

Online Appendix for “How Does Intergenerational Investment Respond to Changes in the Marriage Market? Evidence from China”

A Theoretical Derivations

Given the utility function, the optimization problem for a household with child of gender k can be written as

$$Max \quad u^W + \mu u^H = \alpha_W \ln c_W + \mu \alpha_H \ln c_H + \theta Eu(G) \quad (1)$$

$$s.t. \quad c_W + c_H + i^k = Y \quad (2)$$

Where $\theta = [\mu(1 - \alpha_H) + (1 - \alpha_W)]$, $Eu(G) = \sum_{i'} p(i^k, i') \ln c^{kL} + (1 - p(i^k)) \ln(c^{kM} - \tau^k)$, in which $p(i^k) = \sum_{i'} p(i^k, i')$.

It is equivalent to the following Lagrange function

$$L = \alpha_W \ln c_W + \mu \alpha_H \ln c_H + \theta [\sum_{i'} p(i^k, i') \ln c^{kL} + (1 - p(i^k)) \ln(c^{kM} - \tau^k)] + \lambda (Y - c_W - c_H - i^k) \quad (3)$$

The first-order conditions with respect to c_W , c_H , i , and λ are as follows

$$\frac{\alpha_W}{c_W} - \lambda = 0 \quad (4)$$

$$\frac{\mu \alpha_H}{c_H} - \lambda = 0 \quad (5)$$

$$\frac{\theta \partial Eu(G)}{\partial i^k} - 1 = \theta \sum_{i'} p(i^k, i') \frac{\frac{\partial c^{kL}}{\partial i^k}}{c^{kL}} + \theta \sum_{i'} \frac{\partial p(i^k, i')}{\partial i^k} \ln c^{kL} - \theta \frac{\partial p(i^k)}{\partial i^k} \ln(c^{kM} - \tau^k) + \theta (1 - p(i^k)) \frac{\frac{\partial c^{kM}}{\partial i^k}}{c^{kM} - \tau^k} - 1 = 0 \quad (6)$$

$$Y - c_W - c_H - i^k = 0 \quad (7)$$

We use the Jacobian matrix method to conduct comparative statics. First we can write the following matrix form by taking total differential of the above system:

$$\begin{pmatrix} -\frac{\alpha_W}{c_W^2} & 0 & 0 & -1 \\ 0 & -\mu \frac{\alpha_H}{c_H^2} & 0 & -1 \\ 0 & 0 & \theta \frac{\partial^2 Eu(G)}{\partial i^{k2}} & -1 \\ -1 & -1 & -1 & 0 \end{pmatrix} \begin{pmatrix} dc_W \\ dc_H \\ di^k \\ d\lambda \end{pmatrix} = \begin{pmatrix} 0 \\ 0 \\ -\theta \frac{\partial^2 Eu(G)}{\partial i^k \partial \tau^m} \\ 0 \end{pmatrix} d\tau^m \quad (8)$$

where the coefficient matrix of the left-hand side is the Jacobian

$$|J| = \left(\frac{\mu\alpha_H}{c_H^2} + \frac{\alpha_W}{c_W^2} \right) \theta \frac{\partial^2 Eu(G)}{\partial i^k^2} - \frac{\mu\alpha_H\alpha_W}{c_H^2 c_W^2} \quad (9)$$

Because $Eu(G)$ is concave in i^k , $\frac{\partial^2 Eu(G)}{\partial i^k^2} < 0$. Therefore $|J| < 0$.

Using Cramer's rule to find an expression for $\frac{\partial i^k}{\partial \tau^m}$

$$\frac{\partial i^k}{\partial \tau^m} = \frac{|J_1|}{|J|} \quad (10)$$

where

$$J_1 = \begin{pmatrix} -\frac{\alpha_W}{c_W^2} & 0 & 0 & -1 \\ 0 & -\mu\frac{\alpha_H}{c_H^2} & 0 & -1 \\ 0 & 0 & -\theta\frac{\partial^2 Eu(G)}{\partial i^k \partial \tau^m} & -1 \\ -1 & -1 & 0 & 0 \end{pmatrix} \quad (11)$$

Thus

$$|J_1| = -\theta \left(\frac{\alpha_W}{c_W^2} + \mu \frac{\alpha_H}{c_H^2} \right) \frac{\partial^2 Eu(G)}{\partial i^k \partial \tau^m} \quad (12)$$

Since $|J| < 0$, we have

$$\frac{\partial i^k}{\partial \tau^m} \propto \theta \left(\frac{\alpha_W}{c_W^2} + \mu \frac{\alpha_H}{c_H^2} \right) \frac{\partial^2 Eu(G)}{\partial i^k \partial \tau^m} \quad (13)$$

Note that local males' utility cost τ^m enters only c^{fL} for daughters, while it enters both c^{mL} and c^{mM} for sons. Using first order conditions (equations (4) and (5)). We can derive the effect of a change in τ^m on i^f and i^m respectively as follows.

$$\frac{\partial i^f}{\partial \tau^m} \propto \theta \Sigma_{i'} \left(a \frac{\partial c^{fL}}{\partial \tau^m} + b \left[\frac{\partial \frac{\partial c^{fL}}{\partial i^f}}{\partial \tau^m} \right] \right) \quad (14)$$

$$\begin{aligned} \frac{\partial i^m}{\partial \tau^m} &\propto \theta \Sigma_{i'} \left(\tilde{a} \frac{\partial c^{mL}}{\partial \tau^m} + \tilde{b} \left[\frac{\partial \frac{\partial c^{mL}}{\partial i^m}}{\partial \tau^m} \right] \right) \\ &+ \theta \frac{\partial p(i^m)}{\partial i^m} \frac{1}{(c^{mM} - \tau^m)^2} + \theta (1 - p(i^m)) \frac{\partial c^{mM} / \partial i^m}{(c^{mM} - \tau^m)^2} \end{aligned} \quad (15)$$

In equations (14) and (15), $a = \frac{\partial p(i^f, i')}{\partial i^f} \frac{1}{c^{fL}}$, $b = p(i^f, i')$, $\tilde{a} = \frac{\partial p(i^m, i')}{\partial i^m} \frac{1}{c^{mL}}$, and $\tilde{b} = p(i^m, i')$. Since premarital investment increases locals' probability to marry locals, we can easily see that $a > 0$, $b > 0$, $\tilde{a} > 0$, and $\tilde{b} > 0$.

