

(Please do not quote or cite)

**Preliminary Findings from a Study on the Impact of Migration on the Status of Women
and Reproductive Health in Rural China**

Rachel Connelly, Bowdoin College
Kenneth Roberts, Southwestern University
Zhenming Xie, China Population Information Research Center
Zhenzhen Zheng, Institute of Population Research at Peking University

I: Introduction

The objective of our larger study is to examine the impact of migration on the two groups of women in rural China most directly affected by labor migration, returning migrant women and the wives of the male migrants. We hypothesize that women in the first group bring home new concepts, norms and skills and financial resources acquired in the urban area. Does what they have experienced, earned and learned in the city affect their future reproductive health, including their general level of health, their fertility, their educational aspirations for their children, their health-seeking for themselves and their families, their sexual behavior and expectations, their status in the family, and their gender role expectations? For the second group, those whose husbands have been or are currently migrants, does the absence of their husbands change these women's reproductive health in any significant ways? We wonder if changes in work patterns and gender roles that accompany the separation of the couple will lead to changes in fertility, gender role expectations and their status in the family, among other factors, either positively or negatively. A large number of variables of interest were collected for each group of women, including contraceptive knowledge, current contraceptive behavior, completed fertility levels, the spacing between marriage and first birth and between first and second births, morbidity, frequency of seeking medical help, educational outcomes of and aspirations for their children (boys and girls separately), the women's own employment situation, the division of labor within the household and measures of women's status in the household.

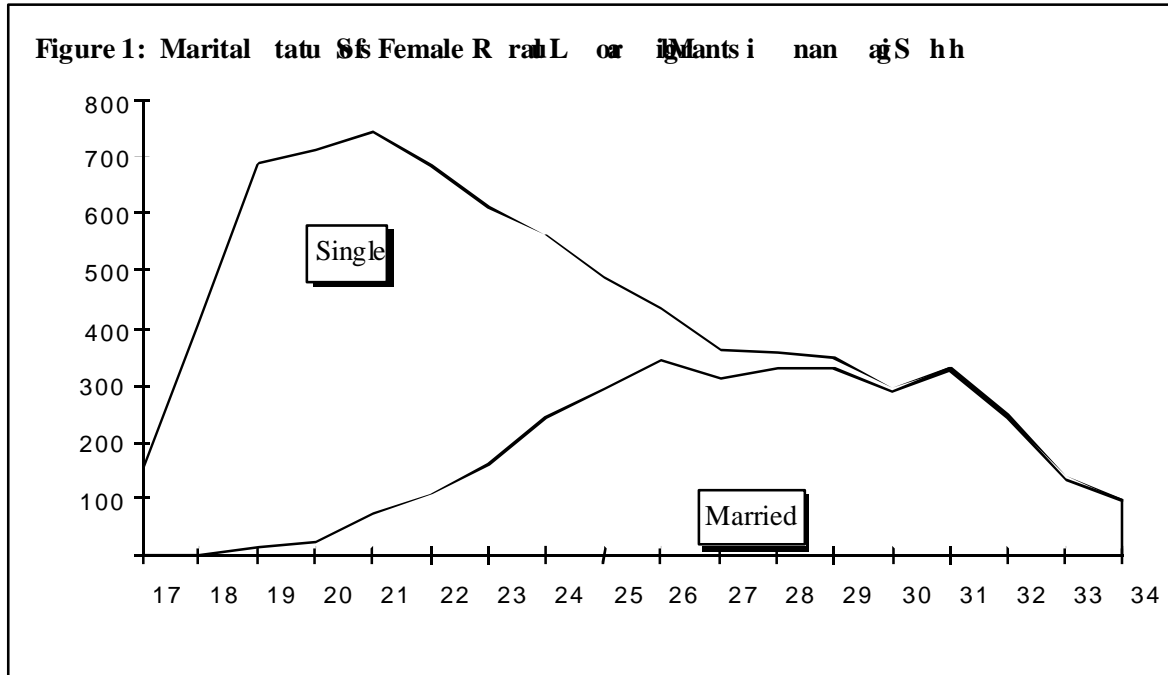
This paper will highlight some of our finding from our larger study on four major topics: fertility and fertility proxies, aspects of reproductive health, indicators of women's status in their families, and indicators of family income. The data used was collected for this

purpose in the fall of 2000 from rural women aged 20-40 in four rural counties of China, two in each of the provinces of Sichuan and Anhui. Of the 3186 respondents, one third are returned migrants and more than half have husbands who have migrated. Using multivariate analysis, we find that having ever migrated usually had a significant effect on a woman's behavior, while being married to a man who has migrated had more limited effects.

