

Migration and Gender in China: An Origin-Destination Linked Approach*

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During the past 2 decades, major social and economic transformations have occurred in China. One of the demographic consequences of these changes is the large increase in the migrant population. In the prereform era, the Chinese government strictly controlled and regulated migration through the household registration system (*hukou*) and other mechanisms. Since the late 1970s, however, the role of household registration has weakened so much that one does not need to obtain local *hukou* in order to migrate. Migration, especially floating migrant population, is clearly on the rise.¹

Social scientists are quick to take the opportunity to study different aspects of migration.² Not surprisingly, with few exceptions, most studies of migration focus on migrant men even though women constitute a high proportion of the migrant population.³ According to the 1990 China Population Census, migrant women account for 46% of intraprovincial migrants and 42% of interprovincial migrants in China. The most recent data from the 2000 Chinese census show that 52% of migrants are women.⁴

Although the subject of female migration is relatively neglected for other countries as well, the Chinese case promises a particularly interesting comparison because of its current *hukou* system. Originally designed and implemented in the late 1950s, *hukou* was and continues to be an important institution that is associated with entitlements, such as housing, medical care, and jobs, as well as children's education.⁵ Before 1978, not having *hukou* meant that migrants would not be able to find jobs and housing, let alone benefits such as medical care and pension. Notwithstanding, since China initiated market reforms in the late 1970s, the function of China's *hukou* system has been gradually declining but still plays an important role in the receipt of

certain benefits. For example, in some cities, local urban *hukou* is a prerequisite for specific occupations, which limits the opportunities for migrant career advancement. In addition, without local urban *hukou*, migrants are not permitted to place their children in urban public schools without paying high “endorsement fees.” Thus, the extent to which migrant men and women have access to *hukou* and how it affects the life chances of migrant men and women are the major questions of our research. In addition, recent literature on migration argues that a comprehensive assessment of the consequences of migration requires data that can link individuals at both the place of origin and destination,⁶ and our article proposes such a methodology.

Using data from the Shenzhen Special Economic Zone in China, we contribute to the emerging literature on migration and gender in China. Our research is motivated by three research questions. First, it has been well documented that traditionally women were the ones who always migrated, most often for social reasons or as associational migrants, such as through marriage and joining other family members. With the transition to a market economy in China started in the late 1970s, has this traditional pattern of female migration been challenged and shifted toward more economically motivated migration?

Second, given the continuing advantages associated with having *hukou* at the place of destination, the important research question is whether migrant women have the same chance of getting *hukou* at their place of destination, when controlling for sociodemographic characteristics. This question is important because it indicates who faces the fewest barriers in getting *hukou* among migrants, and thus, who assimilates more easily into the mainstream society.

Our third question is, what are the labor market consequences of migration for female migrants? We approach this research question through several steps. We compare the occupational attainment of female migrants with that of male migrants as well as with that of local women (nonmigrants) in Shenzhen. Finally, going beyond the existing studies of gender and migration in China, we compare the occupational attainment of migrants with nonmigrants at the place of origin by gender.

Market and the Flow and Fortunes of Migrant Women in Shenzhen

In 1979, Shenzhen was designated as a Special Economic Zone (SEZ) along with three other cities on the southeast coast of China (Zhuhai and Shantou in Guangdong Province and Xiamen in Fujian Province).⁷ The Shenzhen Special Economic Zone is located in the southern part of Guangdong Province and adjacent to Hong Kong. The rationale for establishing an SEZ is similar to the rationale for export processing zones found in other developing countries in that it uses foreign capital to stimulate export and national development.⁸ As advanced economies in the world become more and more labor- and capital-intensive, large multinational companies look to China for labor-intensive manufacturing. Areas along China’s “golden coast” and the Pearl

River Delta region have been the front-runners in taking advantage of the opportunities for export-oriented production.⁹ Entrepreneurs from Hong Kong and other countries have quickly opened plants in southern China, in Shenzhen in particular. The increase of foreign investment in Shenzhen is striking. In 1979, when Shenzhen first became an SEZ, only \$15 million of foreign capital was invested; by 1994, foreign investment capital had soared to \$1.7 billion.¹⁰

Along with the increase of foreign investment in Shenzhen, the number of migrants, especially floating migrants (migrants without *hukou*), has increased dramatically since 1979. The percentage of Shenzhen's floating migrant population rose from less than 1% in 1979 to 72% in 1994.¹¹ Several features of Shenzhen's migrant population set it apart from other cities in China. First, Shenzhen is the only city in China where the number of floating migrants is larger than that of local residents. This reflects the nature of Shenzhen's economy in that it has a large number of joint-venture enterprises and a heavy reliance on floating migrants for labor. Shenzhen is also unique because of the large concentration of female migrants between the ages of 15 and 29. This reflects a strong preference among employers for young female workers because they are easy to manage and complain less than men about working conditions.¹²

We chose to study migrants in Shenzhen for two major reasons. First, on substantive ground, Shenzhen is important because it has a vital economic market: a vibrant stock market, booming foreign investment, an unusually large number of joint venture enterprises, and the emergence of a labor market. One could argue that a market should be able to provide a fair playing field where both men and women can compete equally.¹³ Thus, we can deduce that perhaps the market will help to reduce, if not eliminate, gender inequality.¹⁴ The second reason that we chose Shenzhen is that it has a large number of migrants, which allows us to easily test our method of constructing origin and destination data from the 1990 China Population Census.

Gender and Consequences of Migration

The issue of gender and consequences of migration has increasingly attracted attention from scholars in recent years, perhaps due to the fact that women participate heavily in the migration process throughout the world.¹⁵ A central issue is whether or not migration improves the position of women. Although the question initially seems simple, it becomes more complicated once we begin to address it. The current literature covers studies on both internal and international migration. P. R. Pessar's review suggests that immigrant women in the United States "generally gain greater personal autonomy and independence, while men lose ground."¹⁶ In contrast, J. M. Hagan's recent study of immigrants in Houston's Maya community shows that women suffer as a result of unequal access to "weak ties."¹⁷

Although there is an increasingly large body of literature on migration in China, the study of migration and gender is still in its early stages. Using data from Hubei Province, S. Goldstein, Z. Liang, and A. Goldstein examined

the interplay between migration and gender; the general conclusion of the study suggests that migration has enabled women to benefit from economic opportunities and provided them with a degree of freedom that was not possible at their places of origin.¹⁸ In contrast, F. Wang and A. Shen were not so optimistic.¹⁹ Based on the 1995 Survey of Floating Population in Shanghai, they showed that migrant women are at an earnings disadvantage when compared to migrant men and local women, and they characterized the status of migrant women as suffering a “double jeopardy.”

