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# PATTERNS OF MIGRATION AND OCCUPATIONAL ATTAINMENT IN CONTEMPORARY CHINA: 1985-1990\*

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Using data from the 1990 China Population Census, this paper examines the patterns of temporary and permanent migration in China. The results show that temporary migration is an important form of geographic mobility throughout China. Both change and continuity seem to be in place. Although educated people are more likely to be permanent migrants, cadres still enjoy advantages in moving to coastal regions. Even temporary migrants and rural migrants with high levels of education are still less likely to be employed in prestigious occupations, as compared to permanent migrants and migrants with urban origin. Despite the ever-increasing flow of rural migrants to cities, China's rural/urban hierarchy continues to restrict the life chances of millions of peasants.

Key Words: Economic Reform, Migration, China, Household Registration (hukou), Coastal Regions

#### INTRODUCTION

During the 1980s, a new social scene began to emerge in urban China as large numbers of migrants poured into cities. From Beijing and Tianjin in the North to Shanghai in the East, and to Guangzhou and Shenzhen in the South, migrants were everywhere. Estimates of the size of the "floating population", i.e. migrants without permanent household registration at destination, vary widely. While the 1990 Chinese Census recorded close to 30 million individuals (SSB, 1991), the number has increased drastically in recent years. In fact, data from a 1996 survey suggested that the "floating population" numbered about 70 million in 1996 (SSB, 1997). Other estimates often go as high as 80 to 100 million (cited in Roberts, 1997). Whatever the actual figure may be, the current migrant population clearly represents history's largest flow of migrants.

The arrival of unprecedented masses of migrants in urban China has had

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major consequences for the urban economy and life of cities. Perhaps the greatest change has been in the lives of the migrants themselves. Migration creates tremendous opportunities for social mobility for millions of Chinese; and, as a result, a new order of social stratification is emerging. Peasants who join the army of the migrant population are shaking the old system of the rural/urban hierarchy. The increase in China's "floating population" challenges China's current household registration system; and, has generated heated debate and various proposals among policy-makers (Gu, 1994). Though several regional surveys of migration were conducted in the 1980s and 1990s (Goldstein et al., 1991; Liang and White, 1997; Wang and Zou, 1996; Yang, 1993; Zou, 1996), many important aspects of Chinese migration patterns remain poorly understood. For instance, what are the patterns of destination choices among migrants? How does occupational attainment differ among rural and urban migrants? To what extent does an individual's level of education or cadre status affect his/her migration propensity?

In this paper, I examine patterns of migration in 1990, drawing on data from the 1990 China Population Census. I begin with discussion of the legacy of China's dual societies (i.e. rural vs. urban), which is maintained largely by a household registration system (hukou), and the increasing inequality between coastal and inland provinces and its implications for China's migration patterns. I will then identify some of the limitations of current studies on migration in China and highlight the potential contributions of the current study. A series of statistical models will be estimated to study the determinants of migration, migrant destination selection, and migrant occupational attainment, with a focus on the winners and losers in the migration process. Some concluding remarks end the paper.

# THE HOUSEHOLD REGISTRATION SYSTEM AND THE RISE OF TEMPORARY MIGRATION

Study of migration in China differs from other countries because of China's unique household registration system (*hukou*). Consequently, the propensity to migrate depends not only on individual characteristics but also on whether the individual is of rural or urban origin.

Ever since its implementation in the late 1950s, China's household registration system has been affecting the life chances of thousands of people (Cheng and Seldon, 1994; Wang, 1997; Yang, 1993). The system governs where one can reside and to which benefits one is entitled. Not too long ago, individuals without urban household registration status could not buy food or get a job in cities; essentially it was difficult to survive. For a long time,

China's household registration system was an effective divide (or a "Great Wall", as one analyst termed it) that kept rural people from migrating to cities (Wang, 1997). Though it was relatively easy to move physically to a new location, it was much more difficult, especially in cities, to obtain a permanent household registration card. Under such a system, whether one can migrate depends not only on one's credentials, but also on one's ability to navigate the system to obtain approval from both the place of destination and the place of origin. Prospective migrants must be able to bargain with officials at relevant work units as well as and at the office of personnel affairs.

This bargaining between migrants and officials exemplifies the difficulties involved in migration prior to the era of market transition. Naturally, cadres were particularly well-positioned to navigate such a rigid system because of their networks and connections accrued in the course of their careers. However, in the age of market transition, the market rewards productivity and credentials, instead of political loyalty; employers are eager to hire people with the credentials (both human capital and work experience) and obtain household registration cards for them.

Urban reform in the late 1980s further facilitated migration in China and paved the way for millions of migrants, many of whom did not have household registration status at their destinations. Things began to change in the 1980s when grain rationing coupons (*liang piao*) were eliminated and replaced by free market (Wang, 1997). In China, two types of migrants can be defined: temporary and permanent migrants. Permanent or temporary migrant status is not determined by the migrant's duration of stay at a destination, but rather by his/her household registration status. Permanent migrants are those who possess permanent household registration status at their destinations, while temporary migrants lack such status (Goldstein and Goldstein, 1991). Changes in urban China in the late 1980s and early 1990s made migration, especially temporary migration, much easier than ever before.

The recent development of coastal regions has also attracted lots of migrants, many of whom are temporary migrants. For example, in Shenzhen, one of China's Special Economic Zones, many temporary migrants work in mushrooming joint venture enterprises. Data from the 1990 Chinese Census identify more than 70% of Shenzhen's population as temporary migrants (SPCO, 1994). The rise of temporary migration is by no

<sup>&</sup>lt;sup>1</sup> Temporary migrants are also required to register at their destinations in order to obtain a temporary household registration card. However, many migrants simply ignore this procedure.

means limited to Shenzhen. Indeed, based on data from several national surveys, China's temporary migrant population increased from 55 million in 1995 to 67 million in 1996 (CPSSO, 1997; SSB, 1997).

The rise in the number of temporary migrants is partly a result of the difficulties in obtaining *hukou*. The emergence of such a large temporary migrant population is a relatively new phenomenon in China. This paper studies temporary migrants for a better understanding of what characteristics they are likely to have as well as their patterns of occupational attainment at their destinations.