II: Background and Previous Research

One of the most significant effects of economic reform in China, one that is integral to the process of reform itself, has been massive labor migration from rural areas. By official household statistics, the "floating population" of China, defined as all those persons away from their place of household registration, was 31 million in 1990 and 84 million in 1995; unofficially it was estimated in a 1992 national survey to be 95 million (Cai, 1997). The direction of migration has been mainly from the rural areas to urban areas, and from the less-developed middle to the more-developed eastern regions. Most migrants return to their villages regularly or after a few years (De, 1996).

On average, more than a third of the floating population are women. The proportion of women varies substantially by destination location: while women were estimated to be 34% of the 1993 floating population in Shanghai (Wang, 1995) and the 1997 floating population of Beijing (Beijing, 1998), they represented 75% of the floating population in Pearl River Delta in 1994 (Sun, 1996). Over 70% of them migrated for economic reasons, and most were in paid jobs (Ministry of Public Security, 1998). Of the female migrants to Beijing in 1997, 72% were employed while only 21% were following their spouses. This is very different from situations before 1990, when 40% of rural women moved because of marriage (Gu and Jian, 1994). The age structure of the floating population is very young, as shown in Figure 1 below.



Source: Roberts, Kenneth D. "Female Labor Migrants to Shanghai: Temporary 'Floaters' or Settlers?," *International Migration Review*, forthcoming. Based upon data from the 1993 2% survey of the floating population of Shanghai that included 54,372 migrants, "rural labor migrants" are defined as those who had an agricultural household registration (*hukou*) and whose previous employment was in agriculture.

Most do not stay in the city for long. Only 9% of the female migrants to Shanghai had been there for longer than three years, 19% one to three years, 27% six months to a year, and the rest less than six months (Roberts, forthcoming). Of course, this is not proof of a pattern of return migration: the same pattern could be observed if there were had been a recent surge in migration. But successive surveys of the floating population in Shanghai show stability in the relative proportions of women in each "duration" cohort, which implies that their duration of stay has not changed substantially in recent years (Roberts, forthcoming). Some of these young women go back home and get married, while others may migrate with their husbands and then go home again when they have children or when their children become school-aged. Given the constraints urban governments place upon the floating population in terms of access to housing, health care, and education for their children, most rural migrants do return home, sooner or later.

Chinese national leaders have expressed concern that migrants will contribute to an increase in fertility, and frequently articulate that a major challenge to family planning is that of controlling the fertility of the migrant population. The fear is that women are leaving the

place of their household registration, where their fertility is closely monitored, to have more children than are allowed – that they are “excess birth guerrillas” (*chao sheng youdidui*). The Ministry of Civil Affairs, commenting upon an estimate of 100 million floaters, said “if effective steps are not taken, illegitimate births and early marriage and childbearing among the floating population ... will severely hit the basic state family planning policy and the continued healthy development of the economy” (*Reuters News Service*, December 23, 1996). Li Peng, in his 1997 government work report to the National People’s Congress, said for the third year in a row that “we should focus on carrying out family planning and providing relevant services for people in rural areas and migrant workers” (*Xinhua*, March 20, 1997), and in 1998 reiterated “the rural population and the floating population are still key targets of family planning work” (*Xinhua*, March 18, 1998). We believe that their emphasis upon migration as a factor increasing fertility is not only incorrect in its causality, but incomplete in its focus, because it ignores the potential for migration to lower the age of marriage and childbearing.

There is also concern about other aspects of the migrant women’s reproductive health. Zheng et al. (1999) find that young women migrants in five major Chinese cities are more apt to be sexually active before marriage than their rural counterparts, but often lack even basic knowledge about reproductive physiology and contraceptive methods. The result is higher incidences of unmarried pregnancy, induced abortion, and STDs. In addition, rural migrants in urban areas often lack access to health care, for they do not possess the proper *hukou* and are not employed by one of the larger work-units. On the other hand, migrants may be easier to reach with reproductive health information when in the cities, and may transmit that information back to rural areas.

It is difficult to obtain an estimate of the number of returned female migrants who are currently in rural China because rural surveys determine current but not former migration status. But since the migration pattern described above has been ongoing since the mid-1980s, and especially the early 1990s, and since most female labor migrants return in their twenties, there will be a large number of women returnees in the rural areas. The next part of this paper is concerned with how these returning women migrants fare upon their return to their village.