Note that in the right-hand side of equation (14), the first element reflects the income effect, i.e., as τ^m decreases, local women would get a smaller share of marital surplus from their marriage with local males, which discourages parental investment in daughters. The part in [...] is what we call competition effect. It is equal to $\frac{1}{(c^{fL})^2}(\frac{\partial^2 c^{fL}}{\partial i^f \partial \tau^m} c^{fL} - \frac{\partial c^{fL}}{\partial i^f} \frac{\partial c^{fL}}{\partial \tau^m})$. Given that $\frac{\partial^2 c^{fL}}{\partial i^f \partial \tau^m}$ is negative (local women with higher education (higher i^f) are less affected by the change in τ^m), $\frac{\partial c^{fL}}{\partial i^f}$ is positive (local women with higher education can enjoy more from marital surplus), and $\frac{\partial c^{fL}}{\partial \tau^m}$ is positive (the decline of local men's outside option (larger τ^m) can increase marital surplus of local women), the competition effect is negative. Intuitively, a decrease in τ^m will encourage investment in daughters because the rate of return to the investment increases.

The first two elements in the right-hand side of expression (15) are income and competition effects for boys respectively, which arise from local-local marriages. These two effects are similar to those for daughters but have the opposite direction. That is, $\frac{\partial c^{mL}}{\partial i^m} < 0$ and $\frac{\partial \frac{\partial c^{mL}}{\partial i^m}}{\partial \tau^m} > 0$. The third and fourth elements are the matching and income effects which arise directly from marriages with migrants. The third element shows that an increase in τ^m will decrease the utility from marrying migrants and induce more investment so as to increase the probability of marrying locals ($\partial p(i^m, i') / \partial i^m > 0$). The fourth element shows a cross-marriage income effect – an increase in τ^m lowers the utility from marrying migrants. Parents would invest more in sons so that they can obtain a larger share of marital surplus. The third and the fourth elements combined are defined as cross-marriage effect, which suggests that a decrease in τ^m would reduce parental investment in sons.

B Robustness Checks

We conduct several robustness checks to explore the validity of our main results.

Testing for Pre-existing Time Trends. One threat to the validity of the IV estimation is that the IV could be correlated with pre-existing time trends that drive the estimation results. To address this concern, we conduct a placebo test by estimating Equation (8) in the main text using data from 1995-1997. In estimating this equation, we replace $Post \times Mig_density_{c,2000}$ with interactions of years 1996 and 1997 dummies with female migrant density in 2000, $Dummy_{1996} \times Mig_density_{c,2000}$ and $Dummy_{1997} \times Mig_density_{c,2000}$. We use $Dummy_{1996} \times Mig_density_{c,1990}$ and $Dummy_{1997} \times Mig_density_{c,1990}$ as IVs. If pre-existing trends are correlated with the IV, we would expect the interaction terms to be statistically significant. The estimation results are presented in Appendix Table 5. All the coefficients of the interaction terms are statistically insignificant. These results thus give us more confidence that the IV estimates are not driven by pre-existing time trends.

Effects on Gender-neutral Expenditures. Although we have included macroeconomic variables in the regressions, one may still query whether unobserved macroeconomic variables are correlated with the IV, leading to biases in our estimates. To address this, we estimate effects of the policy change on food items, a gender-neutral expenditure. If the main results shown in the main text are driven by unobserved macroeconomic variables, we should observe the same pattern for gender-neutral goods. Appendix Table 6 presents effects of the policy change on gender-neutral expenditure. Column (1) shows the share of expenditure on food. Columns (2)–(4) report expenditures on the three most commonly consumed food items, namely rice, pork, and vegetables. In all four columns, the coefficients on the interaction term of the post-reform dummy and female migrant density in the year 2000 are not statistically significant, suggesting that unobservable macroeconomic shocks did not lead to the results shown in the main text.

Effects on Labor Market Status. One could still be concerned that macroeconomic shocks in different cities might be gender specific. For example, local women in cities with a higher ratio of female migrants could experience slower growth in work opportunities from 1997

to 1999 due to the more severe competition from female migrants. Therefore, the negative effects of the policy change could be due to women’s worsened bargaining position within households because of their inferior economic status. To address this concern, we investigate effects of the policy change on the probability of being employed and the probability of participating in the labor force for women and men, respectively. We define a person as participating in the labor force if he or she is employed or without a job but searching for employment. Appendix Table 7 presents the results. Therein, none of the coefficients of the interaction term $Post \times Mig_density_{c,2000}$ using $Post \times Mig_density_{c,1990}$ as an IV are significant for either outcome variable, whether the female or male sample is used. These findings suggest that our results in the main analysis are not driven by the worsening economic status of women in cities with higher proportions of female migrants.

Effects of Possible Dissolution or the Formation of Families. As the data used in our empirical analysis do not constitute a panel, another concern is that changes in the composition of households may confound our results, especially when the policy change affects the marriage matching pattern.¹ To rule out this concern, we conduct an analysis using households formed prior to the policy change. Because the UHS data do not include information on years of marriage, we restrict households in the 1999 sample to those with children older than 2 years. This group of households is most likely to have been formed before the policy change. The results estimated using the 1997 sample and the sub-sample in 1999 are reported in Appendix Table 8. The coefficients of the interaction of the post-reform dummy and female migrant density are qualitatively similar to the main results.²

¹A related issue is that it could be easier for migrant women who married local men to acquire local hukou after the policy change, and then these couples may be included in our post-reform sample. These migrant women could have weaker bargaining power within households because they were not born locally even if they have local *hukou*. If there are more such cases in cities with higher proportions of female migrants, then our estimates are biased.

²We also estimate Equation (8) in the main text using the 1997 sample and newly formed households in the 1999 sample (i.e., households without any children older than 2 years). The results, shown in Appendix Table 9, are much weaker. We then estimate long-run effects by including two more years of data (2000 and 2001); the results, shown in Appendix Table 10, suggest that although policy change effects still exist

Reduced Form Regressions. To further confirm our results, we follow suggestions proposed by Angrist and Pischke (2009) and conduct reduced form regressions. Replacing $Mig_density_{c,1990}$ with $Mig_density_{c,1990}$, we estimate Equation (8) in the main text using OLS. Results are shown in Appendix Table 11. All coefficients of $Post \times Mig_density_{c,1990}$ are statistically significant. They are negative for women-favored expenditures but positive for men-favored expenditures. The reduced form regression results thus re-confirm our main findings.

Adding City Level Variables in the Initial Period. In the main regressions, we use female migrant density in 1990 as an IV for that in 2000. One might concern that the female migrant density in 1990 might be correlated with some city level variables in the early 1990s which could affect the change of outcome variables from 1997 to 1999, leading to bias in our estimates. As pointed out in the seminal work by Harris and Todaro (1970), the income level and the employment perspective are two most important factors affecting inward migration. We therefore include in the regressions the interaction of $Post$ and city level GDP per capita and employment rates in 1994, which is the earliest year when these two city-level variables are available. The results are presented in Appendix Table 12. We can see that the coefficients of $Post \times Mig_density_{c,2000}$ are similar to those in the main regressions, meaning that variables in the early 1990s might not affect the change of outcome variables years later.