#### THE LEGACY OF URBAN/RURAL DUAL SOCIETIES

In addition to making migration more difficult, China's household registration system created a dual society: people with urban registration status who enjoyed all kinds of benefits and entitlement; and people with rural registration status who lacked access to such benefits (Chan, 1996; Wang, 1997). Such a system powerfully determined one's life chances: if one were born a peasant, one was very likely to remain a peasant for the rest of his or her life. The two societies existed apart and were unequal in both benefits and rewards. However, since the late 1970s, with increasing employment opportunities in cities, peasants began joining the wave of migrants, and in fact, became the backbone of China's migrant population. Has this migration process significantly altered the old rural/urban hierarchy, as measured by migration-related variables?

Admittedly, the rise of a market economy in China provides tremendous opportunities for every citizen, including peasants who were much more disadvantaged under state socialism. However, Zhou et al. remarked that although more and more economic transactions are in market places, "the role of political authority of central and local government in economic processes has not fundamentally changed" (Zhou et al., 1997, p.343). Although migration has become much easier in comparison to earlier years, receiving a permanent household registration card is still more difficult for rural individuals than for individuals from urban areas. Within China's current hierarchical system, people with rural origin are clearly at the bottom. Horizontal migration (from city to city, especially from large to mediumsized or smaller cities) is much easier than vertical (from rural to city) migration (Zhang, 1994). With such a remote possibility of obtaining a permanent household registration card, the majority of peasants simply migrate without ever seeking permanent registration status at their destination. Among rural migrants already working in cities, often in "3D" jobs

(dangerous, difficult, and dirty), there is little hope for occupational advancement. As insurance against their uncertain future, most peasant migrants continue to keep their land, while working in cities; the land serves to minimize the consequences of being returned one day to the countryside. In sum, I expect that individuals from rural areas are less likely to be permanent migrants but more likely to be temporary migrants than those of urban origin. Regarding destination choice, we hypothesize that migrants from rural areas are less likely to migrate to coastal regions. Moreover, once at their place of destination, rural migrants are less likely to work in prestigious occupations.

#### RECENT STUDIES OF MIGRATION IN CHINA

Like the trend of migration itself, the studies of migration in China have flourished in recent years in part due to the growing availability of data on migration. Some of the important studies include major patterns of migration in China (Chan, 1994; Liang and White, 1997; Yang and Guo, 1996); analysis of the evolution of China's *hukou* system (Chan and Zhang, 1999; Solinger, 1999), the dynamics of gender and migration (Fan and Huang, 1998; Yang and Guo, 1999), comparative analysis of migration in China and other countries (Roberts, 1997), migration and returns to human capital (Knight and Song, 1997; Zhao, 1999), a series of studies on temporary migration in China (Goldstein et al., 1991), and more recently studies of remittances and rural transformation (Ma, 1999). These studies help us understand many crucial aspects of the migration process and have moved the study of migration in China a solid step forward.

This paper endeavors to contribute to this growing literature in two ways. First, I want to conduct two comparisons. One is to compare the propensity of migration for rural and urban origin individuals. It is well established that migration from rural areas has increased dramatically since the late 1970s. With few exceptions (e.g. Yang, 1994), the flow of migrants from urban areas has not received much attention. To what extent do migrants from urban areas differ from migrants from rural areas in terms of migration propensity, destination choices, and occupational attainment at the place of destination? Answers to these questions will provide clues about the continuing rural/urban hierarchy in the social stratification system that has separated rural and urban residents for a long time. In addition, most studies of occupational attainment of migrants have focused on temporary migrants, most often from rural areas (Yang and Guo, 1996; Yang and Guo, 1999) or gender difference (Fan, 1999). I argue that comparison of occupa-

tional attainment of temporary and permanent migrants is particularly important because it will elucidate the consequences of not having local *hukou* for migrants at their place of destination and reveal the continuing significance of *hukou* in affecting life chances of migrants. As I will demonstrate in this paper, the research design of including both rural/urban origin individuals and temporary and permanent migrants can generate several important insights that would not have been obtained otherwise.

Second, recent years have witnessed dramatic economic development in China's coastal region. In 1986, for example, the coastal region accounted for 41.3 percent of China's population, but over 60 percent of the gross national industrial output, as well as 79 percent of China's foreign trade (Yang, 1991). In addition, most of China's special economic zones are located in the coastal regions, and therefore have more flexible and liberal policies, thus giving another boost to the economy of the coastal region. Rural areas in coastal regions also benefit from this process. For instance, from 1978 to 1988, rural per capita income in coastal regions grew about 178 percent; whereas, the corresponding growth rate for non-coastal regions was only about 111 percent (SSB, 1993). Therefore it is not surprising that coastal regions are attractive destinations for migrants, compared to other regions. It is also expected that the high level of market activities in the coastal region would create a demand for and reward individuals with high levels of education; thus, individuals with greater human capital are more likely to move to these coastal regions. I also expect that cadres are more likely to move to coastal regions because during the late 1980s and early 1990s, cadres still had lots of connections on which to capitalize on to move to a desired location. Surprisingly, most previous studies do not model the determinants of migrant destination choices (coastal vs. non-coastal).

#### DATA AND METHODS

The major data set for this paper is the 1% Sample of the China 1990 Population Census which was conducted in July, 1990, by China's State Statistical Bureau (SSB, 1991). For a long time, students of migration and urbanization in China faced the reality of having limited migration data (Goldstein and Goldstein, 1990). For example, there were no questions pertaining to migration in China's first three censuses in 1952, 1964, and 1982. The 1990 Chinese Census was the first time that information on migration was collected. Similar to migration questions from censuses in other countries, the 1990 China Population Census asked respondents whether or not they had migrated within 5 years prior to the date of the census (i.e. in the

years, 1985-1990). If they had migrated, their provinces of origin and destination, as well as their rural or urban status, were identified.

There are several advantages of using the 1990 Chinese Census data for doing migration research. First, compared to other regionally-based surveys, census data have the advantage of covering China as a whole; thus it allows us to examine patterns of migration across China and minimizes the potential bias which may be associated with regionally-based data. In addition, because we have information on migrants originating from all parts of China, we can study regional variations in migration patterns and destination choices (including coastal vs. non-coastal destinations).