Previous Research on the Effect of Migration on Returned Migrants: Most studies find that rural migrant women experience more autonomy and sexual freedom while they are in the urban areas. Preliminary findings from a WHO-funded, multi-city qualitative study of young female migrant's reproductive health status and needs while in the urban areas (Zheng et al. 1999) show that while in the cities, the young women from rural areas are greatly influenced by their migration experience and urban lifestyle. They tend to get married later: some talked about how classmates at home already had children, while they are still single. They enjoy their work in the city, not only because they can earn more money, but also because they can learn more out life outside their village. This information is communicated from the urban migrants to their sisters, cousins, and friends back home. Although many female migrants only have elementary school education, they say that younger girls still in their home villages are now trying to complete their middle school education so that these younger girls will be able to find a good job in the city. Most of the young women interviewed said that they would eventually go back home, since they do not consider the city their real home. But they did not think that they would ever live the same life as their fellow villagers, who usually get married when they reach 20 years old, have a child soon after marriage, and stay in the village for their entire lives.

But whether these experiences and aspirations do in fact carry over into their marriage when they return to the rural areas remains an open question. Davin (1996) believes that when they return, these young female migrants will “take back with them to the villages notions of love, more compassionate marriage, home comforts and luxuries, smaller families and so on (and are) likely to be more receptive to and more knowledgeable about birth control.” Judd (1994: 161) challenges this view, saying that “this activity on the part of young women is unambiguously temporary and will cease as each marries. It consequently poses no noticeable challenge to existing patterns of gender division of labor (and) does not imply any structural change.” These differences in opinion between noted scholars of Chinese women pose important questions for empirical research, questions to which our research can contribute.

Previous Research on Rural Wives with Migrating Husbands: Men participate in the circular migration patterns described above in even larger numbers than women. While it is uncommon for married women to migrate without their husbands, it is not at all uncommon

for married men to migrate without their wives. Analysis of the floating population of Shanghai resulted in an estimate that 65% of rural labor migrants left their wives at home, which is in line with estimates from other sources (Roberts, forthcoming).

Little is known about the effect of a husband's absence on rural Chinese women's reproductive health. In terms of fertility, the effect of the husband's physical absence on fertility does not appear to be very important. Zhang (1997: 27) found that there was no disruption effect in Hebei province from the temporary outmigration of men: they returned home at least once a year and, as some women noted, "it is not the man who gives birth to children." However, fertility depends on much more than frequency of intercourse. Entwisle and Chen (1998) found that an additional birth caused women to reduce the time they worked in the fields. Given the critical role that women play in Chinese agriculture while men are migrating (Christiansen 1992), this time has a potentially high cost: Hebei wives, if they were forced to give up agricultural labor, asked, "how can I stop my work to have more children?" because the husbands of wives occupied with several young children would have to stay close to home to do the fieldwork, and thus receive lower local wages (Zhang 1997: 1).

Income is increased by remittances from the migrating husband, and this increased income might affect fertility and reproductive health. Intergenerational relations may change as some women stay with their natal family during their husband's absence. Gender roles in the family could change as women assume some of the work that was previously done by their husbands. Again, there is disagreement in the literature about whether these changes will be temporary – lasting only while the husband is away – or permanent, and whether they are substantive. Davin (1999: 127) believes "the change is a real one and affects decisions about a whole range of matters, including work, household spending, and children's education. Women who are left alone begin to deal with village officials themselves. They may be pushed into greater contact with the modern world by the need to cash money orders or open savings accounts at post offices and banks. Women's literacy becomes valued more highly as they engage in such activities." Zhang (1998: 199) supports her view with data from Hebei province, concluding "the increasing role of women in agriculture and the increasing contribution of women's labor to the family increased their bargaining power with their parents before marriage and with their husbands and parents-in-law after marriage."

However, a longitudinal study of women in eight provinces by Entwisle et al. (1995: 54) “offers little support this claim”: women “filled in” for men, but by working inside, in agriculture and traditional sideline activities, which was “probably not a significant challenge to traditional authority structures and domestic relations.” Jacka (1997: 137) explains that there has been “a conceptual shift of the whole of agriculture from the ‘outside’ sphere to the ‘inside’ sphere of work,” so that agricultural work is downgraded as it is feminized.

