull forces exist along the side. The mainstream theories of migration see the difference in expected income between regions as the driving force of migration. So, to examine the regional disparity is a key to understand spatial patterns of internal migration in China.

Regional disparity of development has been present also before the reform period in China. Before economic reforms were introduced, the large gap between rural and urban areas, as well as between regions, remained despite the central government's attempts to redistribute fiscal and physical resources between regions (Tsui, 1991). At that time regional disparities, however, did not result in a significant migration rate, due to the institutional constraints (Zhao, 1997). Only after the economic reform has been introduced, regional disparities have led to significant migration, since the institutional base has been changing. During the outset of reform in the late 1970's, the central regions of China played a key role in the reform process. The rural household responsibility system was initiated from below poor regions such as Anhui and Sichuan. Experiments with fiscal decentralization, which among other things let enterprises keep part of the profits, also began in Sichuan. As the reform process deepened, however, the eastern regions of China have taken the initiative, in particular after price and fiscal reform were implemented. After the mid-80's, township and village enterprises which had a good basis in the coastal regions have become a driving force in China's economy. The development strategy formulated by central authorities gave the eastern regions favourable policies, moving the gravity of economic reforms and development eastward.[7] Favourable policies to the coastal regions at the expense of central and western regions have led to a discrepancy of economic growth and income between regions. The gap between regions has thus widened in the later part of the reform period.

In 1978, the eve of rural reform, per capita GDP was counted for 359 yuan and per capita income of weighted average income of rural and urban residents for 164 yuan. Based on constant price, per capita GDP increased to 1,715 yuan and per capita income to 656 yuan in 1995 with annual growth rates of 7.8 per cent and 3.6 per cent respectively during the period.

Meanwhile the inequalities of development and income among regions have increased as well. The calculated Gini coefficient of per capita GDP by province increased from 0.2438 in 1978 to 0.2747 in 1995 and that of per capita income from 0.1261 to 0.1670 in the same period. Given that the existence of regional disparity provides different employment opportunities and income levels among regions, the features of the regional disparities have formed the direction and patterns of migration among regions (Cai, 1999).

First, considering that the regional disparity between counties of the same provinces consists of important share of the overall disparity in China,[8] and the important role that distance plays in the migration decision process, intra-provincial migration is a major part of the total migration. Analyzing data of 1 percent population sampling survey in 1995 shows the large proportion of intra-provincial migration in terms of both rural-urban migration and rural-rural migration -- 68.4 per cent of the total migrants moved only within their home provinces. If we divide total migrants into rural-to-urban and rural-to-rural migrants, 75.3 percent of rural-to-urban migrants migrate within their home provinces, and 54.6 percent of rural-to-rural migrants migrate within their home provinces. The survey in Ji'nan city in 1995 provides an even stronger result -- 93.3 per cent of migrant workers surveyed are from the same province (Shandong).

Second, because of the role of regional disparities between eastern, central and western regions, it is likely that migration between these three regions will be main streams of inter-provincial migration flows. The direction logically is that from western to central to eastern areas. In order to examine the direction of migration flows when they go beyond the borders of provinces, we exclude data on migration within provinces from the data processing. Then flows within and between eastern, central and western areas can be observed more clearly since we are only looking at inter-provincial data. Summarizing the statistical results, the direction of migration from western to central to eastern regions can be put in evidence. Table 4 indicates that migration from eastern to central and western areas consist of a little more than 30 per cent of its inter-provincial migration, while eastern areas are main destination of migration from central and western areas.

Table 4 Spatial Distribution of Migrants (%)

	From:	east	central	west	all regions
To:	east	68.7	71.3	53.6	65.9
	central	21.5	18.0	14.2	18.1
	west	9.8	10.7	32.2	16.0
	sum	100	100	100	100

Source: National Population Sampling Survey Office, 1997

Third, given the regional disparities of development and income between rural areas of different provinces, [9]rural-to-rural migration is an important phenomenon. Its direction follows the same pattern as the general migration, from western to central to eastern areas. In the data set of one per cent of population sampling survey conducted in 1995, total population is divided into three categories: city population, town population and county population.[10]In Chinese statistics, city population and town population is summed up as urban population, referred to as urbanization. However, towns in China function like a bridge between urban and rural areas both in a geographical sense and an economic sense. It is also in the towns that most of the TVEs are based and they are therefore important to the rural economy. This study considers both county and town in-migration as rural in-migration. According to the figures provided by the National Population Sampling Survey Office, 33.4 per cent of total migrants migrated to rural areas, and 48 per cent of inter-provincial migrants migrated to rural areas. When farmers migrated beyond their home provinces, 40 per cent of the easterners moved to wherever rural areas, 47 per cent of the central migrants and 59 per cent of the westerners moved to rural areas.