A recent study by C. C. Fan further underscores the gender differences in several aspects.²⁰ Male migrants are more likely to move to urban areas than female migrants and are also more likely to transfer from agricultural jobs to nonagricultural jobs. Moreover, male migrants are more likely to work in prestigious occupations. Using data from the 1990 Chinese census, Y. Huang conducted perhaps the most systematic empirical analysis of gender and migration in China.²¹ Overall, Huang’s findings are in general consistent with Fan’s assessment: that is, that female migrants continue to face disadvantages. While previous investigations provided significant insights into the issue of gender and migration, none of the extant studies systematically took migrant origin into account, without which our understanding of the process of migration by men and women remains incomplete.

Another line of research links recent debate in market transition theory to off-farm employment and gender. V. Nee and R. Matthews implied that the more extensive the shift to market the smaller the gender gap.²² Empirical analyses of data from China provided some support for their argument.²³ Because of opportunities generated by markets, men tend to travel long distances to off-farm employment. The indirect benefit for women is that they then have a greater chance of becoming household heads, which in turn affords them more decision-making power.²⁴

Apart from the various aspects of women’s position before and after migration, an assessment of the consequences of migration by gender is further complicated by data limitations and methodological difficulties.²⁵ Migration surveys are usually conducted at places of destination. This type of data allows researchers to make comparisons among migrant women, men, and local residents on measures of research interests. Migration surveys conducted at places of origin allow us to examine the determinants of migration by gender but miss households in which all members have left. A comprehensive assessment of the consequences of migration requires data that can link individuals at both the places of origin and destination.²⁶ A major advantage of origin-destination linked data sets is that they can be used not only to evaluate migration consequences by gender at the place of destination but also to enable researchers to assess how migrants fare, compared with nonmigrants at their places of origin. Several studies cited in this section also advocate the use of such data.²⁷ Using origin-destination pooled data, Landale and her associates shed significant new insights into the role of assimilation and selective mi-

gration on infant mortality.²⁸ Our study follows a similar approach to identify the impact of migration for migrant men and women in Shenzhen.

Data and Methods

The major data set for this article is the 1% sample of the 1990 China Population Census.²⁹ We extracted data for the Shenzhen SEZ and Guangdong Province. The 1990 Chinese census was the first Chinese census to contain information on migration. Similar to migration questions from censuses in other countries, the 1990 China Population Census asked respondents whether or not they had migrated in the 5 years prior to the date of the census (i.e., during 1985–90). If they migrated, their provinces of origin, as well as their rural or urban status, were identified.

There are several advantages in using the 1990 Chinese census data for migration research. The 1990 Chinese census asked about migration during 1985–90. The late 1980s and early 1990s were a time of accelerating migration, and the 1990 census captures this important period. The 1990 Chinese census also includes information on basic demographic and socioeconomic variables, which allows us to compare permanent migrants, floating migrants, and nonmigrants on these important characteristics. We pay particular attention to the occupational attainment of migrants.

The Chinese census data have some limitations. For example, there is no information on wages, one of the standard ways of measuring gender inequality. Because of this limitation, we focus instead on occupational attainment and realize that different conclusions may be drawn if we were to use wages. Another shortcoming is that it also misses floating migrants whose duration of residence in Shenzhen is less than 1 year.

Our empirical exercise starts by selecting individuals, between the ages of 15 and 59, who are in Shenzhen. The focus on this age group mainly reflects our interest in examining the labor market consequence of migration by gender. Again, we define floating migrants as migrants in Shenzhen who do not have local *hukou*. Permanent migrants are migrants who have local *hukou*.

Aside from providing descriptive statistics on the migrant population in Shenzhen, we will estimate a series of statistical models. Our first statistical model is to predict who gets *hukou* in Shenzhen among migrants, paying particular attention to whether or not migrant women are advantaged or disadvantaged in obtaining *hukou* when compared with migrant men. Since the dependent variable is a dummy variable (1 = a migrant has *hukou*, 0 otherwise), we will employ a standard logistic regression technique.

We have three sets of statistical models to estimate gender differences in occupational attainment. We collapse the detailed census occupational classifications into three large categories: (1) professional and managerial; (2) sales and service; and (3) agricultural work, manufacturing, and transportation.³⁰ Because we have three categories for dependent variables, we will estimate mul-

tinomial logit models. The first model of occupational attainment is to compare occupational attainment of migrants with that of local residents in Shenzhen. We focus on the extent to which gender matters in terms of obtaining good occupations. The second model compares occupational attainment of migrants who are from other parts of Guangdong with corresponding nonmigrants in Guangdong (not including local residents in Shenzhen). Results from the latter model will yield valuable insights into the extent to which male and female migrants benefit equally from the migration process through occupational attainment.

For the second model, we need to construct a separate data set. Because we have data for both Shenzhen and Guangdong Province as a whole, we are able to conduct some innovative comparisons of migration consequences by gender. The idea is that not only can we compare migrant women with migrant men at their place of destination, but also we can compare migrant women with nonmigrant women from places of origin within Guangdong Province. This analysis will involve first selecting migrants in Shenzhen who are from other parts of Guangdong Province. We will then construct another data set that contains individuals who reside in Guangdong (not including Shenzhen) and who have not reported any migration during the period of 1985–90. For this exercise, we eliminated migrants from other provinces who were residing in Guangdong Province (excluding Shenzhen) in 1990. We merged these two data sets to make the origin-destination linked data for an estimation of a model of occupational attainment.