Our research can address these issues from the standpoint of the effect of the husband’s migration on status of the wife who remains in the rural area. Data collected through our survey, focus groups, and home visits will allow us to explore the ways in which a husband’s absence influences these women, both temporarily and more permanently.

III: The Data

The data we use was collected during August and September of 2000 in two counties in each of the two provinces of Anhui and Sichuan. Since the survey was done in the villages, it includes only those who were in their rural homes: those women from the villages who were currently out were not included. Data collection corresponded to the rice harvest, which meant that some migrants had returned home to help on the farm. This reduces somewhat the problem of missing the current migrants, but does not eliminate it entirely.

The data were collected using a stratified sampling frame: two townships from each county were selected according to information provided by the county, and three to five villages were chosen from each township. All women aged 20-35 were eligible for the survey. A few women younger than 20 or older than 35 were included, since some villages were too small.

The interviewers were from local government staff or middle school teachers, all with a high school diploma or higher. Research team members personally trained the interviewers. Research team members organized the fieldwork organization and performed quality control. The data was entered by double entry to eliminate random errors. After substantial quality checks, logic checks and other data cleaning procedures, the effective sample size is 3,186 women. One third of the women had migration experience and one half were married to men who had migrated. All but 59 of the women were already married.

The content of the questionnaire includes: basic information about the village, basic demographic information of the respondent and her current family of residence, the respondent's migration history, her husband's migration information if he ever migrated, information on her marriage, childbearing, contraception and reproductive health, and her opinions on family and on women's role in the family and decision making. The migration information collected includes the time, destination and period of stay of first six migration episodes, with more detailed information about their first and the last migration. The definition of migration is staying longer than a month in a destination other than the county or city in which they reside.

IV: Basic Information of the Survey Sites and Respondents

Table 1 Some population and economic statistics of the four counties in 1999

County	Pop. end of 1999 (×1000)	Proportion population rural (%)	GDP/capita (Yuan, current prices)	Government Revenue (×10000)	Gross output of agriculture (1990 prices, ×10000)	Land type
Huaining, Anhui	779.4	89.6	3,576	13,612	83,566	Agricultural area
Zongyang, Anhui	946.0	91.2	2,445	10,962	79,555	
Xingwen, Sichuan	423.0	89.4	1,974	4,039	30,204	Mountainous
Changning, Sichuan	422.0	90.5	2,969	4,214	42.250	Hilly

Data sources:

1. Sichuan Statistical Bureau. Sichuan Statistical Yearbook 2000. China Statistics Press, 2000.
2. Anhui Statistical Bureau. Anhui Statistical Yearbook 2000. China Statistics Press, 2000.
3. Rural Social-Economic Investigation Division of State Statistical Bureau. Social-Economic Statistics Summary by County (City) of China, 2000. China Statistics Press, 2000.

Table 1 shows some statistics for the four counties in year of 1999. The two counties of Anhui, Zongyang and Huaining, are both located in southern part of Anhui near the Changjiang River, and are both major rice producing areas. However, Zongyang's elevation is lower, like a pool accepting all the water from upstream, so that the farmland often floods when the upstream counties have adequate water supply. On the other hand, Zongyang farmers have plenty of water when the other upstream counties are experiencing drought. The people in Zongyang have a long tradition of migrating in response to flooding, documented well into the last century.

The two counties of Sichuan, Xingwen and Changning, are located in Southwestern Sichuan. They are hilly and mountainous areas, and among the poorest counties in China. Xingwen, with high mountains and hills, is the least developed of the four counties surveyed,

and is on the nation's county poverty list. Due to the lack of roads, some of the villages are very difficult to reach.

Table 2 Basic information of the respondents

	Huaining	Zongyang	Xingwen	Changning	Total
N	760	805	801	820	3186
Ever migrated (%)	52.8	35.4	26.3	31.2	36.2
Mean Age	30.2	30.0	29.2	28.7	29.5
Education (column percentage)					
illiterate	21.7	37.1	5.1	4.5	17.0
primary school	54.4	44.6	73.4	63.7	59.1
middle school	22.3	17.3	19.3	29.6	22.1
high school +	1.6	1.0	2.1	2.2	1.8
Married (%)	97.9	96.9	99.1	98.7	98.1
Mean age at marriage	20.96	21.51	21.47	21.11	21.27
Current occupation (column percentage)					
farming	60.3	74.6	71.0	70.7	69.3
on paid job	17.3	9.8	2.3	8.3	9.3
self employed	9.0	2.7	3.1	2.9	4.4
other	13.4	12.9	23.6	18.1	17.0