Finally, altogether, the regional disparities of both between the three regions and between rural and urban areas may provoke migration to be shaped as a two step process --labor moves from rural areas in less-developed regions to more advanced rural areas as a first step, then it moves from more advanced rural areas to the cities as a second step. One major obstacle for farmers to enter into the urban sector is the low quality of human capital (Cai, 1998). Because jobs of the urban sector require different skills from those in the agricultural sector, those who directly migrate from the agricultural sector have less chances to find a job compared to those who were formerly engaged in the non-agricultural sector, such as TVEs in rural areas. Since the opportunities of non-agricultural activities vary from place to place in rural

China, and the information that migrants need for their job searching is increasing as the migration expands from that within rural areas to the rural-to-urban type and from the intra-regional to inter-regional type, logically, migration will end up in two steps: farmers first move from farming works in their home countries to TVEs in more advanced rural areas, and later move to the urban sector. As is shown in Table 5, there is a pattern that farmers in western and central regions move to urban areas within regions, or to rural areas if they move out from their home regions, as a first step of their migration process, migrants from the rural areas in the eastern regions have more chances to move from the rural sector to the urban sector directly.

Table 5 Spatial Distribution of the Moved-In: To Rural or Urban Areas (%)

	Origin			
Destination	east	central	west	total
Urban areas				
east	95.1	24.5	20.7	60.7
central	3.4	72.7	3.7	26.1
west	1.5	2.8	75.6	13.3
Rural areas				
east	87.2	34.6	23.1	49.6
central	8.7	58.6	7.9	26.1
west	4.1	6.8	69.0	24.3

Source: National Population Sampling Survey Office, 1997

Ⅴ. Impact of Migration on the Economy

Integrated labor market in China is far from completely formed. Both policy makers and those people who have influence on policy making view migration an unacceptable phenomenon simply because they observe it more superficially rather than examine its positive aspect that is much more important to the potential of China’s economic growth and social stability in medium and long term. There are many tools used by local governments to impede rural-urban migration. One such intervention lies in the restrictions on labor mobility, where governments, especially those at the municipal level (shi), continue to forbid rural labor employment. Viewing migrants as competitive rivals to their native workers, local governments in cities have

adopted policies that aim at reducing competition from rural migrant workers, issuing a series of discriminatory policies that include: (1) charging various fees to increase the costs for rural laborers to migrate into cities. One of these tools is to require migrants to apply for various permissions to move and find a job in the city. For example, a migrant has to hold 5-6 kinds of officially issued documents and identifications if he or she wants to be legally employed in Beijing city in; (2) setting constraints on urban enterprises for hiring migrant workers for many types of jobs. Beijing Municipal Bureau of Labor issues a list of jobs that are not allowed migrants to occupy. Those jobs were 15 in 1996, 36 in 1998, and 103 in 2000; (3) inducing enterprises to use local unemployed workers instead of migrant workers in the name of 'Reemployment Project' (zai jiuye gongcheng) by imposing penalties or giving out various rewards. Therefore, to change the government's attitude towards migration is to confirm that there are more advantages of migration than disadvantages.

1. Sustaining the rapid economic growth

As well documented by economists, labor movements to cities in the period of reform have had significant and immediate productivity effects on the Chinese economy. A few studies have estimated that the labor movements from the low productivity sector (agriculture) to higher productivity sectors (say industry) were a major source of economic growth in China in the post-reform period. The contribution of labor mobility to total GDP growth rate ranges from 16 per cent to 20 per cent.[11] So far this contribution has been mainly made by the shift of labor from agricultural to rural industrial sectors. As the TVEs' ability to absorb rural laborers declines, the migration between rural and urban sectors will be the new source that contribute to the sustainable growth of the economy. Johnson (1999) argued that over the next three decades, if the barriers to migration are gradually removed and rural and urban wages are nearly equalized for individuals with similar level of human capital, the inter-sectoral labor transfers could annually contribute as much as 2 or 3 percentage points to annual economic growth.