For all statistical models, we include other independent variables: education, age, rural/urban status, Guangdong origin, and marital status. We expect individuals from rural areas continue to suffer disadvantages when they move to Shenzhen. Therefore, their probability of obtaining *hukou* or obtaining prestigious occupations is lower than that of individuals who are from urban areas because rural people are located at the lower level of the rural-urban hierarchy. We also expect that individuals who are from other parts of Guangdong Province enjoy advantages in getting Shenzhen *hukou* and occupational attainment. Although the official policy of preference for local Guangdong people is only in the area of employment, in reality, individuals from Guangdong may enjoy advantages in both getting Shenzhen *hukou* and obtaining prestigious occupations. For example, migrants from other parts of Guangdong speak Cantonese, and most of the joint-venture companies are owned or partially owned by people from Hong Kong where Cantonese is spoken. This language homogeneity may give Guangdong-origin people living in Shenzhen some leverage in getting ahead.

Results

Statistical Description of Migrants in Shenzhen

Table 1 compares basic sociodemographic characteristics across categories of floating migrants, permanent migrants, and local Shenzhen residents. It is evident that in Shenzhen floating migrants overwhelmingly dominate the mi-

TABLE 1
 SOCIODEMOGRAPHIC CHARACTERISTICS BY MIGRATION STATUS AND GENDER,
 SHENZHEN, 1990

	PERMANENT MIGRANTS		FLOATING MIGRANTS		LOCAL RESIDENT	
	Male	Female	Male	Female	Male	Female
Age (%):						
15-19	10.91	7.46	10.57	31.32	12.93	12.45
20-29	40.61	43.65	56.98	53.07	35.33	37.55
30-39	31.52	33.70	19.23	9.41	24.82	22.94
40-49	12.12	11.05	8.57	3.28	12.67	11.93
50+	4.85	4.14	4.65	2.92	14.25	15.14
Mean age (years)	30.70	30.90	28.36	23.96	33.00	33.16
Education (%):						
Illiterate and elementary school	.91	5.25	16.28	27.70	16.55	31.13
Junior high school	16.97	26.52	59.88	61.42	35.13	39.12
Senior high school	49.70	41.44	19.05	9.07	32.57	23.00
Technical high school	7.27	12.71	1.60	.72	6.70	3.54
Technical college and university	25.15	14.09	3.18	1.09	9.06	3.21
Original residence (%):						
City	63.94	64.36	15.26	8.53	64.54	52.69
Town	29.09	26.52	11.74	8.60	.33	.00
Rural	6.97	9.12	73.00	82.87	35.13	47.31
Marital status (%):						
Currently married	62.12	75.97	43.44	27.00	66.58	71.95
Top three migrant origins (%):						
1. Both = Guangdong	74.85	74.59	71.34	66.18		
2. Permanent migrant: both = Hubei	5.15	4.42				
Floating migrant: both = Guangxi			7.33	11.14		
3. Permanent migrant: male = Guangxi, female = Sichuan	2.73	4.42				
Floating migrant: both = Sichuan			6.13	6.18		
Other province origin	17.27	16.57	15.20	16.51		
Interprovincial migration (%)	25.20	25.40	28.66	33.82		
Reason for migration (%):						
Job transfer	62.42	60.22	10.61	2.22		
Job assignment	5.15	3.87	.06	.03		
Business or factory work	16.06	10.22	87.78	87.36		
School or training	1.21	.55	.10	.13		
Join relatives or friends	.61	.83	.44	2.02		
Retirement	.00	.83	.20	.34		
Dependents of migrants	12.12	13.54	.14	1.96		
Marriage	.00	4.42	.02	.23		
Others	2.42	5.52	.64	5.71		
Number of cases	330	362	4,993	3,870	1,523	1,526

grant population. The proportions of floating migrants are 91% and 94% for migrant men and migrant women, respectively. Migrant women are less educated than their male counterparts. This is true for both permanent and floating migrants. Migrants in Shenzhen predominantly come from counties or cities in Guangdong Province. Among interprovincial floating migrants, Guangxi, the neighboring province, topped the list in sending migrants to Shenzhen. Somewhat surprisingly, the proportion of interprovincial migrants among female migrants is slightly higher than for male migrants. In fact, this is consistent with Fan's contention that it is questionable that women migrate shorter distances in migration.³¹

Another important finding is that women migrants came to Shenzhen primarily for economic reasons. For example, among floating migrant women, nearly 90% reported seeking business or factory work as their reason for migration. We note also that contrary to findings for China as a whole,³² the proportion of those reporting marriage as their reason for migration is negligible, for both floating and permanent migrant women in Shenzhen. Other studies suggest that the urban marriage market is, by and large, closed to rural migrants.³³

Gender differences exist within floating migrant and permanent migrant groups. Male and female permanent migrants share an almost identical distribution on almost all variables, with the exception of marital status: 76% of permanent migrant women are currently married, as compared to 62% of permanent migrant men. In contrast, a higher proportion of floating migrant men reported "currently married" compared to floating migrant women; this reflects the much younger age distribution of floating migrant women. Floating migrant women (83%) are more likely to come from rural areas than male migrants (73%). Female floating migrants have a much younger age distribution than that of male floating migrants. Nearly 85% of them are in the age group of 15–29. The high concentration in the younger age group also explains the lower proportion of female floating migrants who are currently married.

Who Gets Shenzhen Hukou?

Shenzhen is a unique city in several ways. It is the only large city in China where the migrant population is much larger than the local resident population (see table 1). Despite the large size of the migrant population, Shenzhen has been reluctant to issue *hukou* to its migrant population, resulting in a large floating migrant population. It is reported that the quota for Shenzhen *hukou* for 1991 was only 2,200.³⁴ The central variable of our concern is gender. Do migrant women have equal chances of getting *hukou* when compared with migrant men?

To examine who gets *hukou* among migrants, we selected all migrants in Shenzhen and estimated a logistic regression model predicting the probability of obtaining Shenzhen *hukou*. Ideally, we want to separate individuals who are illiterate from those who have some level of education. As table 1 shows, most male migrants have at least some elementary school education

TABLE 2
LOGISTIC REGRESSION MODEL PREDICTING *HUKOU* STATUS FOR MIGRANTS IN SHENZHEN

VARIABLE NAME	MODEL I		MODEL II	
	Coefficient	Standard Error	Coefficient	Standard Error
Female	1.34	.71	.46	.73
Age:				
15–19	–.65	.48	–.55	.48
20–29	.45	.29	.38	.29
30–39	.85**	.28	.82**	.28
40–49	.66*	.30	.65*	.30
Education:				
Junior high school	1.44*	.61	1.39*	.61
Senior high school	3.03**	.60	2.97**	.59
Technical high school	3.12**	.65	3.12**	.64
Technical college or above	4.01**	.61	4.03**	.61
Education × gender:				
Junior high school × female	.02	.74	.20	.74
Senior high school × female	–.46	.72	–.28	.73
Technical high school × female	.81	.81	.92	.81
Technical college or above × female	–.17	.76	–.82	.76
Urban origin	3.11**	.18	3.06**	.18
Guangdong origin	1.60**	.14	1.61**	.14
Currently married	.96**	.14	.48**	.17
Currently married × female			1.06**	.24
Intercept	–9.54**	.67	–9.08**	.67
Number of cases	8,990		8,990	
χ^2	1,990.52		2,010.39	

NOTE.—For the age variables, 50+ is the reference group; for the education variables, the reference group is illiterate and elementary school.