Table 2 shows the basic information of the respondents. Interestingly, the proportion of the women who are illiterate is much lower among Sichuan women, while Anhui women, particularly Huaining women, have the highest proportion currently working in a paid job. People in Anhui began migrating out much sooner and migration than in Sichuan, with out-migration beginning soon after the economic reforms of 1979 (which began in Anhui). Migration is also more widespread, so much so that it was not easy to find a household where no one had ever migrated. The women in Anhui also tend to leave home at an earlier age: some went with their older brother or sisters when they were only 13 or 14 years old. The jobs they have while out vary widely, which is quite different from the situation in Sichuan, where migrating women mainly work in factories. Out-migration of women in Sichuan started on a large scale in the late 1990s, and most of them migrated for the first time after they were already married (see Table 3).

Table 3 Information of the first migration episode

	Huaining	Zongyang	Xingwen	Changning	Total
Respondents	401	285	211	256	1153
Mean age at first migration episode	23.48	20.94	24.62	24.38	23.26
Migrated before marriage (%)	37.9	58.6	25.1	17.6	36.2
Migrated to another province (%)	88.3	74.3	78.2	75.7	80.2
Destination was big city (provincial capital or Beijing, Shanghai, Tianjin, Chengdu)	31.3	20.8	40.8	30.7	30.3
Destination was mid-small city	45.0	58.5	36.0	52.4	48.3
Average period of stay (months)	8.67	12.50	14.53	13.69	11.79
Employment status (column percentage)					
unemployed	3.0	11.9	5.2	4.3	5.3
self employed	54.1	6.0	3.3	12.5	23.7
employee	42.4	81.4	90.5	80.0	69.2
manager	0.5	0.7	1.0	3.1	1.2
Major job (column percentage)					
factory worker	22.9	46.7	64.5	48.6	42.1
restaurant worker	19.2	12.3	12.3	13.7	15.0
retailer	49.1	4.6	1.9	8.6	20.5
other	8.8	36.9	21.3	29.1	22.4

V: Migrant Selectivity

As in every study of migration, it is possible that movers are a select group with characteristics that differ from stayers; they may, for instance, be better educated or younger. These are characteristics that we can control for in our analysis of the effect of migration on our set of outcome variables. Other differences, such as more motivation or higher innate ability, cannot be so easily controlled.

While we must be concerned about migration selectivity, it may be less of a factor in our data than in other studies because migration has become very commonplace in these villages. In some villages it was difficult to find young women who had not migrated. Among the age group 16-24 in Anhui 66% had migrated, while in Sichuan 37% had migrated. One could argue that the unobservable characteristics should be less different between movers and stayers when migration becomes commonplace.

One way to get a feeling for the selectivity of the migrants is to try to predict migration status from observable characteristics. Table 4 shows the results of a probit estimation of having ever migrated. Age is a significant determinant of the probability of migration, with younger women more likely to have migrated. This is comforting as one

might have feared that all the young women migrants were still in the city, which would have lead to a selectivity of older migrants and younger stayers. The results in Table 4 show that enough young migrants have returned to lead to the predicted relationship between migration probabilities and age.

Table 4: Determinants of the Probability of Having Ever Migrated

	Coefficients(z-statistics)	Marginal Effects
Graduated from Primary School	0.1973 (3.390)	0.0715
Graduated from Middle School	0.0942 (1.452)	0.0349
Age	-0.0510 (-8.319)	-0.0187
Married	-0.9910 (-5.134)	-0.3789
Husband Ever Migrated if Married	0.8715 (16.584)	0.3077
Zongyang	-0.5751 (-8.475)	-0.1954
Xingwen	-0.6059 (-8.438)	-0.2047
Changning	-0.6095 (-8.726)	-0.2061
Sample size	3170	
Log likelihood	-1805.888	

Model estimated using maximum likelihood probit estimation. Marginal effects evaluated at the mean for continuous variables and comparing the probability at 0 and then 1 for discrete changes.

Education is also related to migration probabilities, but not linearly. The group most likely to migrate in our data is the group of women who attended school through at least the sixth grade but did not graduate from middle school.

The location dummies tell us that women from Huaining are more likely to have migrated than from any of the three other counties. The other three counties do not differ in the probability of migration once age and education are controlled for. Recall that Huaining has higher average per capita income than the other three counties.