2. Accelerating the urbanization process delayed before the reform

This can be viewed by the impact on places of destination. The present

distribution of urban and rural population in China is the result of implementation of the traditional economic development strategy. As a result of this strategy, despite the change of composition in national output value with agricultural production dropped from 57.7 percent in 1952 to 32.8 percent in 1978, employment structure did not change accordingly. The agricu1tural labor force only reduced from 83.5 percent in 1952 to 76.5 percent in 1978. Corresponding urbanization level was 17.9 percent in l978 versus 12.5 percent in 1952, only several percentage points increase.

With the present transition in the country from a planned to a market-oriented economy, the process of urbanization also functions as a dual-track system. In the planned economy track, it is constrained by a highly controlled household registration system. The scale of migration through change of permanent residence is far from enough to correct the distorted urban rural population distribution. Population mobility outside central planning has therefore become a necessity.

3. Supporting new sectors with low labor costs

One of the important features of China's reform is the emergence of newly established sectors (NESs) such as self-employed enterprises, private enterprises, collective enterprises, foreign, joint and cooperation ventures. For a long period of time, a large number of labors have been in over supply in the rural areas. One result of the economic reform process is that most obstacles for migration have been eliminated. Given the magnitude of labor supply, the market oriented employment decision itself has the function to create job. Newly established enterprises employ labors according to their real demands and do not take up the burden of employing labor they do not need. Moreover, most of the NESs does not need to pay welfare expenditure for their employees but only the wage determined by the market. Judged by the ownership of enterprises absorbing migrant workers, one may see that migrant workers tend to concentrate in the economic sector newly emerged after the reform (private enterprises, joint venture, foreign invested enterprises, etc.).

4. Feeding back to rural development

Labor surplus has been a significant phenomenon of rural China. Studies

(Carter, et. al., 1996) suggest that, first, tota1 amount and proportion of surplus labor are enormous, counting for one third of total rural labor, and secondly, the difference between provinces is very substantial: rates of labor surplus in central and western parts are higher than that in coastal east. That's the reason why the direction of population migration and labor movement appear to be from central and west to east, and from rural to urban areas.

Under such circumstance, as the level of inputs increases and technology improves in agriculture, the out-flows of labor force in agriculture will not resu1t in reduction of production in the sector. In contrast, with the money they send or bring home, migrants make greater contribution in agricultural investment. The survey in Ji'nan, Shandong province indicated that 82 percent of migrant workers interviewed had brought or sent money home in the countryside, accounting for an average of 1776 yuan and more than 30 percent of their earnings in the city. Other surveys show even greater amount of the remittance. Suppose that each migrant bring or send 2000 yuan back home, the total income made by the 80 million migrants in the entire country would reach 160 billion yuan. This amount is 59.7 percent of the total expenditures on fixed assets for production purposes and housing in which rural households invested, and 2.56 times as much as the tota1 expenditures on agricultural production and administration from the state budget in 1998.

The migrant labor's linkage with agricultural activity and rural life can be reflected in their frequently home visits. In the Ji'nan, Shandong survey, 57.6 percent of the migrants return home at least once a year to help on farm work during the busy season. Most migrants, no matter how much demanding their jobs in cities are, come home for the Chinese New Year every year. Consider the seasonally changing demand for labor, this frequency of returning home is of great help to farm need of labor force.

5. Reducing the income gap between regions

Mobility of production factors is one important mechanism that reduces regional divide. The inequality in development and income level between areas is usually reflected by the endowment difference in major production factors. For instance, more advanced areas are relatively abundant in capital whereas less advanced areas are characterized by its relatively abundant labor. As long as there is a well-functioned market of factors of production,

the gap in factor endowment can be narrowed by the regional exchange of these production factors, and the price of production factors and income level can then be more proportionate. Due to the underdevelopment of market of capital and the immobility of land at the current stage, theoretically labor migration is the only means to react against the large regional income gap.