Second, the 1990 Chinese Census was conducted in July, 1990, and asked about migration during the years 1985-1990. The late 1980s and early 1990s were a time of accelerating migration, and the 1990 Census captures this important period. Finally, the 1990 Chinese Census includes information on all major demographic and socioeconomic variables; this allows for the comparison of permanent and temporary migrants, as well as non-migrants, using these important characteristics.

Despite the richness of the data, the 1990 Chinese Census is not without limitations. One shortcoming in the data is the definition of temporary migrants. The 1990 Chinese Census covers three types of temporary migrants: (1) individuals who have resided at their destination for at least a year without obtaining permanent household registration; (2) individuals who left their place of registration more than a year ago and who have resided at their destination for less than a year (without local permanent household registration); and (3) individuals whose place of household registration is uncertain, but who reside in the current locale. Using these definitions, the 1990 Chinese Census missed temporary migrants who had resided at their destinations for less than a year and who had left their place of household registration for less than a year. This, presumably, could be quite a large number. Thus, our measure of temporary migration is clearly an underestimate of the magnitude of temporary migration in China.<sup>2</sup>

Because of the large size of the 1% Sample of the China 1990 Census, I

<sup>&</sup>lt;sup>2</sup> It is not an issue for permanent migrants because they are counted at their destinations, as long as they arrived during 1985-1990. I also made a decision of retaining only those temporary migrants who arrived at their destinations during 1985-1990. This decision eliminated about 4,000 individuals (roughly 22% of the total temporary migrant population in the 1990 Census) from the sample. The major interest of this paper was to compare temporary and permanent migration within the same time frame. If we were to keep those temporary migrants who came before 1985, one would also argue that we would need to include those permanent migrants who came before 1985; it is not possible to extract this information from the 1990 Census.

decided to select 10% of the original data file. To focus on individuals in the labor force, I further selected individuals who were between 15 and 59 years old. I begin with a description of China's migrant population by province, and by temporary versus permanent migration status. To describe general patterns of temporary and permanent migration, I use province destination propensity for temporary and permanent migrants. It takes the following form:

$$PDP_{i} = \frac{TMIG_{i}}{\sum_{i=1}^{28} TMIG_{i}}$$

Here  $PDP_i$  is province destination propensity for province i and  $TMIG_i$  represents the total number of temporary migrants in province i. We can similarly define  $PDP_i$  for permanent migrants. It should be noted that this measure of migration has some limitations because it does not control for population size of each province. However, to the extent that this measure of migration gives us a sense of the distribution of temporary and permanent migrants, it serves our research objectives well.

Next, I estimate a series of statistical models. I begin with multinomial logistic regression models, using individual-level characteristics, to predict the probability of undertaking permanent or temporary migration. The dependent variable has three categories: 0 for permanent migration; 1 for temporary migration; and 2 for non-migration. Individual-level variables include: age, sex, education, marital status, cadre status,<sup>3</sup> and rural/urban origin.

The second statistical model concerns destination choice. Here I selected only interprovincial migrants and examined the determinants for choosing coastal regions as migration destination. The idea here is to examine the extent to which individuals with greater human capital or cadre status select coastal destinations, and similarly whether individuals from rural areas are less likely to migrate to coastal regions.

Finally, I selected all migrants and estimated another logistic regression model, predicting the probability of working in prestigious occupations based on individual characteristics. Here prestigious occupations are defined as the following: (1) professional, technical, managerial, and office

<sup>&</sup>lt;sup>3</sup> Cadres include: (A) Individuals who hold high-level positions with party and government agencies at the state, provincial, prefectural, county, and town level; (B) party chief and leaders of the Youth League, the Workers' Union, and the Federation of Women; (C) administrators for state-owned enterprises.

workers; (2) administrators for government agencies at state, province, prefectural, county, and town level.  $^4$ 

TABLE 1. DISTRIBUTION OF TEMPORARY AND PERMANENT MIGRANTS BY PROVINCE

Region	% Temporary Migrants	Temporary Migrants <sup>a</sup>	Permanent Migrants <sup>b</sup>
NORTH:			
Beijing	51.37	2.68	2.12
Tianjin	44.79	2.87	2.95
Hebei	39.36	2.94	3.78
Shanxi	59.45	2.21	1.26
Inner Mongolia	55.36	3.06	2.06
NORTHEAST:			
Liaoning	40.40	3.43	4.22
Jilin	37.24	1.71	2.41
Heilongjiang	64.46	5.17	2.38
EAST:			
Shanghai	61.35	4.72	2.48
Jiangsu	53.98	5.27	3.75
Zhejiang	60.45	4.79	2.62
Anhui	47.86	4.04	3.67
Fujian	61.94	4.40	2.26
Jiangxi	30.42	2.49	4.75
Shandong	28.35	3.49	7.36
CENTRAL and SOUTH			
Henan	33.95	4.10	6.66
Hubei	39.19	4.02	5.20
Hunan	22.74	2.20	6.22
Guangdong	58.19	16.95	10.16
Guangxi	33.61	2.18	3.60
SOUTHWEST:			
Sichuan	34.82	5.43	8.48
Guizhou	45.11	0.97	0.99
Yunnan	47.05	2.77	2.61
NORTHWEST:			
Shannxi	44.29	3.20	3.36
Gansu	23.85	1.27	3.38
Qinghai	67.01	0.90	0.37
Ningxia	16.33	0.05	0.23
Xinjiang	76.21	2.69	0.70
Ň	32,246	14,667	17,579

Source: One per thousand sample of the 1990 China Population Census.

<sup>&</sup>lt;sup>a</sup> represents province destination propensity for temporary migrants.

b represents province destination propensity for permanent migrants.

 $<sup>^4</sup>$  To operationalize the dependent variable of working in prestigious occupations, respondents who reported occupations of 11-245 in occupational classification are coded as 1 and 0 otherwise.