Finally women who are married are less likely to have migrated controlling for all other factors, but among those married women those whose husbands have migrated, they are more likely to have migrated themselves. This may indicate some couples migrating together, or that characteristics that lead one to migrate also lead one to marry someone who would migrate. The pseudo- R^2 is only 13%, indicating there is plenty of randomness left in migration probabilities, so that we can safely control for the observable selectivity characteristics of migration: age, education, marital status and location and still be able to estimate the independent effect of migration on our outcome variables.

VI. The Effect of Migration on Fertility and Proximate Determinants of Fertility

In this section we consider the effect of migration and husband's migration on four outcome variables: age of marriage, desired number of children, age of first birth, and number of children ever born. Each of these variables should have an impact on the TFR and thus on the growth rate of the population, which is an issue of major concern to Chinese policy makers. (Table 5, a summary of the probit regressions, is not shown yet)

Age of first marriage: Age of marriage is an important determinant of the length of a generation and the momentum of population growth. When we consider all the women in our sample, age of first marriage is not significantly affected by the woman's migration status. Nor is age of marriage affected by the husband's migration if the woman is currently married. But if we limit our analysis to those women who have migrated, we find that the timing of migration does impact the timing of marriage: those women who migrated before marriage are more likely to marry later than those women who migrated after marriage, with migration before marriage increasing the age of marriage by 1.5 years. Finally, the total duration of migration did not significantly affect age of marriage. If the pattern of migration was to migrate once, return and then marry (the common wisdom on the issue), we would expect duration to affect age of marriage. But the pattern seems to be migrate, then return to marry and then migrate again before children (or even after children), so that total duration does not affect age of marriage. Instead, the duration of the first migration episode does have a significant positive effect on the age of marriage, though the effect is quantitatively small. See Zheng et al. (2001) for a more complete analysis of the effect of migration on the timing of marriage.

Desired number of children: Even if fertility could be perfectly controlled by government fiat, it would still be better from the perspective of the costs of enforcement and coercion that actual fertility coincide with desired fertility. Our analysis shows that having migrated does significantly reduce the desired number of children among rural Chinese women in our sample. On the other hand, having a husband who migrated does not reduce the desired number of children. Of those women who have migrated, neither their age at first migration nor the relative timing of their migration, before marriage or before childbirth significantly effect the desired number of children, but the total duration of migration does

reduce the desired number of children. See You (2001) for a more complete analysis of this data in terms of desired and actual fertility.

Age at first birth: Our findings on age of first birth are similar to those of age of marriage. Looking at all married women, having migrated does not significantly affect age of first birth, nor does husband's migration status. But among the women who have migrated, the timing of their migration does matter: migrating before the birth of one's first child increases the age at first birth. The total duration of migration does not affect age at first birth.

Number of children ever born: The mean number of children ever born in our full sample of married women is 1.33. The mean for the never-migrated group is 1.37 while the mean for the ever-migrated group is 1.26. This difference remains after we control for age, education, location, husband's migration status and age at marriage. Women who have migrated have significantly fewer children than those who have never migrated, while husband's migration status does not have a significant effect. Among those who have migrated, the age of first migration significantly reduces the number of children, as does the relative timing of migration before the birth of one's first child. Total duration of migration does not affect the number of children ever born. Thus while some women may be migrating to avoid the eyes of the local family planning officials and be "excess birth guerrillas," our results show that the net effect of rural women's migration is to lower fertility by lowering both the desired and the actual number of children born.

VII. The Effect of Migration on Indicators of Reproductive Health

In this section we explore five indicators of reproductive health: the number of induced abortions a woman has had, her knowledge of STDs, her knowledge of AIDs, her knowledge of reproductive physiology, and whether she has been beaten by her husband. Many more indicators are available in the data that have not yet been analyzed.

Knowledge of reproductive physiology: Respondents were asked when was the optimal time in a woman's monthly cycle for her to get pregnant. Knowledge about the optimal time to get pregnant is important to those woman trying to avoid pregnancy. Slightly less than half of the respondents answered correctly. The probability of answering correctly was not associated with having migrated, and women whose husband's had

migrated were even less likely to answer correctly. Of those women who migrated, those who migrated younger were less likely to answer correctly, while total duration of migration was associated with a small increased probability of having answered correctly. Unmarried women were significantly less likely to answer correctly.