6. Improving human capital in rural areas

In the process of labor force mobility, it is not only observed the importance of quanlity of human capital to the success of migration, but also the improvement in quality and human capital level of the laborers. Ways of increasing the value of human capital include: 1) Receive further education or occupational training. Several related surveys find that there is a positive correlation between the migrant's educational level and his or her urban income (The Research Group of Labor Ministry, 1996). 2) Procure certain skills from "learning by doing". A survey shows that more than half of the out-migrate laborers who have gone beyond the county or township boundaries have acquired certain skills (The Rural Economic Research Center of Agriculture Ministry, 1996). 3) Change life style and mode of thinking, enhance pioneering spirit and the spirit of taking risks through imperceptibly influences. Compared to the household agricultural production, urban works bear more characteristics of modernization; compared to the relatively closed rural life style especially of the middle and western regions of China, urban life style and social context are more conducive to breaking through traditions. Rural labor migrants will inevitably accept some new things in urban areas as they are shocked by the urban culture.

7. Trickle down effect on rural non-migrants

The trickle down effect means that apart from benefits migrants gain from their migration, rural non-migrants can benefit from other's migration. Seemingly, the rural out-migrants who are more likely to have had higher quality of human capital before migration become more capable due to the migration, while the rural non-migrants who are more likely to be the poor with lower quality of human capital seem to have no chance to improve their quality and get rich -- a practice of Matthew Effect: "For everyone who has will be given more, and he will have an abundance. Whoever does not have,

even what he has will be taken from him". But the fact is not like this. As the migrants become more capable and earn more money, there occurs the trickle down effect. Since most of the rural labor out-migrations are made by individuals in stead of families and are likely not to be permanent, either the migrants themselves or the money they earned in urban areas are more likely to turn back to the migrants' hometown -- rural areas, in stead of staying in the labor place --urban areas. The returned migrants will invest their money in various economic activities in rural areas, and as such, create more employment opportunities and more chances to earn money for rural people including the rural poor (Chen, 1997).

Ⅵ. Concluding Remarks

Since the mid 1980s, better educated and young laborers have migrated from rural to urban areas, from western and central regions to coastal east. On one hand, this process has greatly contributed to the economic growth, on another it has given rise to nation-wide concern. To cope with this phenomenon in terms of policy-making, the government and society need to gain a better understanding of it. The analysis of this paper shows that migration flows are a response by farmers to the changes in economic and social conditions. It can be viewed as a movement of one of the most vital production factors, which is stimulated by rural-urban and regional disparity of income, and adjusted by human capital of potential migrants. Therefore in this process, the visible feet of migrants are directed by invisible hand of market mechanism. This finding suggests the necessity of formulating policies that can help to reduce such regional disparity, availability of urban to absorb the mobile labor, as well as increase human capital of farmers.

There have been two policy orientations differentiated between both local governments of sending and receiving areas. Putting it as a priority the rural development and increase of farmers' income, the governments of sending areas welcome the practice and encourage people to move out, while the local governments of receiving areas make various efforts to limit the move. Because of the asymmetry of incentives and effectiveness of the policy tools between sending and receiving areas, the obstacles set by receiving areas have been bigger than the helps provided by sending areas. Therefore, the rural-urban and inland-coastal migration has not reached its scale as much as otherwise if there were no policy obstacles. As a result of this mobility

restriction, relatively a high proportion of rural labor produces only a smaller share of total GDP of the country, following the same pattern of urbanization a smaller part of population lives in the cities. In 1998, rural laborers who consist of 70 percent of total laborers of the country only contributed 46 percent of the total GDP of the country as a whole. Consequently, the per capita income in urban areas has been about two to three times higher than the level in rural areas. Judged by economic theory that suggests a trend of equalizing income through labor mobility among regions, above fact indicate the existence of significant obstacle for labor mobility between rural and urban areas.

With the characteristics of China's gradual reform, as the Hukou system and employment policy further relax, the scale and scope of the migration between rural and urban areas and among central, western and eastern regions will expand, which in turn challenges governments' policies as such Hukou system and urban employment system. Because urban governments have the responsibility to keep a low unemployment rate and to guarantee welfare of urban residents unchanged, to respond to this challenge, they have two options: (1) continue to restrict the urban labor market to protect urban workers from job competition; (2) remove the obstacles to labor mobility, making the labor market more flexible in order to gain an efficiency in labor market. The policy reform should aim at improving the functioning of the labor markets. This direction is also consistent with government's objective of achieving political and social stability, because improvements in labor market efficiency will lead to faster real economic growth. Permitting mobility would also achieve immediate productivity gains. Even though this may create competition in urban labor markets, and perhaps taking away urban jobs. But if the government has to compensate the reduction in welfare for urban workers, the government would have more resources to do so because of the improvement in efficiency in the labor markets.