#### **RESULTS**

## Patterns of Permanent and Temporary Migration

Table 1 describes major patterns of permanent and temporary migration in China. I use three measures to describe these patterns. First, I measure the proportion of temporary migrants among the total migrant population in each province. The results are presented in the second column. Overall, the proportion of temporary migrants ranges from 23 percent in Hunan Province to as high as 76 percent in Xinjiang Province. In general, we see that for all provinces, temporary migration is becoming an important form of population mobility.

It is worth noting that there are six provinces where the proportion of temporary migrants exceeds 60 percent: Heilongjiang, Shanghai, Fujian, Guangdong, Qinghai, and Xinjiang. These six provinces suggest two patterns of temporary migration in the late 1980s. One pattern is that temporary migrants go to provinces which are undergoing great economic development. This explains why temporary migrants selected Shanghai, Fujian, Guangdong, and Heilongjiang as destinations. Because obtaining permanent household registration status is often a difficult and long drawn-out process, people simply migrate in search of economic opportunities, without changing their household registration status. Heilongjiang Province plays an important role in trade with the former Soviet Union, North Korea, South Korea, and Mongolia; this economic activity has stimulated the province's overall development in recent years, and attracted large numbers of temporary migrants.

The second pattern of temporary migration is the high proportion of temporary migrants in remote provinces such as Qinghai and Xinjiang in the Northwest. Although Qinghai and Xinjiang overall have a relatively small number of migrants (see columns 3 and 4), they do have a high proportion of temporary migrants. The high proportion of temporary migrants in these two provinces is suggestive of two things. Both provinces have begun to catch up economically with the rest of China. Xinjiang has comparative advantages: rich natural resources (mineral reserves); the cultivation of well-known fruits such as watermelon and grapes; cotton industry; and border trade with other countries (Christofferson, 1993; Hannum and Xie, 1995).

These development initiatives have generated a demand for labor. The out-migration of Han Chinese from Xinjiang in the late 1980s has increased the demand. A recent report confirms that as many as 400,000 migrant

workers, most of whom are from Sichuan province in central China, go to Xinjiang each year to pick cotton during the harvest season (Mer, 1998). Aside from the draw of increased economic development, these two provinces are not particularly attractive destinations for migrants to stay permanently. Qinghai and Xinjiang are considered to be rather "remote" and minority-concentrated, with unpleasant temperatures and unpredictable weather conditions.<sup>5</sup>

Column 3 lists province destination propensity for temporary migrants, measuring the attractiveness of a province in receiving temporary migrants. Not surprisingly, Guangdong Province receives 17 percent of China's temporary migrants. Located along the coast, Guangdong has easy access to markets in Hong Kong, Taiwan, and Southeast Asia and, thus has the upper hand in China's transition to a market-oriented economy. Some analysts even suggested that Guangdong is "one step ahead in China" (Vogel, 1989). Guangdong also contains several of China's special economic zones, e.g. Shenzhen, Zhuhai, and Shantou; these special economic zones attract hordes of temporary migrants looking for work in joint venture enterprises, booming construction work, and service industries. Heilongjiang, Shanghai, Jiangsu, Zhejiang, and Sichuan receive a large share of China's temporary migrants. Shanghai, Jiangsu, and Zhejiang are in the Yantz River Delta Region (chang jiang san jiao zhou), which has prospered rapidly because of its export-oriented economy and the development of rural industries. As I discussed earlier, Heilongjiang Province also has a large number of temporary migrants because of its recent trade development with Russia, South Korea, and Mongolia (the triangle trade zone).

Although Beijing is constantly in the spotlight for its large "floating population", the 1990 census data show that Beijing had only about 3 percent of China's temporary migrants. Again, note that the 1990 Census missed temporary migrants who had remained at their destinations for less than a year and had left their place of household registration for less than a year. It is possible that Beijing has a large number of temporary migrants; but they would not be included in the census if they had been in Beijing for less than a year.

The measure in column 4 is the province destination propensity for permanent migrants. Again, Guangdong tops the list with almost 10 percent of China's permanent migrants. Thus, Guangdong was the most important

<sup>&</sup>lt;sup>5</sup> Some temporary migrants are sent by their work units in other parts of China to work in Xinjiang for one or two years. They usually prefer to keep their household registration status at their place of origin and return home after their work assignment.

province for both temporary and permanent migration in China in 1990.

# Comparison of Permanent and Temporary Migrants

Table 2 shows the socio-demographic characteristics of temporary

TABLE 2. SOCIODEMOGRAPHIC CHARACTERISTICS BY MIGRATION STATUS

Variables	Non-Migrant	Temporary Migrant	Permanent Migrant
Sex:			
Male	51.67	58.08	55.54
Age:			
15-19	16.10	14.80	15.01
20-29	31.68	55.23	60.86
30-39	23.62	17.50	12.92
40-49	16.24	7.81	7.18
50-59	12.36	4.66	4.02
mean age	32.49	27.61	26.72
Ethnicity:			
Han	92.65	95.53	94.03
Marital Status:			
Never married	27.34	42.78	48.80
Currently married	68.84	55.79	49.69
Widowed	1.72	0.64	0.30
Divorced	0.56	0.40	0.51
Education:			
University	0.54	0.41	14.74
Technical College	1.09	1.77	9.41
Tech. High School	2.05	2.13	12.28
Senior High School	9.83	11.04	15.17
Junior High School	34.07	48.66	28.32
Elementary School	36.84	28.48	15.50
Illiterate	15.57	7.52	4.57
Occupation:			
Professional/Tech.	5.38	3.28	20.72
Officials	1.79	1.03	3.56
Clerical	1.64	1.69	7.69
Sales	2.95	10.41	4.24
Service	2.29	9.23	4.63
Agriculture	70.47	18.00	31.34
Production/Shipping	15.48	56.36	27.83
Residence of Origin:			
City	12.37	9.12	28.60
Town	16.79	13.32	23.64
Rural	70.84	77.56	47.76
Current Residence:			
City	20.53	58.19	53.68
Town	7.49	12.57	19.47
Rural	71.98	29.24	26.86
Coastal (%)	40.69	53.67	45.75
ntra-provincial migration		60.72	72.48
N	728,646	14,667	17,579

Source: One per thousand sample of the 1990 China Population Census.

migrants, permanent migrants, and non-migrants. There are slightly more men than women in both temporary and permanent migrant populations. Clearly, a large number of women participate in the migration process, a finding that is consistent with previous research using regional data. Both temporary migrants and permanent migrants are most likely to be between 20 and 29 years old (55 percent for temporary migrants and 60 percent for permanent migrants). In contrast, only 32 percent of the non-migrant population is in the 20-29 age group. As compared to the non-migrant population, temporary and permanent migrants have a higher proportion of those who have never been married, primarily because of their relatively younger age.