Number of induced abortions: Without knowledge about reproductive physiology, and with contraception being largely unavailable to unmarried women, our hypotheses that migrating women are more likely to be sexually active before marriage leads to the prediction that women who have migrated will have had more abortions. We have seen that migration is related to a reduction in the desired number of children, which might lead to an increase in the number of induced abortions. Since we did not ask women about their sexual history, it is difficult to judge between these two hypothesized reasons to expect migration to be correlated with an increase in abortions. Our multivariate analysis indicates that ever-migrated women have had significantly more abortions, though the size of this effect is small – only .08 more abortions. Husband’s migration status does not affect the number of abortions, nor does the timing or duration of migration for those women who had migrated.

Knowledge of AIDs and STDs: We asked a number of questions about how a person could contract AIDs or STDs, asking about each separately. Here we report on just the simple question “Do you know about AIDs (STDs)?” Just under half of the sample answered “yes” to each of these questions. The results for the two questions are parallel, with women who had migrated substantially more likely to answer yes. Married women whose husband had migrated were also more likely to answer yes after controlling for their own migration status. Of those women who had migrated, those with longer migration were more likely to answer yes. Timing of migration measured both as age of first migration and relative timing in terms of life events was not a significant predictor of answering yes.

Domestic Violence: Thirty one percent of the respondents reported being beaten by their husband, either “sometimes” or “often.” Neither the migration status of the women nor that of her husband were significant predictors of domestic violence. Among those women whose husband had migrated, those whose husbands seldom came home (once a year or less) were more likely to report being beaten. While we can not distinguish between the hypothesis that long absences puts increased strain on the marital relationship versus the hypothesis that those couples with marital problems are less likely to make the trip back

home, anecdotal evidence supports the former: Chinese husbands are concerned with their wife's fidelity in their absence – they strongly prefer that other household members help them with farming tasks rather than hired (male) laborers – and their suspicions might lead them to engage in more domestic violence.

VIII. The Effect of Migration on Indicators of Women's Status

Our survey included many questions asking for the woman's opinion on issues of autonomy and decision-making within the family. Here we present the results from a small selection of these questions.

Who should decide about who should marry whom? When asked this question, 80% of the sample indicated that the couple should decide themselves, either with parental approval or by themselves. Women who had migrated were significantly more likely to think that the couple should decide. Among those who were married, their husband's migration status did not matter. Among those who had migrated, neither timing nor duration mattered.

Should contraception be available before marriage? Our sample of women was almost perfectly divided on this question. Women who had migrated were significantly more likely to be in the "yes" camp, as were married women whose husbands had migrated. Among those who migrated, those who migrated at younger ages were slightly less likely to vote yes, while those who migrated after marriage and before children were more likely to vote yes. The total duration of migration increased the likelihood of voting yes by a small amount.

Is it alright for a couple that does not get along to get divorced? In keeping with China's low divorce rate, only 30% of the sample answered yes to this question. Looking at the entire sample, ever-migrating women were significantly more likely to say yes. However, when we look only at the sample of married women and control for whether the husband migrated, we find that those whose husband migrated are more likely to say yes, but the women's migration status is no longer a significant predictor of one's opinion on divorce.

Is it alright for a wife to refuse her husband's desire to have intercourse? 59% of the married sample answered yes to this question. (This question was not asked of unmarried women.) Ever-migrated women were significantly more likely to answer yes, while her

husband's migration status was not a significant predictor. Among those women who had migrated, the timing of their migration didn't matter but duration did – those who were away longer were more likely to answer yes. Among those whose husbands had migrated, neither his duration out nor the frequency of his visits home affected the probability of answering yes.

IX. The Effect of Migration on Family Income and Wealth

One of the drawbacks of our data is the lack of information on income before migration. Thus, we view income as an outcome variable and not as a determinant of migration while, in fact, it is both. Out of this duality emerges an interesting pattern in our data: consistently, the woman's migration status has a positive effect on family income and measures of wealth, while her husband's migration status has no effect on either income or wealth. When we limit the sample to those couples where both the husband and wife have migrated, we find that the total duration of migration of the wife's migration is positively related to income and wealth, while that of her husband is negatively associated with income and wealth. How can we make sense of these opposite signs for women's and men's migration? One hypothesis is that women migrate for investment or major consumer purchases – to build a new house, purchase a color TV, or make a down payment on a family business back home – that only better-off families can afford. Men's migration might be necessitated by poverty, so that families with lower income would be more likely to have the man away for a longer time.

The generalized finding on family income and wealth are based on the analysis of respondents answer to what their family income was last year, the number of rooms in the house, whether the house has an indoor flush toilet and whether they have a color TV. The pattern of significance was the same for all these outcome variables.