Regarding Remarriage Policy. As shown in Appendix Table 1, in general, the remarried couple were allowed to have another child if the couple had no more than one child from previous marriages. In our sample, 86% of households have no more than one child, which means for the remaining 14% of households, they cannot have children after they get divorced. Therefore, these households would not be affected by the change in *hukou* policy. We conduct a robustness check using these 14% of households and the results are shown in Appendix Table 13. We can see that no coefficients of $Post \times Mig_density_{c,2000}$ are significant.

three years after the policy was introduced (particularly for children's clothes), they become weaker. These findings are consistent with Lafortune et al. (2017) who suggest that newly formed households could respond to the policy before union which offsets the effects of the policy change.

Appendix Table 1 also shows that the remarriage policies in Guangdong and Beijing are different from other provinces. We therefore conduct another robustness check to see whether our main results differ in Guangdong and Beijing. Appendix Table 14 shows that the results are not different in Guangdong or Beijing.

Permutation Tests. To address the concern that our main results could be driven by random factors, we conduct permutation tests.³ We randomly assign female migrant densities to cities and estimate impacts of the policy change on all outcome variables. We repeat this exercise 1000 times. Appendix Figure 3 presents histograms of all 1000 p-values for each outcome variable (panel A for intergenerational investments, panel B for women-favored expenditures, and panel C for men-favored expenditures). The majority of the p-values are larger than 10% and thus these permutation tests provide additional evidence supporting the validity of our main results.

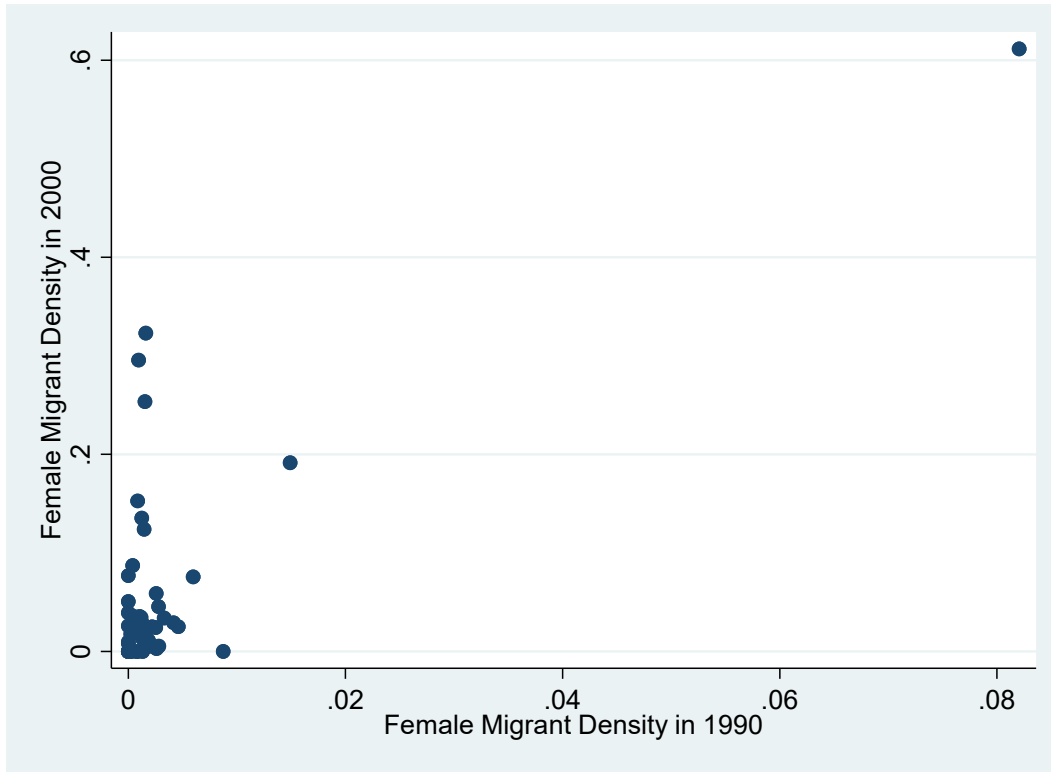
³For similar exercises, see, e.g., Chetty, Looney, and Kroft, 2009; La Ferrara, Chong, and Duryea, 2012; and Cai, et al., 2016.

References

- [1] Harris, John and Michael Todaro. 1970. "Migration, unemployment and development: A two-sector analysis." *American Economic Review*, 60(1), 126-142.
- [2] Lafortune, Jeane, Pierre-Andre Chiappori, Murat Iyigun, and Yoram Weiss. 2017. "Changing the rules midway: the impact of granting alimony rights on existing and newly formed partnerships." *The Economic Journal*, Vol. 127, Issue 604, 1874-1905.
- [3] Chetty, Ray, Adam Looney, and Kory Kroft. 2009. "Salience and taxation: Theory and evidence." *American Economic Review*, 99, 1145-1177.
- [4] La Ferrara, Eliana, Alberto Chong, and Suzanne Duryea. 2012. "Soap opera and fertility: Evidence from Brazil." *American Economic Journal: Applied Economics*, 4, 1-31.
- [5] Cai, Xiqian, Yi Lu, Mingqin Wu, and Linhui Yu. 2016. "Does environmental regulation drive away inbound foreign direct investment? Evidence from a quasi-natural experiment in China." *Journal of Development Economics*, Vol. 123, 73-85.