* $P < .05$.

** $P < .01$.

(less than 1% of migrant men are illiterate). We have combined illiterate with elementary school education because otherwise statistical estimations would be impossible. We know education is important in getting Shenzhen *hukou*,³⁵ but the extent to which it differs by gender is a question that interests us. Thus, we include several interaction terms between education and gender. We control for marital status and age. The results are presented in model 1 of table 2. Education is clearly important in obtaining *hukou* in Shenzhen. The higher a migrant's level of education, the more likely he or she is to obtain *hukou*. The coefficients are particularly sizable for migrants who have a technical high school level of education, and for technical college and above. Consistent with our expectations, migrants from Guangdong Province are more likely to have *hukou*.

Somewhat surprisingly, migrant men are less likely than migrant women to have *hukou*. However, the result is not statistically significant. It is also

interesting that there is no detectable difference between male and female migrants in the effect of education on having Shenzhen *hukou* (see the interaction terms between education and gender). None of the interaction terms are statistically significant. To further explore gender differences in obtaining Shenzhen *hukou*, we conducted cross-tabulations of marital status by gender and *hukou* status. The results (not shown here) indicated that female married migrants were more than twice as likely as male migrants to obtain *hukou*, 8.6% versus 3.9% for females and males. Based on this, we estimated model 2, which contains the interaction term between marital status and gender. As we expected, married female migrants were more likely to obtain *hukou* than married male migrants. We believe that this is because when applying for *hukou*, all family members (i.e., spouse and children) apply together, such that women tend to benefit more from this process than men. Overall, we did not find systematic evidence that women are being discriminated against in obtaining *hukou* status in Shenzhen.

Occupational Attainment: The First Comparison

In the next few tables, we carefully scrutinize patterns of occupational attainment for migrants by gender. Before we introduce results from the regression models, let us examine the basic occupational distribution for migrants by gender. We reclassified detailed census occupations into seven major occupational categories. Permanent migrants, both men and women, are more likely to be concentrated in white-collar occupations (not shown).³⁶ The gender difference among permanent migrants is even more striking: over half of the permanent migrant women are employed in professional and technical occupations. In contrast, only less than 20% of permanent migrant men are in professional and technical occupations. We use the term “permanent migrant women advantage” to refer to this phenomenon; this advantage in occupational attainment is somewhat surprising given our early results showing that female permanent migrants are not better educated than male permanent migrants. In fact, compared with permanent migrant men, a higher proportion of permanent migrant women were in the low-education categories (e.g., illiterate, elementary school, and junior high school).

Nevertheless, great care must be taken when interpreting these results, as the actual jobs held by permanent migrant women are not that prestigious. Among the permanent migrant women who reported professional and technical occupations, about 65% were in accounting. As we discussed earlier, a majority of Shenzhen’s joint venture enterprises hire migrant women. It is very possible that most of these permanent migrant women work in these joint venture firms as accountants. We note that accountants are regarded as working in professional occupations, and it is comforting to observe that migrant women are engaged in this important occupation in a market economy. At the same time, as A. Walder noted, unlike true elite occupations such as company executives and managerial staff, professions such as accounting usually have little authority and few subordinates.³⁷ The fact that more than 15% of permanent

migrant men were managers or administrators (as compared to less than 3% for permanent migrant women) suggests that permanent migrant men still hold more powerful jobs than women. Among floating migrants, however, no significant difference exists in occupational distribution between male and female migrants, except for the fact that floating migrant men still have an advantage in managerial and administrative positions. The largest concentration of floating migrants—over 65%—is in manufacturing and transportation for both male and female floating migrants.

To estimate a model of occupational attainment, we rearranged the seven occupational categories into a total of three categories. We use the sample of migrants and local residents in Shenzhen. Again, we are forced to collapse agriculture, manufacturing, and transportation into a single category because no single male permanent migrant was employed in agriculture in 1990. For ease of interpretation, we also collapsed the following occupations: professional, technical, and managerial occupations into one category “professional”; and sales and service workers into “sales and service.” We estimated a multinomial logit model with a dependent variable that has three categories: (1) professional and managerial; (2) sales and service workers; and (3) agriculture, manufacturing, transportation, and other manual workers. We use the last category as the reference category.

The first important finding from table 3 is that permanent migrants have a higher probability of working in sales and service jobs compared to local residents. A consistent finding throughout the world is that migrants are not faring as well as local residents. However, in Shenzhen, the story is somewhat different. We argue that two factors contribute to this “anomaly.” One is that Shenzhen is a relatively young city that is composed of mostly migrants. Even among Shenzhen local residents, some of them may simply be migrants themselves, who came a few years earlier.³⁸ Thus, it is likely that we are actually comparing the occupational attainment of a recent cohort of migrants with earlier arrivals. Another possibility is that in the late 1980s, as Shenzhen’s economy further prospered, it attracted a highly selective group of individuals.