X. Discussion

(to follow)

References (in Chinese if not specified)

- Beijing (1998) 1997 In-floating Population Census Data of Beijing. China Commercial Press, Beijing.
- Cai, F. (1997) China's Population: Distribution, Resource, and Impact on Economics. UNDP, Beijing.
- Christiansen, F. (1992) "'Market Transition' in China: the Case of the Jiangsu Labor Market, 1978-1990," *Modern China* 18, no. 1: 72-93. (English)
- Davin D. (1996) "Gender and Rural-Urban Migration in China." *Gender and Development* 4, no. 1: 24-30. (English)
- Davin, D. (1997) "Migration, Women and Gender Issues in Contemporary China," in T. Scharping (ed.) *Floating Population and Migration in China: The Impact of Economic Reforms*. Hamburg: Mitteilungen Des Instituts Für Asienkunde, 297-314. (English)
- De, W. (1996) "Spatial Structure of Internal Migration in Modern China: An Analysis Based on the 1990 Population Census," *Regional Development Studies*, 2, 65-86. (English)
- Entwisle, B. et. al. (1995) "Gender and Family Business in Rural China," *American Sociological Review* 60, no. 1: 36-57. (English)
- Gu, S. and Jian, X. eds. (1994) *Population Floating and Urbanization in Contemporary China*. Wuhan: Wuhan University Press.
- Jacka, T. (1997) *Women's Work in Rural China*. New York: Cambridge University Press. (English)
- Judd, E. (1994) *Gender and Power in Rural North China*. Stanford, California: Stanford University Press. (English)
- Liang J. and Chen S. eds. (1993) *Sample Survey Data and Analysis of National Fertility Survey of China, 1988*. China Population Press.
- Peng X. et al. (1998) "In-floating Female Population in Rearranged Textile Industry of Shanghai." *Chinese Journal of Population Science* 3:38-43.
- Roberts, Kenneth D. forthcoming. "Female Labor Migrants to Shanghai: Temporary 'Floaters' or Settlers?," *International Migration Review*
- Roberts, K. (1999) "Rural Labor Migration, Women's Status and Fertility in China," unpublished manuscript. (English)
- Sun S. (1996) "Market Economy and Female Floating Population." *Southern China Population*, 4:41-44.
- Tan S. (1997) "Gender Difference in Migratory Rural Labor Force." *Sociological Research*, 1:42-47.
- Tan S. (1998) "Young Female Migratory Workers in Pearl River Delta, Current Situation and Development." In Jin Y. and Liu B. (eds.), *China's Women and Development in the Turning of the Century*. Nanjing University Press, Nanjing.
- Wang W. et al. (1995) *Shanghai Floating Population in the 90's*. East China Normal University Press, Shanghai.
- Wang X. and Zhang X. (1998) "Rural Women's Employment and Mobility in Hunan." In: Kang L. (eds.) *Women's Development and Strategy*. Modern China Press, Beijing.

- You D.(2001), "Fertility Desire of Rural Migrant Women in Anhui and Sichuan," unpublished Master's thesis, Institute of Population Research, Beijing University.
- Zeng Y. (1996) "Latent Possibility for a Change of the Fertility Behaviors of Rural-Urban Migrants." *China Population Today* 13, no.5-6: 16. (English)
- Zhang, W. (1996) "Dynamics of Marriage Change in Chinese Rural Society in Transition: A Study of a Northern Chinese Village," paper presented at the Annual Meetings of the Population Association of America, New Orleans, May 9-11. (English)
- Zhang, W. (1997) "Economic Reforms and Fertility Behaviour in Rural China: An Anthropological and Demographic Inquiry," paper presented at the XXIII IUSSP Population Conference, Beijing, October.
- Zhang, W. (1998) "Rural Women and Reform in a North Chinese Village," in F. Christiansen and J. Zhang (eds.), *Village Inc.: Chinese Rural Society in the 1990s*. Surrey, England: Curzon Press, 193-211. (English)
- Zheng Z. (forthcoming) "Social-Demographic Influence on First Birth Interval in China, 1980-1992." *Journal of Biosocial Science*.(English)
- Zheng Z. (1998) "Rural Women and Rural-Urban Migration." Presented at the International Conference on Women's Studies and Development in the 21st Century, Beijing, June 1998.
- Zheng Z. (1999) "Sexual Behavior, Contraceptive Knowledge And Practice Among Young Female Migratory Workers In Urban China, working paper. (English)