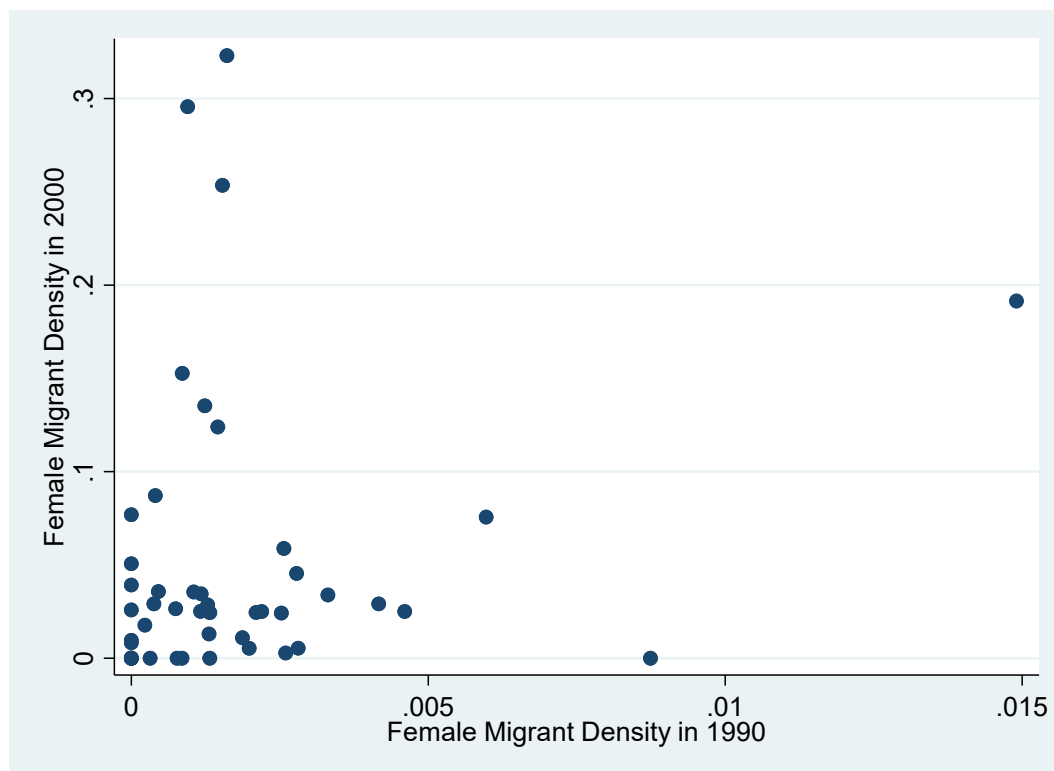
C Figures and Tables

Figure 1 Distribution of Female Migrant Densities with an Outlier



Note: We use a 1% sample of the 1990 population census and a 0.095% sample of the 2000 population census to calculate city level female migrant densities in 1990 and 2000, respectively. A migrant is defined as a person whose *hukou* is not in the place of residence in the census year and who was not living in the local province five years before. The female migrant density is the share of female migrants aged between 20 and 45 years old in the same female age cohorts in each city.

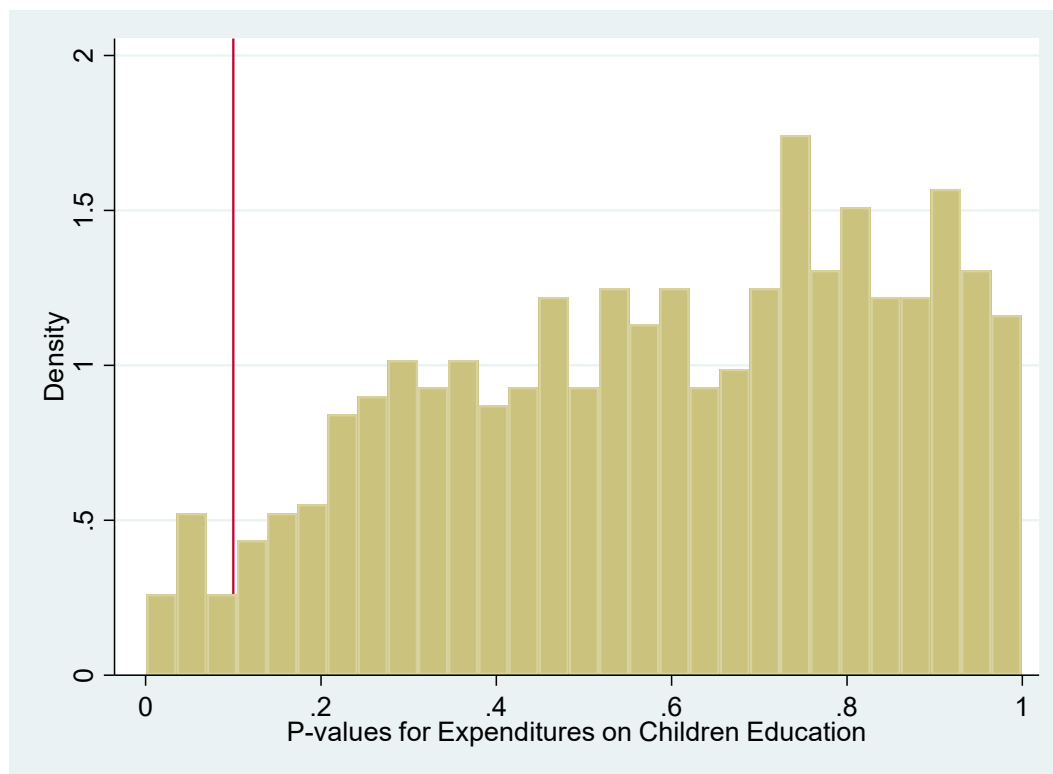
Figure 2. Distribution of Female Migrant Densities for Cities Used in Analysis



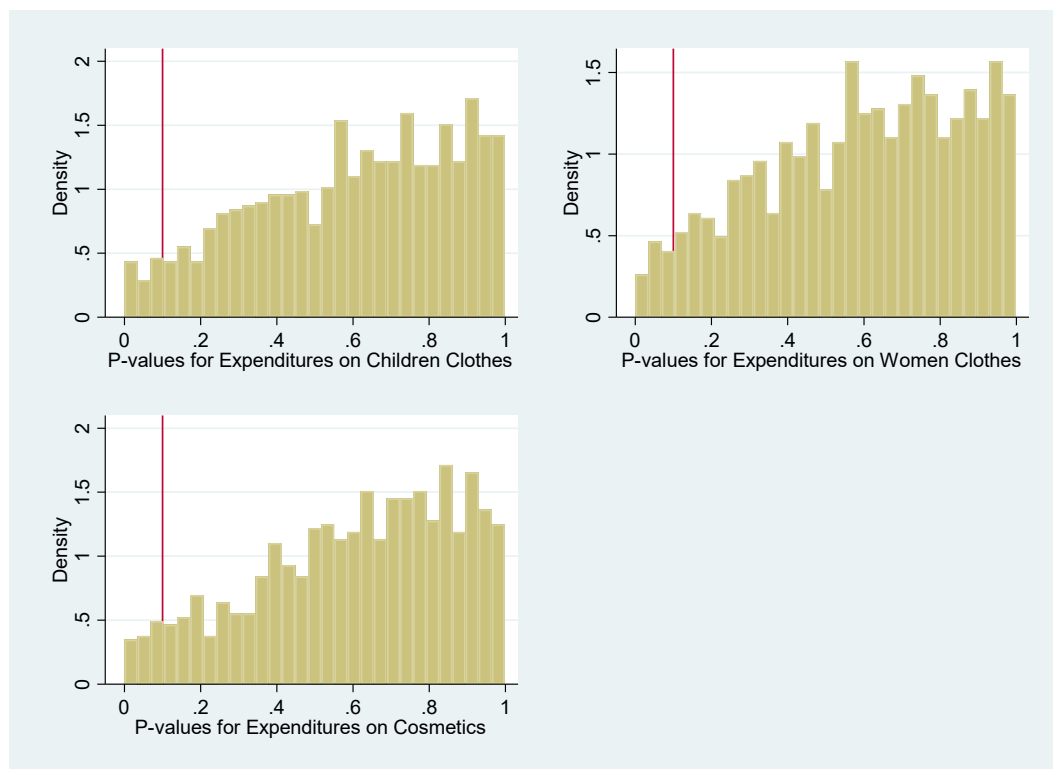
Note: We use a 1% sample of the 1990 population census and a 0.095% sample of the 2000 population census to calculate city level female migrant densities in 1990 and 2000, respectively. A migrant is defined as a person whose *hukou* is not in the place of residence in the census year and who was not living in the local province five years before. The female migrant density is the share of female migrants aged between 20 and 45 years old in the same female age cohorts in each city.