Not surprisingly, one’s level of education is very important in obtaining prestigious jobs. Migrants from urban areas still enjoy an advantage in procuring prestigious professional and managerial jobs, as well as positions in sales and service. Our major research question—gender effects in occupational attainment among migrants—present mixed findings. On the one hand, permanent migrant women are more likely to be in professional and managerial positions than their male counterparts, and the results are statistically significant (see the interaction term between permanent migration and gender). In contrast, for floating migrants (who dominate the current migrant flow), the pattern is just the opposite: migrant men are doing better than migrant women. Returns to education on occupation differ by gender. With the same level of education, women have a higher probability of obtaining professional and managerial jobs than men (for both migrants and local residents). Women seem to benefit the most from an education at the technical high school level

TABLE 3
 COEFFICIENTS FROM MULTINOMIAL LOGIT MODEL OF OCCUPATIONAL ATTAINMENT OF
 MIGRANTS COMPARED TO NONMIGRANTS IN SHENZHEN

VARIABLE NAME	PROFESSIONAL AND MANAGERIAL		SALES AND SERVICE	
	Coefficient	Standard Error	Coefficient	Standard Error
Female	-.39	.32	.62**	.17
Permanent migrant	-.10	.19	.49**	.19
Permanent migrant × female	1.10**	.31	.40	.31
Floating migrant	-1.61**	.12	-.16	.10
Floating migrant × female	-.44**	.17	-.61**	.14
Age:				
15-19	-2.37**	.25	-.99**	.18
20-29	-2.23**	.17	-.66**	.15
30-39	-1.78**	.17	-.38**	.15
40-49	-1.10**	.18	-.37*	.16
Education:				
Junior high school	1.27**	.19	.13	.11
Senior high school	2.33**	.20	.58**	.13
Technical high school	3.85**	.27	1.10**	.27
Technical college or above	4.99**	.27	1.61**	.25
Education × gender:				
Junior high school × female	.82*	.34	.11	.16
Senior high school × female	1.74**	.34	.44*	.19
Technical high school × female	1.89**	.55	.23	.56
Technical college or above × female	1.46**	.57	-.23	.62
Urban residence	.68**	.10	.76**	.07
Guangdong origin	-.02	.11	.72**	.08
Currently married	.56**	.10	.48**	.08
Intercept	-1.37**	.23	-2.29**	.19
χ^2	5,152.97			
Number of cases	11,183			

NOTE.—For the age variables, 50+ is the reference group; for the education variables, the reference group is illiterate and elementary school.

* $P < .05$.

** $P < .01$.

(see the largest coefficient among education and gender interactions). This underscores the critical role education plays in reducing gender inequality in occupational attainment.³⁹

Once we control basic sociodemographic variables as well as unequal returns to education, women in Shenzhen are still more likely to be employed in sales and service sector positions, and the coefficient for professional and managerial occupations is not significant. To understand whether gender inequality has worsened in Shenzhen than at migrant's place of origin, we also estimated a similar model using nonmigrants in Guangdong Province (not including Shenzhen). The results (not shown here) reveal that even when we

control all the variables as we did in table 3, the gender variable is still statistically significant. Overall, our results yield a clear message, to the extent that discrimination against women persists; it is much less so in Shenzhen than in the place of migrant origin. A similar conclusion was reached by Matthews and Nee, who argued that migration yielded positive consequences for gender equality, such as more decision-making power by women.⁴⁰

Occupational Attainment: The Second Comparison

Before we present results from the model of occupational attainment using origin-destination linked data, we first compare the labor force participation rates of migrants from Guangdong with local Shenzhen residents, shown in table 4. The first major finding in table 4 is that the labor force participation rates for migrants are much higher than that of local Shenzhen residents. Migrants come to seek economic opportunities and are more likely to be actively employed than local residents. The second finding is that male migrants have a higher labor force participation rate than that of female migrants. The gender difference in occupational attainment persists in that nearly 47% of female permanent migrants are in professional and technical occupations, compared to 17% of male permanent migrants.

For male and female migrants, a pattern of transfer from agricultural work to manufacturing and transportation sector occupations is clearly evident. For example, 65% of local male Guangdong residents are engaged in agricultural work, while 63% of male floating migrants work in manufacturing and transportation. The same can be said about female floating migrants. The general conclusion that can be drawn from this comparison is that temporary migration really represents the transformation process from agricultural to nonagricultural work.

Next, we estimated a multinomial logit model of occupational attainment. The objective here is to compare migrants from Guangdong (who were residing in Shenzhen at the time of the census) with nonmigrants of Guangdong Province (excluding Shenzhen). Since we selected only Shenzhen migrants who are from Guangdong Province, the sample sizes for both temporary and permanent migrants are reduced.⁴¹ To make the statistical models estimable, we decided to eliminate permanent migrants from this part of our analysis. This adjustment is unlikely to alter our major conclusions, since floating migrants constitute the overwhelming majority of the migrant population. We do this for men and women separately. We enter interaction terms between education and migrant status because we expect that at each level of education, migrants will receive less returns compared to nonmigrants at their places of origin. Table 5 reports the results from the multinomial logit model of occupational attainment for migrant men and nonmigrant men in the place of Guangdong origin. Similarly, table 6 reports results for women. For comparison purposes, we discuss results from tables 5 and 6 together. Two major findings emerge from our analysis. Primarily, floating migrant men are more likely to be in professional and managerial jobs than nonmigrant men at their

TABLE 4

OCCUPATIONAL DISTRIBUTION BY GENDER AND MIGRATION STATUS

	MALE				FEMALE			
	Guangdong Resident	Shenzhen Resident	Floating Migrant	Permanent Migrant	Guangdong Resident	Shenzhen Resident	Floating Migrant	Permanent Migrant
Occupational classification (%):								
Professional and technical workers	4.87	15.62	1.64	17.45	4.03	24.13	1.99	46.55
Managers and administrators	2.27	10.10	1.39	13.21	.37	1.53	.05	2.30
Office workers	1.96	11.34	1.14	9.90	.86	10.26	.90	14.28
Sales workers	4.47	15.07	10.15	23.58	3.11	15.28	4.43	12.44
Service workers	2.01	3.57	5.38	2.35	2.61	11.03	7.73	12.90
Agricultural workers	65.14	10.33	17.36	.00	73.36	15.61	13.10	1.38
Manufacturing and transportation	19.28	33.95	62.94	33.48	15.66	22.16	71.76	10.14
Number of working population	160,318	1,287	3,509	212	134,722	916	2,212	217
Labor force participation rate (%)	85.84	84.50	98.51	85.82	77.95	60.03	86.38	80.37
Total number of cases	186,764	1,523	3,562	247	172,831	1,526	2,561	270

NOTE.—Guangdong resident = person resides in Guangdong (but excluding Shenzhen) and has Guangdong *hukou*. Shenzhen resident = person resides in Shenzhen and has Shenzhen *hukou*. Floating migrant = person originates from Guangdong and is a floating migrant in Shenzhen. Permanent migrant = person originates from Guangdong and is a permanent migrant in Shenzhen.