Regarding education, permanent migrants are clearly better educated than non-migrants and temporary migrants; 15 percent of them are college educated, compared with less than 1 percent for non-migrants and temporary migrants. The high education selectivity for permanent migrants indicates that it is easy for individuals with educational credentials to secure household registration status at their destinations. The educational differentials between temporary migrants and non-migrants are not particularly striking. Because of educational credentials, 21 percent of permanent migrants, not surprisingly, are in professional and technical occupations. Interestingly, 31 percent of permanent migrants are doing agricultural work, which primarily reflects the rural to rural permanent migration. Most temporary migrants work in production and shipping (56 percent), followed by sales and service types of occupations. Compared to the non-migrant population which has 15 percent in production and shipping, permanent migrants have a much higher percentage (28 percent).

Are migrants more likely to come from rural or urban areas? The answer differs for temporary and permanent migrants. Seventy-eight percent of temporary migrants are from rural areas, and only nine percent are from cities. The origin of permanent migrants varies. While rural people are still the largest source of permanent migration, nearly one-third of permanent migrants come from cities. The concentration of rural migrants in the temporary migration category attests to the continuing disadvantages faced by rural people in China's stratification system.

Not surprisingly, migrants are most likely to move to urban areas. Although about 18 percent of China's population lived in cities in 1990 (SSB, 1991), over half of the migrants migrated to cities, and between 12 and 19 percent of them moved to towns (depending on whether we looked at permanent or temporary migrants). Clearly, cities are the most attractive destinations for migrants. More than 60% of temporary migrants are intraprovin-

cial migrants. In contrast, 72% of permanent migrants are intraprovincial migrants. This also implies that it is easier to change household registration status within the same province than across provinces.

Migrants have a preference for coastal rather than interior provinces. Although coastal provinces constitute 41% of China's total population, they account for 54% of China's temporary migrants and 46% of its permanent migrants. Employers in coastal regions do not seem to be very concerned about workers having local household registration. A recent survey of China's coastal cities reported that more than half of the respondents said that either employers did not require local household registration status, or that they assisted employees to obtain local household registration (Shen et al., 1998).

### Determinants of Permanent and Temporary Migration

Table 3 shows the results of multinomial logit estimates of temporary and permanent migration. Individual-level variables in the model include sex, age, education, marital status, and rural/urban origin. Holding other factors constant, men are more likely than women to become temporary migrants. Although women account for less than half of the permanent migrant population, once socio-economic factors are controlled, they are more likely than men to be permanent migrants. This, however, does not necessarily mean that women enjoy a particular advantage over men in obtaining local hukou. Recent research on migration and gender suggests that women who do migrate are more likely to move for marriage reasons, thereby making it easier for them to obtain local hukou (Fan and Huang, 1998; Goldstein et al., 1996). In addition, people who are currently married are less likely to become either temporary or permanent migrants.

The effects of age variables show that the younger the individuals are, the more likely they are to migrate. Moreover, the largest coefficient for the age variables is for the age group of 20-29, which is consistent with our previous findings illustrated in Table 2.

There is strong evidence that individuals with greater human capital (i.e. an education higher than junior high school) are more likely to become both permanent and temporary migrants. This is particularly significant for individuals with an education of senior high school and above. In the late 1980s and early 1990s, educated Chinese clearly enjoyed advantages in moving to different locations, and in obtaining household registration status at their destinations. It should be noted that the coefficients for educational levels of senior high school and technical high school and above are larger for per-

**TABLE 3.** COEFFICIENTS FROM A MULTINOMIAL LOGIT MODEL OF TEMPORARY AND PERMANENT MIGRATION

Variable	Perm/No	Temp/No
	Migration	Migration
Intercept	-4.7422**	-5.0159**
•	(.045)	(.043)
Sex		
Male	-0.0674**	0.1233**
Age $(ref = 40-59)$	(.017)	(.018)
15-19	0.6267**	0.1005**
	(.037)	(.038)
20-29	1.2574**	0.9984**
	(.028)	(.029)
30-39	0.2715**	0.4163**
	(.032)	(.032)
Education (ref = illiterate)	(/	(/
Elementary School	.0238	0.2238**
•	(.040)	(.035)
Junior H.S.	0.4557**	0.7119**
	(.040)	(.035)
Senior H.S.	1.0294**	0.5426**
Tarketer HIC and show	(.043) 2.9271**	(.0422) 0.7798**
Technical H.S. and above		
C- l	(.041)	(.054)
Cadre	-0.3903**	-0.1934*
Marital Status	(.057)	(.092)
Married	-0.444**	-0.4545**
	(.020)	(.021)
Type of Original Residence	(.020)	(.021)
Rural	-0.2719**	0.4530**
	(0.020)	(.021)
N	760,892	, ,

Source: 1/1000 Sample of the 1990 Chinese Census.

manent migration than for temporary migration. This seems to indicate that educated individuals choose permanent rather than temporary migration as the first priority. Cadre status provides no advantage for migration; if anything, cadres are less likely to become temporary or permanent migrants. As China moves toward a more market-oriented society, education, not cadre status, will provide an important capital for seeking opportunities. However, there is also an alternative explanation. That is, cadres are already doing very well and do not have incentives to migrate.

Next we examine the effects of residential origin: rural or urban. Urban includes both towns and cities. I adopt a rather strict definition of urban.<sup>7</sup>

<sup>\*</sup>p < .05; \*\*p < .01.

<sup>&</sup>lt;sup>6</sup> Elementary school education is the only exception. Individuals with elementary school education are less likely to become migrants than those who are illiterate, though the result is not statistically significant.