Figure 3 Placebo Tests

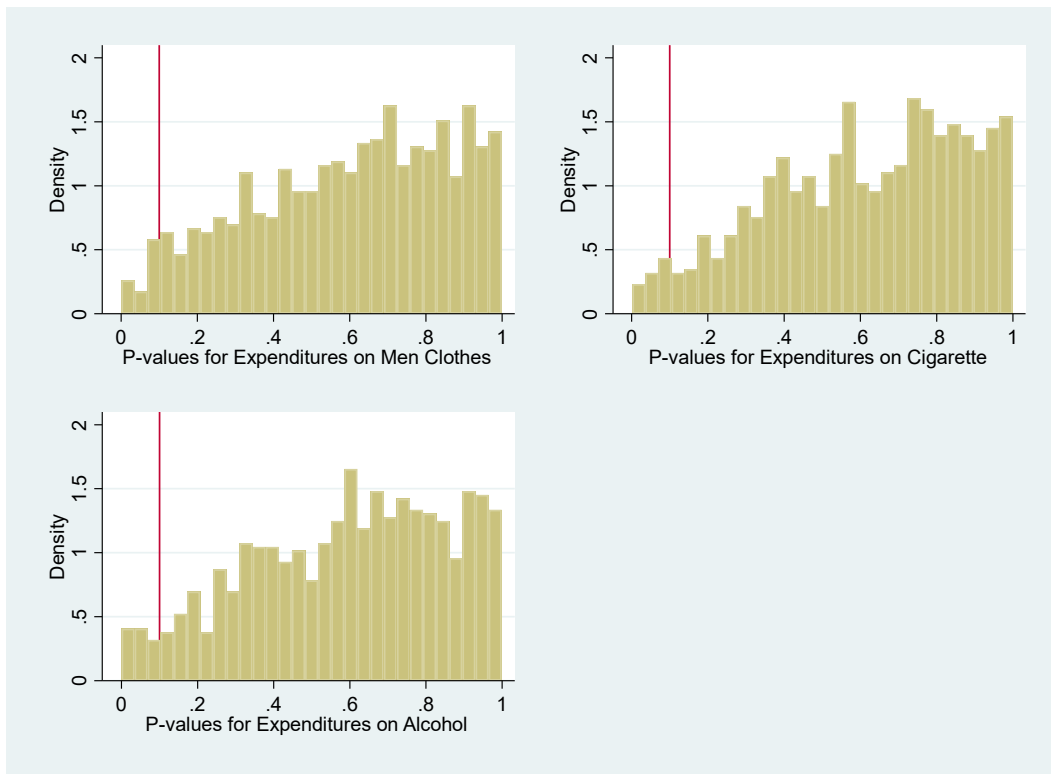
Panel A Education Investment



Panel B Women Expenditures



Panel C Men Expenditures



Note: We randomly assign female migrant densities to cities, then estimate the effects of the policy change. We repeat the exercises for 1000 times. The P-values in figures are from these 1000 placebo tests. The vertical lines represent P-value equal to 0.1.

Table 1 Policies Regarding Having Children after Remarriage

Province	A remarried couple can have another child if
Beijing	The couple had no more than one child prior to this marriage
Liaoning	One had no more than one child before remarrying and the other had no child
Zhejiang	One had no more than one child before remarrying and the other had no child
Anhui	One had no more than one child before remarrying and the other had no child
Hubei	One had no more than one child before remarrying and the other had no child
Guangdong	One had no more than one child before remarrying and the other had no child, or both had one child from their previous marriages but neither has custody
Sichuan	One had no more than one child before remarrying and the other had no child
Shaanxi	One had no more than one child before remarrying and the other had no child
Gansu	One had no more than one child before remarrying and the other had no child

Table 2 Consumption Categories

Food	Household equipment and service
Rice	Durable equipment
Flour and flour product	Daily groceries
Bean and bean product	House decoration
Oil	Furniture
Pork	Housework service
Beef	Medical items
Chicken	Medical equipment
Eggs	Health care product
Seafood	Medicine
Vegetable	Supplements
Fruits	Medical and health care service
Flavoring	Transportation and communication
Eating out	Transportation
Others	Communication
Alcohol	Entertainment, children education, and cultural service
Cigarette	Entertainment
Tea, coffee, and other beverage	Children education
Dressing	Cultural service
Men's clothes	Dwelling
Women's clothes	Housing
Children's clothes	Facilities
Clothing materials	Other items and service
Headgear and footwear	Personal items
Other dressing	Cosmetics
	Haircut, bathe
	Other items
	Other service

Appendix Table 3 Impact of Local Marriage Market on Intergenerational Education Investment and Intra-household Resource Allocation, OLS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Share of Expenditures on:						
	Children education	Children clothes	Women clothes	Cosmetics	Men clothes	Cigarette	Alcohol
Post*Mig_density2000	-0.053*** (0.013)	-0.005* (0.003)	0.005 (0.018)	-0.005** (0.002)	0.011 (0.009)	0.021 (0.015)	0.003 (0.004)
Husband's age	-0.001 (0.002)	-0.001* (0.000)	0.001 (0.001)	-0.001*** (0.000)	-0.002 (0.001)	-0.003 (0.003)	-0.001 (0.001)
Wife's age	0.002 (0.002)	-0.002*** (0.000)	-0.006*** (0.001)	-0.000 (0.000)	-0.001 (0.001)	-0.006* (0.003)	-0.001 (0.001)
Husband's schooling years	-0.004 (0.003)	0.002*** (0.000)	0.005*** (0.001)	0.000 (0.000)	0.005*** (0.001)	-0.021*** (0.004)	-0.004*** (0.001)
Wife's schooling years	0.004* (0.002)	0.001** (0.000)	0.010*** (0.001)	0.001*** (0.000)	0.006*** (0.001)	-0.017*** (0.004)	-0.005*** (0.001)
Ln(total expenditures per capita)	0.006** (0.003)	-0.001*** (0.000)	0.007*** (0.001)	0.001*** (0.000)	0.001 (0.003)	-0.009*** (0.003)	-0.003** (0.001)
Household demographic structure	YES	YES	YES	YES	YES	YES	YES
Macroeconomic variables	YES	YES	YES	YES	YES	YES	YES
Observations	10,157	10,157	10,157	10,157	10,157	10,157	10,157
R-squared	0.162	0.217	0.162	0.113	0.110	0.103	0.134

Robust standard errors in parentheses are calculated by clustering over city level. * significant at 10%; ** significant at 5%; *** significant at 1%.