TABLE 5
 COEFFICIENTS FROM MULTINOMIAL LOGIT MODEL OF OCCUPATIONAL ATTAINMENT OF
 SHENZHEN FLOATING MIGRANTS FROM GUANGDONG COMPARED WITH GUANGDONG LOCAL
 RESIDENTS (Males)

VARIABLE NAME	PROFESSIONAL AND MANAGERIAL		SALES AND SERVICE	
	Coefficient	Standard Error	Coefficient	Standard Error
Floating migrant	.66*	.26	1.39**	.12
Age:				
15–19	–2.72**	.10	–.56**	.06
20–29	–1.86**	.03	–.22**	.04
30–39	–1.80**	.03	–.29**	.03
40–49	–.56**	.03	–.14**	.04
Education:				
Junior high school	1.62**	.03	.54**	.03
Senior high school or above	3.48**	.03	.85**	.03
Education × migrant status:				
Junior high school × floating migrant	–.76**	.28	–.67**	.13
Senior high school or above × floating migrant	–1.17**	.28	–.62**	.15
Urban residence	1.22**	.02	1.46**	.02
Currently married	.46**	.03	.26**	.03
Intercept	–3.38**	.04	–3.21**	.04
χ^2	33,245.33			
Number of cases	164,373			

NOTE.—For the age variables, 50+ is the reference group; for the education variables, the reference group is illiterate and elementary school.

* $P < .05$.

** $P < .01$.

places of origin, when controlling for sociodemographic variables and differential returns to education by migration status. However, no similar results emerge for women; that is, migration does not improve a woman's chance of obtaining professional and managerial jobs. Therefore, if we use working in professional and managerial occupations as an indication of occupational mobility, floating migrant men benefit more from migration than floating migrant women.

The second important finding is that the impact of marital status differs by gender. For men, being married increases the likelihood of obtaining professional and managerial jobs; for women, however, marriage is a constraint that decreases the likelihood of obtaining professional or managerial jobs. It should be noted that the above two findings cannot be revealed if we only look at migrants at the place of destination.

Conclusion and Discussion

China's transition to a market-oriented economy since the late 1970s has been accompanied by a major increase in migration, a magnitude rarely seen in

TABLE 6
 COEFFICIENTS FROM MULTINOMIAL LOGIT MODEL OF OCCUPATIONAL ATTAINMENT OF
 SHENZHEN FLOATING MIGRANTS FROM GUANGDONG COMPARED WITH GUANGDONG LOCAL
 RESIDENTS (Females)

VARIABLE NAME	PROFESSIONAL AND MANAGERIAL		SALES AND SERVICE	
	Coefficient	Standard Error	Coefficient	Standard Error
Floating migrant	-.62	1.00	1.74**	.13
Age:				
15-19	-2.28**	.10	-.48**	.07
20-29	-1.68**	.07	-.17**	.05
30-39	-1.49**	.07	-.05	.05
40-49	-.25**	.07	.33**	.05
Education:				
Junior high school	2.48**	.06	.92**	.03
Senior high school or above	4.66**	.06	1.31**	.04
Education × migrant status:				
Junior high school × floating migrant	.13	1.02	-1.28**	.16
Senior high school or above × floating migrant	-.15	1.02	-1.69**	.24
Urban residence	1.87**	.03	2.37**	.03
Currently married	-.27**	.04	-.03	.04
Intercept	-4.20**	.07	-3.69**	.06
χ^2	35,455.48			
Number of cases	136,969			

NOTE.—For the age variables, 50+ is the reference group; for the education variables, the reference group is illiterate and elementary school.

* $P < .05$.

** $P < .01$.

the last 50-year history of the People's Republic. In this article, we explored the consequences of migration for women, using the Shenzhen Special Economic Zone as a case study. Our study has uncovered several interesting findings, indicating that both changes and continuities are in place.

It is well established that Chinese women have always migrated, not to find jobs, but to migrate to their husbands' homes or to live with family members. This clearly changed in the late 1980s and 1990s in Shenzhen. Eighty percent of migrant women in Shenzhen migrated to do business or factory work. The corresponding percentage for men was 83%. The pattern among floating migrants is even more striking, with 87% of floating migrant women reporting their reason for migration as business or factory work. It seems that the market has changed traditional patterns of female migration. In Shenzhen, at least, both male and female migrants are motivated by economic reasons. Consequently, the percentage of migrant women reporting marriage or joining family members as reasons for migration is almost negligible (less than 4%).

Our findings regarding the consequences of migration for women offer a message of limited optimism. It is an optimistic message because the migration process benefits women in two major aspects. First, permanent migrant women are more likely than permanent migrant men to be engaged in professional jobs; however, bear in mind that professional jobs for women were primarily in accounting, an occupation with no apparent authority or power. A second positive aspect is that, to the extent there is discrimination against women in occupational attainment, it is less so in Shenzhen than at the place of migrant origin. We suggest that this relatively equalized gender relationship in occupational distribution in Shenzhen is due in large part to Shenzhen's economic structure and to the demographic characteristics of its labor force. As we know, the majority of Shenzhen's migrants work in manufacturing occupations, very likely for joint venture companies. Given Shenzhen's large number of female migrants employed in these companies, we speculate that employers are eager to hire female migrants to fill professional and technical jobs. In addition, Shenzhen is a relatively new society and consists mainly of migrants; it is a city that perhaps has the least traditional constraints of gender hierarchies, thus allowing female migrants opportunities to work in relatively prestigious occupations. Having said that, let us quickly add that this "female permanent migrant advantage" is only in comparison with male migrants; and, female migrants (save female permanent migrants) are not doing as well as local residents in Shenzhen.

Although descriptive statistics reveal that migrant women are less educated than migrant men, at each level of education, migrant women receive a higher return on education than migrant men (see table 3). In addition, once a differential return to education is taken into account, the gender variable is no longer statistically significant. This indicates that migrant women's lesser representation in prestigious occupations in Shenzhen is due largely to their low level of education. Thus, one of the ways to reduce gender inequality in occupational attainment is to promote women's education. In addition, given the fact that permanent migrant women are more likely than permanent migrant men to be in professional occupations, easing control on *hukou* is also likely to help migrant women get ahead in Shenzhen.