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[1] There are several research-oriented surveys on population mobility in China in 1990s. For instance, the sample survey on rural labor transfer and migration (nongcun laodongli zhuangyi yu qianyi diaocha) conducted by the Agriculture Ministry of China and the East-West Center of USA in 1990, with 650 households sample total that covered 4 provinces, 130 counties and 130 villages. The investigation on rural labor mobility (nongcun laodongli liudong diaocha)done by Ministry of Public Security of China in 1991, which included all households of 50 towns and counties in 18 provinces. The sample survey on rural labor transfer (nongcun laodongli zhuangyi diaocha) conducted by Institute of Rural Development of CASS and the Agricultural Bank of China in 1993, with 12,673 households sample total that covered 26 provinces; The overall investigation on rural migration (nongcun laodongli liudong quanmian diaocha) that covered 28 counties of 15 provinces, done by the Economic Committee of C.P.P.C.C., the Development Research Center of the State Council and China Rural Labor Force Development Research Association in 1994. Although there are some differences in the estimates of floating population, the commonly accepted figures are ranging from 80 million to 120 million. E.g. estimate by the Central Committee of the Communist Youth League of China is 80 million (Cai, 1995). Estimate by He et al. (1994) is also 80 million. The Policy Research Office of the Secretariat of CCCP estimates that the total floating population in 1992 was about 60-70 million (Pan, 1993), then in a rate of 10 percent increase, the figure for 1995 would close to 80 million. Estimates by Shi (1995) and Xiao (1995) are 90 million and 100 million respectively.

[2] In-migrants and out-migrants represent those who have lived surveyed place without registration and those who have left their registered place for more than half a year, respectively. So both in-migrants or out-migrants are not necessarily Hukou migrants.

[3] Labor productivity is defined as output value per worker. In the economics literature, “total factor productivity” is often used synonymously with “increased efficiency” or “technical progress.” Studies of total factor productivity attempt to measure the contribution of output growth accounted for by growth of inputs such as labor, land, and capital. After the contributions to output growth by measurable inputs are taken into account, the residual output growth is referred to as “total factor productivity.” See Carter, Zhong, and Cai (1996).

[4] The questionnaire and the sampling method for this survey, which was completed in July 1995, were designed by Institute of Population Studies, Chinese Academy of Social Sciences and carried out by the rural sampling team of Shandong province. The sample included all the migrants in Ji’nan over the age of 15 who had found jobs. 1,540 people were interviewed from areas under the jurisdiction of 12 police stations in four districts of Ji’nan using the two-stage proportional stratified sampling method.

[5] In this survey, migrants are defined as those who had migrated and resided in the place within the past five years October 1st, 1990 to October 1st, 1995.

[6] In Chinese statistics and policy analysis, it is a usual practice to classify the country into three categories according to economic development levels and geographical features. The East includes Beijing, Tianjin, Liaoning, Shanghai, Jiangsu, Zhejiang, Shandong, Fujian and Guangdong; the Central area covers Hebei, Shanxi, Jilin, Heilongjiang, Anhui, Jiangxi, Henan, Hubei, Hunan and Guangxi; and the West includes Inner Mongolia, Sichuan, Guizhou, Yunnan, Tibet, Shaanxi, Gansu, Qinghai, Ningxia and Xinjiang.

[7] The most notable fact is that the government outdoor policy had been exclusively introduced in state-designated Special Economic Zone and a number of coastal cities before it extended to inland regions as late as the 1990s.

[8] The Gini Coefficient calculated by county is 0.3519, much higher than that by province (0.1484), implying that income disparity within province is also significant (Cai, 1999).

[9] The Gini Coefficient of rural income by province is 0.1796, higher than that of urban income (0.1095) in 1995 (see Lin et al., 1997).

[10]City population consists of population in districts of cities; town population consists of population in towns which are under the administration of cities or counties; county population represents the remaining population which is not included in the above categories. See National Population Sampling Survey Office (1997), Preface.

[11] The estimates by World Bank (1999) and Lees (1997) suggest that labor mobility contributed 1.5 percentage points to the annual GDP growth rate of 9.4 per cent over the period of reform. Cai et al. (1999) provided a higher estimate, suggesting 1.62 percentage point contribution among the 8.01 per cent of annual GDP growth rate in the past reform years.