(1) Year dummies and city dummies are controlled in all columns.

(2) Household demographic structure includes family size, ratio of male family members aged 0-6, 7-18, 19-60, and above 60, ratio of female family members aged 0-6, 7-18, and 19-60. Ratio of female family members aged above 60 is omitted to avoid multi-collinearity. Macroeconomic variables include log GDP per capita, GDP growth rate, ratio of GDP in primary industry, ratio of GDP in secondary industry, log average wage in city level, ratio of SOE employees.

Appendix Table 4 Heterogeneous Effects in Terms of Husband's Schooling Years

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Share of Expenditures on:						
	Children education	Children clothes	Women clothes	Cosmetics	Men clothes	Cigarette	Alcohol
Post*Mig_density2000*Husband schooling years (Post*Mig_density1990*Husband schooling years as an IV)	-0.108 (0.111)	-0.014 (0.009)	-0.090** (0.045)	0.012 (0.010)	0.006 (0.050)	0.151 (0.110)	-0.000 (0.016)
Post*Mig_density2000 (Post*Mig_density1990 as an IV)	0.065 (0.124)	0.003 (0.010)	0.064 (0.050)	-0.022* (0.013)	0.034 (0.052)	-0.104 (0.139)	0.017 (0.021)
Mig_density2000*Husband schooling years (Mig_density1990*Husband schooling years as an IV)	0.164* (0.084)	-0.006 (0.009)	0.085*** (0.029)	-0.003 (0.005)	- 0.135*** (0.030)	0.146** (0.061)	0.018 (0.023)
Post*Husband schooling years	0.006 (0.009)	0.001 (0.001)	0.012** (0.005)	-0.000 (0.001)	-0.003 (0.005)	-0.020** (0.010)	-0.002 (0.002)
Husband's age	-0.001 (0.002)	-0.001* (0.000)	0.001 (0.001)	-0.001*** (0.000)	-0.001 (0.001)	-0.003 (0.003)	-0.001 (0.001)
Wife's age	0.002 (0.002)	- 0.002*** (0.000)	- 0.006*** (0.001)	-0.000* (0.000)	-0.001 (0.001)	-0.006* (0.003)	-0.000 (0.001)
Husband's schooling years	-0.015** (0.008)	0.002** (0.001)	-0.004 (0.004)	0.000 (0.001)	0.016*** (0.005)	- 0.027*** (0.008)	-0.005* (0.003)
Wife's schooling years	0.003 (0.002)	0.001** (0.000)	0.010*** (0.001)	0.001*** (0.000)	0.006*** (0.001)	- 0.017*** (0.004)	- 0.005*** (0.001)
Ln(total expenditures per capita)	0.006** (0.002)	- 0.001*** (0.000)	0.007*** (0.001)	0.001*** (0.000)	0.000 (0.003)	- 0.008*** (0.003)	-0.003** (0.001)
Household demographic structure	YES	YES	YES	YES	YES	YES	YES
Macroeconomic variables	YES	YES	YES	YES	YES	YES	YES
Observations	10,157	10,157	10,157	10,157	10,157	10,157	10,157
R-squared	0.161	0.216	0.159	0.112	0.108	0.099	0.134

Robust standard errors in parentheses are calculated by clustering over city level. * significant at 10%; ** significant at 5%; *** significant at 1%.

(1) Year dummies and city dummies are controlled in all columns.

(2) Household demographic structure includes family size, ratio of male family members aged 0-6, 7-18, 19-60, and above 60, ratio of female family members aged 0-6, 7-18, and 19-60. Ratio of female family members aged above 60 is omitted to avoid multi-collinearity. Macroeconomic variables include log GDP per capita, GDP growth rate, ratio of GDP in primary industry, ratio of GDP in secondary industry, log average wage in city level, and ratio of SOE employees.

Appendix Table 5 Testing the Existence of Pre-existing Time Trend: 1995-1997

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Share of expenditures on:						
	Children education	Children clothes	Women clothes	Cosmetics	Men clothes	Cigarette	Alcohol
Year 1996 dummy*Mig_density2000 (Year 1996 dummy*Mig_density1990 as IV)	0.026 (0.022)	0.000 (0.003)	-0.018 (0.020)	0.003 (0.003)	0.019 (0.011)	-0.038 (0.035)	-0.015 (0.013)
Year 1997 dummy*Mig_density2000 (Year 1997 dummy*Mig_density1990 as IV)	0.032 (0.038)	-0.002 (0.006)	-0.031 (0.026)	0.006 (0.004)	-0.016 (0.026)	-0.099 (0.060)	-0.028 (0.018)
Husband's age	0.000 (0.003)	-0.002*** (0.000)	-0.003** (0.001)	-0.000* (0.000)	-0.002** (0.001)	-0.003 (0.003)	-0.001** (0.001)
Wife's age	0.001 (0.002)	-0.002*** (0.000)	-0.003** (0.001)	-0.001*** (0.000)	-0.001 (0.001)	-0.006** (0.003)	0.000 (0.001)
Husband's schooling years	0.000 (0.003)	0.001*** (0.000)	0.006*** (0.001)	-0.000 (0.000)	0.006*** (0.001)	-0.017*** (0.003)	-0.004*** (0.001)
Wife's schooling years	0.002 (0.002)	0.001** (0.000)	0.011*** (0.001)	0.001*** (0.000)	0.003*** (0.001)	-0.013*** (0.003)	-0.004*** (0.001)
Ln(total expenditures per capita)	0.008*** (0.002)	-0.001*** (0.000)	0.010*** (0.001)	0.002*** (0.000)	0.004 (0.003)	-0.005* (0.003)	-0.002 (0.001)
Household demographic structure	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Macroeconomic variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	14,932	14,932	14,932	14,932	14,932	14,932	14,932
R-squared	0.149	0.190	0.180	0.113	0.101	0.110	0.146

Robust standard errors in parentheses are calculated by clustering over city level. * significant at 10%; ** significant at 5%; *** significant at 1%.

(1) Year dummies and city dummies are controlled in all columns.