Results from Table 3 show that migrants who originated from rural areas are less likely to be permanent migrants, and more likely to be temporary migrants. When we controlled for other individual-level characteristics, urban individuals enjoyed the greatest advantage of moving to a new location, which is consistent with my hypothesis. Apparently, rural household registration status determined the life chances of peasants not only during the heyday of China's planned economy, but also in the early stages of its market transition, though perhaps to a lesser degree. The rural/urban hierarchy continues to be an enduring social institution in the Chinese stratification system.<sup>8</sup>

To give a clear picture of the comparison of permanent and temporary migration by rural-and urban origins, I also generated predicted probabilities of permanent and temporary migration, based on results from Table 3. The following assumptions are made according to several individual characteristics: male, ages 20-29, education level of junior high school, married, and non-cadre. The only variable that is allowed to change is their residential origin, i.e. rural or urban. The predicted probabilities of migration are summarized in Figure 1. Figure 1 shows that, controlling for socio-demographic characteristics, the probability of making temporary migration is higher for rural people than for urban people. In contrast, the probability of making permanent migration is higher for urban people than for rural people. This suggests that urban residents not only enjoy advantages when they do not migrate (i.e. the benefits attached to urban *hukou*), they also enjoy advantages when they do migrate.

## Coastal vs. Non-coastal Destinations

Next I select interprovincial migrants to examine the determinants of who selects coastal regions as a destination. As I discussed earlier, China's coastal region has undergone significant changes in the era of market transition; and is becoming increasingly a very desirable destination for migrants. The assumption here is that individuals who get to migrate to coastal

<sup>&</sup>lt;sup>7</sup> There are two ways of defining rural/urban status, as adopted in the 1990 Census (SSB, 1991). In definition 1, city population covers all residents within a city's administrative boundaries, including substantial numbers of villages within the territories. Definition 2 includes only the population in a city's community district (jie dao) (see SSB (1991), p. 2). Similarly, two definitions can be applied to towns as well. For this paper, I use the second definition.

<sup>&</sup>lt;sup>8</sup> Results from the 1995 China 1% Population Sample Survey show that rural and urban migrants account for 59% and 41% of China's migrant population in 1995 (CPSSO, 1997). Given the fact that 71.4% of China's population was in rural areas in 1995, rural migrants still seem to have a lower rate of migration compared to urban people.

**TABLE 4.** COEFFICIENTS FROM A LOGIT MODEL OF COASTAL VS. NON-COASTAL DESTINATIONS

Variables	В	S.E.
Intercept	.320**	.113
Sex		
Male	.292**	0.044
Age $(ref = 40-59)0$		
15-19	0.369**	0.093
20-29	0.270**	0.070
30-39	0.243**	0.077
Education (ref = illiterate)		
Elementary School	-0.533**	0.091
Junior H.S.	-0.653**	0.089
Senior H.S.	-0.613**	0.103
Technical H.S. and above	-1.182**	0.106
Cadre	0.331*	0.163
Marital Status		
Married	0.379**	0.052
Type of Original Residence:		
Rural	-0.091	0.049
N	10,599	

Source: 1/1000 Sample of the 1990 Chinese Census.

regions reflect the relative advantages he or she has in Chinese society.

Let us look at variables concerning my major theoretical interest: education, cadre status, and rural/urban origin. Consistent with my hypothesis, individuals with greater human capital are more likely to migrate to coastal regions. It seems that places like the coastal regions with intense market activities are more likely to reward educational credentials. Cadres, on the other hand, are less likely to move to coastal regions. This indicates, in the late 1980s, that coastal regions are less attractive to cadres because political capital seems to be less important than human capital in the coastal regions.

Turning to residential origin, there is a piece of good news for peasant migrants that they are more likely to move to coastal regions to enjoy the economic opportunities there, although the results are not statistically significant. This finding is consistent with the common wisdom that peasants flooded into the coastal regions in the early 1990s. It should be noted that my analysis includes only migrants who have stayed at their places of destination for more than a year. It is possible that this coefficient may be statistically significant if a more flexible definition of migration is used, such as six-month stay at their place of destination.

<sup>\*</sup>p < .05; \*\*p < .01.

TABLE 5. COEFFICIENTS FROM A LOGIT MODEL PREDICTING OCCUPATIONAL ATTAINMENT

Variables	В	S.E.
Intercept	-15.624**	.586
Sex		
Male	-0.068	0.051
Age	0.4848*	0.023
$Age^2$	-0.006**	0.0003
Education (ref = illiterate)		
Elementary School	1.649**	0.464
Junior H.S.	3.056**	0.453
Senior H.S.	4.287**	0.454
Technical H.S. and above	6.602**	0.457
Marital Status		
Currently Married	0.637**	0.073
Type of Previous Residence		
Rural	-0.716**	0.079
Type of Migrant		
Temporary	-0.326**	0.079
Interaction Terms		
Tech High School(+) * Rural	-0.568**	0.115
Tech High School(+) * Temporary	-0.432**	0.136
N	32,273	

Source: 1/1000 Sample of the 1990 Chinese Census.

## Occupational Attainment of Migrants

Finally, I selected both temporary and permanent migrants, and examined their occupational attainment patterns at their destinations. Table 5 shows results from a logit model of occupational attainment for migrants. The dependent variable is a 0-1 variable: 1 for prestigious occupations and 0 otherwise. The definition of prestigious occupations is at the end of the data and methods section of this paper.

Education is the most important factor in determining a migrant's occupational attainment. As an individual's education level rises, so does his/her probability of attaining a prestigious occupation at destination. The magnitude is particularly large for migrants with educational levels of senior high school or technical high school and above. China's urban-rural hierarchy again has implications for occupational attainment. Migrants of rural origin are less likely to work in prestigious occupations, compared to migrants of urban origin. The longstanding rural disadvantage has clear consequences in China's current stratification system. "Universalism" still has a long way to go in China.

Results from Table 2 show that temporary migrants are much less educated than permanent migrants. What is troubling is that, even when I control

<sup>\*</sup>p < .05; \*\*p < .01.

for education, age, and other variables, temporary migrants are still less likely than permanent migrants to be in prestigious occupations. Given the fact that 78% of temporary migrants are from rural areas, the implication is that rural migrants will continue to be at the bottom of the occupational hierarchy.