Given the several pieces of good news we reported regarding migrant women, it may be tempting to suggest migration as a mechanism to reduce gender inequality. To a certain degree, it does help women, but only a small portion of migrant women. In fact, despite the progress made by migrant women in Shenzhen, our sense of optimism should be quite limited because this progress is even overshadowed by the enduring disadvantages suffered by migrant women, as revealed in our study. First, at the place of destination in Shenzhen, floating migrant women are not doing as well as floating migrant men in obtaining professional and managerial jobs. Second, compared to migrants at their places of origin, floating migrant men are more likely to obtain professional and managerial jobs after we control for sociodemographic characteristics and differential returns to education by migration status. How-

ever, this is not the case for floating migrant women. This suggests that, relatively speaking, floating migrant men benefit more from migrating to Shenzhen than floating migrant women. Third, like women throughout the world, migrant women in Shenzhen are much more constrained by family obligations than men, as shown by the model of comparison between floating migrants in Shenzhen and at their places of origin. This disturbing news is even more troubling when we consider that the floating migrant population is the majority of the Shenzhen's migrant population.

Methodologically, we want to stress our innovation in comparing characteristics of migrants both at their places of destination and origin. This approach opens up new avenues of research, not only for the study of gender and the consequences of migration but also for an assessment of migrant outcomes in general, especially for internal migration. It is almost a standard practice for scholars of migration to document migrant women at their place of destination and to compare them either with migrant men or local women. Such studies often suggest a disadvantaged position for female migrants. This focus on destination area often is the result of data limitation because migration surveys are usually conducted at the place of destination. One needs to realize, however, that results based only on surveys at the place of destination can yield incomplete and sometimes oversimplified assessment of migration outcomes. In fact, as we demonstrate in this article, significant insights can be gained by conducting a comparison both at the places of origin and destination. Moreover, the implementation of this procedure is perhaps particularly relevant for developing countries where data collection is usually less than ideal and where data collection budgets do not allow researchers to conduct surveys at places both of origin and destination. To implement the procedure we have advocated in this article, a country needs to have standard population census data. With rather modest modifications, the procedure can be used successfully in studies of migration in large cities in China and around the world, such as Shanghai, Mexico City, or Bombay.

Notes

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1. We define "floating" migrants as migrants who do not have *hukou* at their place of destination and "permanent" migrants as migrants who have *hukou* at their place of destination. It should be noted that our use of the terms "floating migrants" and "permanent migrants" does not necessarily imply that floating migrants stay a shorter time in cities than permanent migrants. In fact, some floating migrants have lived in Shenzhen for a long time.

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Women Workers, Labor Markets, and Production Politics in the South China Economic Miracle," *American Sociological Review* 60 (1995): 378–97; Zai Liang, "The Age of Migration in China," *Population and Development Review* 27 (2001): 499–524; Zhongdong Ma, Kaw Lee Liaw, and Zeng Yi, "Migration in the Urban/Rural Hierarchy of China: Insights from the Microdata of the 1987 National Survey," *Environment and Planning A* 29 (1997): 707–30; Rebecca Matthews and Victor Nee, "Gender Inequality and Economic Growth in Rural China," *Social Science Research* 29 (2000): 606–32; Thomas Scharping and Huaiyang Sun, eds., *Migration in China's Guangdong Province: Major Results of a 1993 Sample Survey on Migrants and Floating Population in Shenzhen and Foshan* (Hamburg: Institute für Asienkunde, 1997); Loraine A. West and Yaohui Zhao, eds., *Rural Labor Flows in China* (Berkeley: University of California, Institute of East Asian Studies, 2000); Quanhe Yang and Fei Guo, "Occupational Attainment of Rural to Urban Temporary Economic Migrants in China, 1985–1990," *International Migration Review* 30 (1996): 771–87; Xiushi Yang, "Interconnections among Gender, Work, and Migration: Evidence from Zhejiang Province," in *Re-Drawing Boundaries: Work, Households, and Gender in China*, ed. Barbara Entwisle and Gail E. Henderson (Berkeley: University of California Press, 2000), pp.197–213.

3. C. Cindy Fan, "Migration and Gender in China," in *China Review 2000*, ed. Chuang-ming Lau and Jianfan Shen (Hong Kong: Chinese University of Hong Kong Press, 2000), pp. 423–54.

4. Population Census Office under State Council and National Bureau of Statistics, *Tabulation on the 2000 Census of the People's Republic of China* (Beijing: China Statistics Press, 2002); we use information of reasons for migration to derive this percentage.

5. Tiejun Cheng and Mark Seldon, "The Origins and Social Consequences of China's *hukou* System," *China Quarterly* 139 (1994): 644–68.

6. Susan G. Singley and Nancy Landale, "Incorporating Origin and Process in Migration-Fertility Framework: The Case of Puerto Rican Women," *Social Forces* 76 (1998): 1437–60.

7. Ezra Vogel, *One Step Ahead in China: Guangdong under Reform* (Cambridge, Mass.: Harvard University Press, 1989).

8. Alejandro Portes and John Walton, *Labor, Capital, and International System* (New York: Academic Press, 1981); Saskia Sassen, *Mobility of Labor and Capital: A Study in International Investment and Labor Flow* (New York: Cambridge University Press, 1988); Yuen-fong Woon, "Circular Mobility in Post-Mao China: Floating Migrants in Kaipin County, Pearl River Delta Region," *International Migration Review* 27 (1994): 578–604.

9. Ching Kwang Lee, "Engendering the Worlds of Labor: Women Workers, Labor Markets, and Production Politics in the South China Economic Miracle," *American Sociological Review* 60 (1995): 378–97; Dali Yang, "Patterns of China's Regional Development Strategy," *China Quarterly* 122 (1990): 230–57; Yuen-fong Woon, "Circular Mobility in Post-Mao China: Floating Migrants in Kaipin County, Pearl River Delta Region," *International Migration Review* 27 (1994): 578–604.

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11. Zai Liang, "Foreign Investment, Economic Growth, and Temporary Migration: The Case of Shenzhen Special Economic Zone, China," *Development and Society* 28, no. 1 (1999): 115–37.