(2) Household demographic structure includes family size, ratio of male family members aged 0-6, 7-18, 19-60, and above 60, ratio of female family members aged 0-6, 7-18, and 19-60. Ratio of female family members aged above 60 is omitted to avoid multi-collinearity. Macroeconomic variables include log GDP per capita, GDP growth rate, ratio of GDP in primary industry, ratio of GDP in secondary industry, log average wage in city level, and ratio of SOE employees.

Appendix Table 6 Impact of Local Marriage Market on Gender-neutral Goods

	(1)	(2)	(3)	(4)
		Share of expenditures on:		
	Food	Rice	Pork	Vegetable
Post*Mig_density2000 (Post*Mig_density1990 as IV)	0.089 (0.054)	0.016 (0.011)	0.069 (0.042)	0.013 (0.018)
Husband's age	0.009** (0.004)	0.004*** (0.001)	0.002 (0.001)	0.003*** (0.001)
Wife's age	0.005 (0.004)	-0.000 (0.001)	0.003** (0.002)	0.000 (0.001)
Husband's schooling years	-0.029*** (0.005)	-0.004*** (0.001)	-0.006*** (0.001)	-0.002** (0.001)
Wife's schooling years	-0.031*** (0.006)	-0.005*** (0.001)	-0.005*** (0.002)	-0.005*** (0.002)
Ln(total expenditures per capita)	-0.187*** (0.006)	-0.025*** (0.002)	-0.030*** (0.002)	-0.033*** (0.001)
Household demographic structure	YES	YES	YES	YES
Macroeconomic variables	YES	YES	YES	YES
Observations	10,157	10,157	10,157	10,157
R-squared	0.456	0.447	0.463	0.454

Robust standard errors in parentheses are calculated by clustering over city level. * significant at 10%; ** significant at 5%; *** significant at 1%.

(1) Year dummies and city dummies are controlled in all columns.

(2) Household demographic structure includes family size, ratio of male family members aged 0-6, 7-18, 19-60, and above 60, ratio of female family members aged 0-6, 7-18, and 19-60. Ratio of female family members aged above 60 is omitted to avoid multi-collinearity. Macroeconomic variables include log GDP per capita, GDP growth rate, ratio of GDP in primary industry, ratio of GDP in secondary industry, log average wage in city level, and ratio of SOE employees.

Appendix Table 7 Impact of Local Marriage Market on Employment Status and Labor Force Participation

	(1)	(2)	(3)	(4)
		Wife		Husband
	Employed	Participating in labor force	Employed	Participating in labor force
Post*Mig_density2000 (Post*Mig_density1990 as IV)	0.152 (0.154)	0.052 (0.137)	-0.010 (0.116)	-0.121 (0.133)
Husband's age	-0.069*** (0.018)	-0.062*** (0.017)	-0.183*** (0.012)	-0.188*** (0.012)
Wife's age	-0.140*** (0.017)	-0.161*** (0.016)	0.032** (0.013)	0.034** (0.013)
Husband's schooling years	-0.031** (0.013)	-0.035*** (0.013)	0.037*** (0.011)	0.031*** (0.011)
Wife's schooling years	0.196*** (0.020)	0.173*** (0.018)	0.004 (0.013)	0.002 (0.013)
Ln(total expenditures per capita)	0.029*** (0.010)	0.012 (0.008)	0.019** (0.008)	0.014* (0.008)
Household demographic structure	YES	YES	YES	YES
Macroeconomic variables	YES	YES	YES	YES
Observations	10,157	10,157	10,157	10,157
R-squared	0.481	0.522	0.576	0.591

Robust standard errors in parentheses are calculated by clustering over city level. * significant at 10%; ** significant at 5%; *** significant at 1%.

(1) Year dummies and city dummies are controlled in all columns.

(2) Household demographic structure includes family size, ratio of male family members aged 0-6, 7-18, 19-60, and above 60, ratio of female family members aged 0-6, 7-18, and 19-60. Ratio of female family members aged above 60 is omitted to avoid multi-collinearity. Macroeconomic variables include log GDP per capita, GDP growth rate, ratio of GDP in primary industry, ratio of GDP in secondary industry, log average wage in city level, and ratio of SOE employees.

Appendix Table 8 Effects on Households Mostly Likely to be Formed Before Reform

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Share of expenditures on:						
	Children education	Children clothes	Women clothes	Cosmetics	Men clothes	Cigarette	Alcohol
Post*Mig_density2000 (Post*Mig_density1990 as IV)	-0.062** (0.027)	-0.016*** (0.005)	-0.047** (0.019)	-0.009** (0.004)	0.056** (0.024)	0.077** (0.036)	0.024*** (0.009)
Husband's age	-0.001 (0.002)	-0.001* (0.000)	0.002 (0.001)	-0.001*** (0.000)	-0.001 (0.001)	-0.003 (0.004)	-0.001* (0.001)
Wife's age	0.004 (0.002)	-0.002*** (0.000)	-0.007*** (0.001)	-0.000 (0.000)	-0.001 (0.001)	-0.007* (0.004)	-0.000 (0.001)
Husband's schooling years	-0.005 (0.003)	0.002*** (0.000)	0.005*** (0.001)	0.000 (0.000)	0.006*** (0.001)	-0.021*** (0.004)	-0.004*** (0.001)
Wife's schooling years	0.004 (0.002)	0.001** (0.000)	0.010*** (0.001)	0.001*** (0.000)	0.006*** (0.001)	-0.018*** (0.004)	-0.005*** (0.001)
Ln(total expenditures per capita)	0.006** (0.003)	-0.001*** (0.000)	0.007*** (0.001)	0.002*** (0.000)	0.001 (0.003)	-0.009*** (0.003)	-0.003** (0.001)
Household demographic structure	YES	YES	YES	YES	YES	YES	YES
Macroeconomic variables	YES	YES	YES	YES	YES	YES	YES
Observations	9,237	9,237	9,237	9,237	9,237	9,237	9,237
R-squared	0.156	0.208	0.153	0.109	0.101	0.101	0.134

Robust standard errors in parentheses are calculated by clustering over city level. * significant at 10%; ** significant at 5%; *** significant at 1%.

(1) Year dummies and city dummies are controlled in all columns.

(2) Household demographic structure includes family size, ratio of male family members aged 0-6, 7-18, 19-60, and above 60, ratio of female family members aged 0-6, 7-18, and 19-60. Ratio of female family members aged above 60 is omitted to avoid multi-collinearity. Macroeconomic variables include log GDP per capita, GDP growth rate, ratio of GDP in primary industry, ratio of GDP in secondary industry, log average wage in city level, and ratio of SOE employees.

(3) The sample used in this table include households in 1997 and households with a child older than 2 years old in 1999.