To get a sense of the magnitude of difference in occupational attainment by temporary and permanent migrants and those of rural or urban origin, I again generated predicted probabilities. The assumptions are the following: migrants who are male, 27 years old (mean age), junior high school education, and married. Two patterns were observed. First, regardless of their residential origin, permanent migrants were more likely than temporary migrants to work in prestigious occupations. Second, among temporary migrants, urban individuals were more likely than rural migrants to work in prestigious occupations. A similar finding is true for permanent migrants as well. In sum, temporary migrants of rural origin are at the bottom of the occupational hierarchy within the migrant population, and permanent migrants of urban origin are at the top.

I also entered interaction terms: one is between high education (individuals with technical high school and above) and residential origin; and the other is between a high education variable and temporary migration. The idea here was to test whether rural migrants or temporary migrants are still disadvantaged if they have a high level of education. The two negative coefficients for the interaction terms give unambiguous results: rural and temporary migrants are clearly disadvantaged. This is again a troubling finding because it suggests that not only residential origin matters; but also that a high educational level does not translate equally into corresponding levels of occupational attainment for rural or temporary migrants, as it does for urban and permanent migrants.

#### DISCUSSION AND CONCLUSION

In this paper I have focused on patterns of migration in China during the late 1980s and early 1990s. I argue that migration is a new mechanism of social mobility because it often is in response to emerging opportunities in a new locale. Therefore, patterns of migration help us to understand the changing mechanisms of stratification. I examined the patterns of migration in three ways: by the extent to which individuals participate in migration, the propensity of migrants to select coastal regions (closer to market activities); and by occupational attainment of migrants at their destinations. This paper represents one of the first efforts to examine temporary and perma-

nent migration for each province, using nationally representative data. Capitalizing on the comprehensive nature of the 1990 Chinese Census data, this paper also studies the determinants of migration to coastal regions. It should be emphasized that this is a research strategy that cannot be achieved by using regionally based sample surveys alone, such as the 1994 Beijing Survey of Temporary Migrants (Zou, 1996) or any other regional-based surveys.

The broad pattern of migration at the provincial level demonstrates that temporary migration is an important form of geographic mobility in China. In almost all provinces, temporary migration accounts for a substantial proportion of the migrant population. The increase in temporary migration in China largely reflects the growing economic opportunities induced by market transition. It is also facilitated by China's reform, though limited, in the household registration system, and changes in urban China (the dismantling of the ration system and the emergence of food and rental markets). This paper also shows that migrants move to coastal provinces in significantly large numbers. In this regard, Guangdong Province, one of the most dynamic provinces as far as its economy is concerned, takes center stage and has the largest number and proportion of both temporary and permanent migrants.

At the individual level, the results reveal that individuals with greater human capital enjoy tremendous advantages in the migration process. They are more likely to become permanent migrants, which often means that they receive greater benefits and entitlement at their destinations. They are also more likely to move to the coastal regions and hold prestigious occupations. These findings suggest that analysts should pay more attention as to who gets educated in the years to come. In contrast, cadres, the long-time beneficiaries of state redistributive institutions, seem to have lost some ground, at least when it comes to migration in the era of market transition. They are less likely to migrate either temporarily or permanently. When they migrate, they are less likely to move to the coastal destinations.

It is also important to note that the results herein may illustrate the continuing advantages enjoyed by cadres. The fact that cadres are less likely to migrate can also reflect that state redistributive institutions continue to benefit cadres, thereby giving them less incentive to migrate or migrate to market-driven sectors (i.e. the coastal regions). These cadres tend to maintain jobs in the types of organizations and sectors closest to a redistributive economy (Zhou et al., 1997). These jobs provide substantial benefits such as housing, welfare, and job security.

In the past, China's rural/urban hierarchy divided rural/urban societies

and restricted both the social and geographic mobility of rural individuals. However, even in the era of market transition, the rural/urban hierarchy continues to influence the life chances of millions of peasants. Despite an increasingly large number of migrants from rural areas, peasants are still less likely to become permanent migrants. Moreover, they are less likely to hold prestigious jobs. Indeed, the typical jobs for rural migrant workers are in construction, factories, joint venture enterprises, and in the service sector, e.g. as nannies or in restaurants. The most troubling is the fact that disadvantages persist even for rural individuals with high levels of education. Clearly, individuals of rural origin are the truly disadvantaged, both before and after migration. Rural migrants are in the city, but not a part of it. Most of the literature on migration in China primarily focused on migration from rural areas, however, the current research design yielded important new findings because of its inclusion of individuals who originate from both rural and urban areas. Overall, the results suggest that unless there is a major change in China's household registration system, rural household registration status will remain a hurdle for millions of Chinese peasants who want to migrate in search of greater economic opportunities and a better way of life.

#### REFERENCES

- Cai, Fang. 1997. "On the Issue of Floating Population." Pp.423-35 in Min Xu (ed). Critical Moment: 27 Critical Problems in Contemporary China. Beijing, Contemporary China Press.
- Chan, Kam Wing. 1996. "Post-Mao China: A Two-Class Urban Society in the Making." *International Journal of Urban and Regional Research* 20(1):134-150.
- Chan, Kam Wing, and Zhang Li. 1999. "Hukou and Migration in China." *China Quarterly* 160:818-855.
- Cheng, Tiejun, and Mark Seldon. 1994. "The Origins and Social Consequences of China's hukou System." *China Quarterly* 139:644-68.
- Chen, Yaoming. 1997. "The New Choice of Rural Migrants." *Huasheng Monthly* pp.54-57. December.
- China Population Sample Survey Office (CPSSO). 1997. *Tabulations from the 1995 China 1% Population Sample Survey*. Beijing: China Statistical Publishing House.
- Christofferson, Gaye. 1993. "Xinjiang and the Great Islamic Circle: The Impact of Transnational Forces on Chinese Economic Planning." *China Quarterly* 133:130-151.
- Fan, Cindy C. and Youqin Huang. 1998. "Wave of Rural Brides: Female Marriage Migration in China." *Annals of the Association of American Geographers* 88(2):227-251.
- Fan, Cindy. 1999. "Migration in a Socialist Transitional Economy: Heterogeneity, Socioeconomic and Spatial Characteristics of Migrants in China and Guangdong