12. Ibid. Ching Kwang Lee, "Engendering the Worlds of Labor: Women Workers, Labor Markets, and Production Politics in the South China Economic Miracle," *American Sociological Review* 60 (1995): 378–97.

13. Yanjie Bian, John R. Logan, and Xiaoling Su, "Wage and Job Inequalities in Working Lives of Men and Women in Tianjin," in Entwisle and Henderson, eds. (n. 2 above), pp. 111–33.

14. Victor Nee and Rebecca Matthews, "Market Transition and Societal Transformation in Reforming State Socialism," *Annual Review of Sociology* 22 (1996): 401–35.

15. It should be noted that there is a literature on migration and gender that deals with gender differences in determinants of migration (see Marcela Cerrutti and Douglas S. Massey, "On the Auspices of Female Migration from Mexico to the United States," *Demography* 38 [2001]: 187–200; Sherri Grasmuck and Patricia R. Pessar, *Between Two Islands: Dominican International Migration* [Berkeley: University of California Press, 1991]; Patricia R. Pessar, "The Role of Gender, Household, and Social Networks in the Migration Process: A Review and Appraisal," in *The Handbook of International Migration: The American Experience*, ed. Charles Hirshman, Philip Kasinitz, and Josh DeWind [New York: Russell Sage Foundation, 1999], pp. 54–70; Nancy E. Riley and Robert Gardner, "Migration Decision: The Role of Gender," in *Internal Migration of Women in Developing Countries: Proceedings of the United Nations Expert Meeting on the Feminization of Internal Migration, Aguascalientes, Mexico, 22–25 October 1991* [New York: United Nations, 1993], pp. 195–206). In addition, there is also a large body of literature on women and development (see Ester Boserup, "Population, the Status of Women, and Rural Development," *Population and Development Review* 15 [1989]: 45–60). Due to the focus of our article, our discussion is limited to issues related to gender and consequences of migration only. Jacqueline Maria Hagan, "Social Networks, Gender, and Immigrant Incorporation," *American Sociological Review* 63 (1998): 55–67; Silvia Pedraza, "Women and Migration: The Social Consequences of Gender," *Annual Review of Sociology* 17 (1991): 303–25; Riley and Gardner; Marta Tienda and Karen Booth, "Gender, Migration, and Social Change," *International Sociology* 61 (1991): 51–72.

16. Pessar, p. 63.

17. Hagan.

18. Sidney Goldstein, Zai Liang, and Alice Goldstein, "Migration, Gender, and Labor Force in Hubei Province, 1985–1990," in Entwisle and Henderson, eds., pp. 214–30.

19. Feng Wang and Anan Shen, "Double Jeopardy? Female Rural Migrant Laborers in Urban China, the Case of Shanghai," paper presented at the Seminar on Women in the Labour Market in Changing Economies: Demographic Issues, Rome, September 22–24, 1999. Other studies also identified different occupations and sectors in which female and male migrants work (see Kenneth Roberts, "Female Labor Migrants to Shanghai: Temporary 'Floaters' or Potential 'Settlers'?" *International Migration Review* 36 [2002]: 492–519).

20. Fan, "Migration and Gender in China" (n. 3 above).

21. Youqing Huang, "Gender, hukou, and Occupational Attainment of Female Migrants in China (1985–1990)," *Environment and Planning A* 33 (2001): 257–79.

22. Nee and Matthews (n. 14 above).

23. Matthews and Nee (n. 2 above).

24. Delia Davin, *Internal Migration in Contemporary China* (New York: St. Martin's Press, 1999).

25. Richard E. Bilsborrow and the United Nations Secretariat, "Internal Female Migration and Development: An Overview," in *Internal Migration of Women in Developing Countries* (n. 15 above), pp. 1–20.

26. Singley and Landale (n. 6 above).

27. Nancy Landale, R. S. Oropesa, and Bridget K. Gorman, "Migration and Infant Death: Assimilation or Selective Migration among Puerto Ricans," *American Sociological Review* 65 (2000): 888–909; Tienda and Booth (n. 15 above); Bilsborrow and United Nations Secretariat.

28. Landale, Oropesa, and Gorman.

29. Population Census Office under State Council and National Bureau of Sta-

tistics, *10 Percent Sampling Tabulation on the 1990 Population Census of the People Republic of China (Computer Tabulation)* (Beijing: China State Statistical Publishing House, 1991).

30. Initially, we intended to use seven occupational categories for our analysis of occupational attainment. However, due to the relatively small numbers of cases in the permanent migrant population for both men and women, statistical models cannot be successfully estimated. Therefore, we decided to further collapse occupations into three main groups.

31. Fan, "Migration and Gender in China" (n. 3 above).

32. Ibid.

33. C. Cindy Fan, "Marriage and Migration in Transitional China: A Field Study of Gaozhou, Western Guangdong," *Environment and Planning* 34 (2002): 619–38.

34. Bawei Liao, Wang Yujian, Song Enrong, and Liu Peiqong, *China's Economic Reform and Economic Development in Zhujiang River Delta Region* (Hong Kong: Nanyang Commercial Bank, 1992), p. 79.

35. Liang, "Foreign Investment" (n. 11 above).

36. Detailed results are available from the authors upon request.

37. Andrew Walder, "Career Mobility and the Communist Political Order," *American Sociological Review* 60 (1994): 309–28.

38. Since the time dimension of migration in the 1990 China census covers only the period of 1985–90, individuals who came to Shenzhen in the early 1980s and the late 1970s with local *hukou* will be counted as local residents.

39. Other scholars such as Bian, Logan, and Su (n. 13 above), and Yu Xie and Emily Hannum, "Regional Variation on Earnings Inequality in Urban China," *American Journal of Sociology* 101 (1996): 950–92, found that women receive a higher return to education on earnings. They attribute this largely to the significantly low earnings of women at low levels of education. However, it is not the case for occupational attainment in Shenzhen.

40. Matthews and Nee (n. 2 above).

41. This reduction in sample size creates some difficulties in statistical estimation. For example, only 212 permanent migrant men are from Guangdong Province. To make the statistical models estimable, we eliminated permanent migrants and we also collapsed education classifications into three categories: (1) illiterate and elementary school, (2) junior high school, and (3) senior high school and above.

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