- Province." International Migration Review 33:954-87.
- Gao, Gang. 1996. "The Wandering of 200 Million Peasants at the End of the Century." *Huasheng Monthly*, Nov.
- Goldstein, Sidney and Alice Goldstein. 1990. "China." Charles B. Nam, William Serow, and David F. Sly eds. *International Handbook on Internal Migration*, pp. 63-84 New York: Greenwood Press.
- Goldstein, Sidney and Alice Goldstein. 1991. *Permanent and Temporary Migration Differentials in China*. Papers of the East-West Population Institute, No. 117.
- Goldstein, Sidney, Alice Goldstein, and Shenyang Guo. 1991. "Temporary Migration in Shanghai Households, 1984." *Demography* 28:275-91.
- Greenwood, Michael J. 1981. Migration and Economic Growth in the United States. New York: Academic Press.
- Gu, Shengzu and Jian Xinhua. 1994. Contemporary Population Migration and Urbanization in China (dangdai zhongguo renkou liudong yu chengshihua). Wuhan, Wuhan University Press.
- Hannum, Emily, and Yu Xie. 1995. "Ethnic and Gender Stratification in an Economic Reform Era: The Case of Xinjiang, China." Population Studies Center, University of Michigan, Research Reports No.95-327.
- Knight, John, Lina Song, and Jia Huaibin. 1997. "Chinese Rural Migrants in Urban Enterprises: Three Perspectives." Applied Economics Discussion Paper Series No. 190. Institute of Economics and Statistics, University of Oxford.
- Liang, Zai and Michael J. White. 1997. "Market Transition, Government Policies, and Interprovincial Migration in China, 1983-88." *Economic Development and Cultural Change* 45:321-336.
- Ma, Zhongdong. 1999. "Labor Migration and Return Transformation in China." Unpublished manuscript. Hong Kong: Hong Kong University of Science and Technology.
- Mer, Fu. 1998. "Maiden workers in China's west". *People's Daily*, overseas edition, February 27.
- People's Daily (overseas edition). 1995. "Strengthening the Control of Floating Population." July 12.
- *People's Daily* (overseas edition). "Explanations of China's State Council Reforms by State Council Member Lou Gan." March 18.
- Roberts, Kenneth. 1997. "China's 'Tidal Wave' of Migrant Labor: What Can We Learn from Mexican Undocumented Migration to the United States?" *International Migration Review* 31:249-293.
- Rona-Tas, Akos. 1994. "The First Shall be the Last? Entrepreneurship and Communist Cadres in the Transition from Socialism." *American Journal of Sociology* 100:40-69.
- Shen, Chonglin, Yinyin Chen, and Ping Zhao eds. 1998. A Report of Survey of Social Change in the Advanced Coastal Region of China. Beijing: Social Science Publishing House.
- Shen, Yimin and Tong Chengzhu. 1992. *Population Migration in China, Historical and Contemporary Perspectives.* Beijing, China Statistics Publishing House.
- Shenzhen Population Census Office (SPCO). 1994. *Tabulations from the 1990 Population Census*. Shenzhen: Shenzhen Population Census Office Publications.
- Solinger, Dorothy. 1999. Contesting Citizenship in China: Peasant Migrants, the State,

- and the Logic of the Market. Berkeley, CA: University of California Press.
- Stark, David. 1996. "Recombinant Property in East European Capitalism." *American Journal of Sociology* 101:993-1027.
- State Statistical Bureau (SSB). 1991. *China Population Statistics Yearbook*. Beijing: China Statistical Publishing House.
- State Statistical Bureau (SSB). 1993. *China Statistical Yearbook*. Beijing, China Statistical Publishing House.
- State Statistical Bureau (SSB). 1997. *China Statistical Yearbook 1997*. Beijing, China Statistical Publishing House.
- Vogel, Ezra. 1989. One Step ahead in China: Guangdong Under Reform. Cambridge: Harvard University Press.
- Wang, Feng. 1997. "The Breakdown of a Great Wall: Recent Changes in Household Registration System in China." Pp.149-165 in Thomas Sharping (ed.) Floating Population and Migration in China: The Impact of Economic Reforms. Hamburg: Institute of Asian Studies.
- Wang, Feng and Zuo Xuejin. 1996. "Rural Migrants in Shanghai: Current Success and Future Promise." Paper presented at International Conference on Rural Labor Migration in China, Beijing, China.
- Xu, Min. 1997. Critical Moment: 27 Critical Problems in Contemporary China. Beijing: Contemporary China Press.
- Zhao, Yaohui. 1999. "Labor Migration and Earnings Differences: The Case of Rural China." *Economic Development and Cultural Change* 47:767-782.
- Yang, Dali L. 1991. "China Adjusts to the World Economy: The Political Economy of China's Coastal Development Strategy." *Pacific Affairs* 64:42-64.
- Yang, Quanhe and Gei Guo. 1996. "Occupational Attainment of Rural to Urban Temporary Economic Migrants in China, 1985-1990." *International Migration Review* 30(3):771-787.
- Yang, Xiushi. 1993. "Household Registration, Economic Reform and Migration." *International Migration Review* 27:797-818.
- Yang, Xiushi and Fei Guo. 1999. "Gender Differences in Determinants of Temporary Labor Migration in China: A Multilevel Analysis." *International Migration Review* 33:932-951.
- Zhang, Qingwu. 1994. *Hukou Migration and Floating Population* Beijing: People's Security University of China Press.
- Zhou, Xueguang, Nancy Brandom Tuma, and Phyllis Moen. 1997. "Institutional Change and Job-Shift Patterns in Urban China, 1949-1994." *American Sociological Review* 62:339-365.
- Zhou Yaohui. 1999. "Labor Migration and Earnings Differences: The Case of Rural China." *Economic Development and Cultural Change* 47: 767-782
- Zou, Lanchun. 1996. *The Floating Population of Beijing*. Beijing, China Population Publishing House.

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