Appendix Table 9 Effects on Households Most Likely to be Formed After Reform

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Share of expenditures on:						
	Children education	Children clothes	Women clothes	Cosmetics	Men clothes	Cigarette	Alcohol
Post*Mig_density2000 (Post*Mig_density1990 as IV)	-0.024 (0.044)	-0.001 (0.004)	-0.002 (0.016)	-0.002 (0.005)	0.013 (0.014)	0.054 (0.035)	-0.009 (0.012)
Husband's age	0.001 (0.003)	-0.001 (0.000)	0.000 (0.002)	-0.001*** (0.000)	-0.002 (0.001)	-0.002 (0.004)	-0.001 (0.001)
Wife's age	-0.001 (0.003)	-0.002*** (0.000)	-0.005*** (0.002)	-0.001** (0.000)	-0.002 (0.001)	-0.007* (0.004)	-0.000 (0.001)
Husband's schooling years	-0.002 (0.004)	0.002*** (0.001)	0.003 (0.002)	-0.000 (0.000)	0.005*** (0.002)	-0.019*** (0.005)	-0.004*** (0.001)
Wife's schooling years	0.006** (0.003)	0.001*** (0.000)	0.009*** (0.001)	0.001*** (0.000)	0.005*** (0.001)	-0.015*** (0.005)	-0.005*** (0.001)
Ln(total expenditures per capita)	0.007** (0.003)	-0.001*** (0.000)	0.007*** (0.001)	0.002*** (0.000)	0.002 (0.003)	-0.006* (0.004)	-0.003* (0.001)
Household demographic structure	YES	YES	YES	YES	YES	YES	YES
Macroeconomic variables	YES	YES	YES	YES	YES	YES	YES
Observations	5,995	5,995	5,995	5,995	5,995	5,995	5,995
R-squared	0.161	0.209	0.165	0.127	0.116	0.117	0.140

Robust standard errors in parentheses are calculated by clustering over city level. * significant at 10%; ** significant at 5%; *** significant at 1%.

(1) Year dummies and city dummies are controlled in all columns.

(2) Household demographic structure includes family size, ratio of male family members aged 0-6, 7-18, 19-60, and above 60, ratio of female family members aged 0-6, 7-18, and 19-60. Ratio of female family members aged above 60 is omitted to avoid multicollinearity. Macroeconomic variables include log GDP per capita, GDP growth rate, ratio of GDP in primary industry, ratio of GDP in secondary industry, log average wage in city level, and ratio of SOE employees.

(3) The sample used in this table includes households in 1997 and households without any children older than 2 years old in 1999.

Appendix Table 10 Impact of Local Marriage Market on Intra-household Resource Allocation and Intergenerational Investment in the Long Run

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Share of expenditures on:						
	Children education	Children clothes	Women clothes	Cosmetics	Men clothes	Cigarette	Alcohol
Year 1999 dummy*Mig_density2000 (Year 1999 dummy*Mig_density1990 as an IV)	-0.036 (0.027)	-0.013*** (0.004)	-0.041** (0.018)	-0.008** (0.004)	0.041** (0.020)	0.053* (0.027)	0.011 (0.008)
Year 2000 dummy*Mig_density2000 (Year 2000 dummy*Mig_density1990 as an IV)	-0.001 (0.030)	-0.006* (0.004)	-0.011 (0.021)	0.010* (0.006)	0.035* (0.017)	0.033 (0.036)	0.010 (0.006)
Year 2001 dummy*Mig_density2000 (Year 2001 dummy*Mig_density1990 as an IV)	0.074 (0.055)	-0.011** (0.004)	-0.021 (0.016)	0.009 (0.007)	0.018 (0.017)	0.025 (0.045)	0.002 (0.008)
Husband's age	-0.003 (0.002)	-0.001** (0.000)	-0.001 (0.001)	-0.001*** (0.000)	-0.003*** (0.001)	-0.003 (0.003)	-0.000 (0.001)
Wife's age	0.003 (0.002)	-0.002*** (0.000)	-0.004*** (0.001)	-0.001** (0.000)	-0.000 (0.001)	-0.005* (0.003)	-0.001 (0.001)
Husband's schooling years	-0.008*** (0.002)	0.002*** (0.000)	0.006*** (0.001)	0.000 (0.000)	0.005*** (0.001)	-0.021*** (0.004)	-0.004*** (0.001)
Wife's schooling years	0.003* (0.002)	0.001* (0.000)	0.010*** (0.001)	0.001*** (0.000)	0.006*** (0.001)	-0.017*** (0.003)	-0.004*** (0.001)
Ln(total expenditures per capita)	0.010*** (0.002)	-0.001*** (0.000)	0.006*** (0.001)	0.002*** (0.000)	0.001 (0.003)	-0.008*** (0.002)	-0.003*** (0.001)
Household demographic structure	YES	YES	YES	YES	YES	YES	YES
Macroeconomic variables	YES	YES	YES	YES	YES	YES	YES
Observations	20,032	20,032	20,032	20,032	20,032	20,032	20,032
R-squared	0.140	0.216	0.171	0.102	0.120	0.099	0.128

Robust standard errors in parentheses are calculated by clustering over city level. * significant at 10%; ** significant at 5%; *** significant at 1%.

(1) Year dummies and city dummies are controlled in all columns.

(2) Household demographic structure includes family size, ratio of male family members aged 0-6, 7-18, 19-60, and above 60, ratio of female family members aged 0-6, 7-18, and 19-60. Ratio of female family members aged above 60 is omitted to avoid multi-collinearity. Macroeconomic variables include log GDP per capita, GDP growth rate, ratio of GDP in primary industry, ratio of GDP in secondary industry, log average wage in city level, ratio of SOE employees.

Appendix Table 11 Impact of Local Marriage Market on Intra-household Resource Allocation and Intergenerational Investment, Reduced Form

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Share of Expenditures on:						
	Children education	Children clothes	Women clothes	Cosmetics	Men clothes	Cigarette	Alcohol
Post*Mig_density1990	-0.461** (0.195)	-0.095** (0.036)	-0.292** (0.134)	-0.059** (0.028)	0.322*** (0.115)	0.487* (0.256)	0.122* (0.064)
Husband's age	-0.001 (0.002)	-0.001* (0.000)	0.001 (0.001)	-0.001*** (0.000)	-0.002 (0.001)	-0.003 (0.003)	-0.001 (0.001)
Wife's age	0.002 (0.002)	-0.002*** (0.000)	-0.006*** (0.001)	-0.000 (0.000)	-0.001 (0.001)	-0.006* (0.003)	-0.001 (0.001)
Husband's schooling years	-0.004 (0.003)	0.002*** (0.000)	0.005*** (0.001)	0.000 (0.000)	0.005*** (0.001)	-0.021*** (0.004)	-0.004*** (0.001)
Wife's schooling years	0.004* (0.002)	0.001** (0.000)	0.010*** (0.001)	0.001*** (0.000)	0.006*** (0.001)	-0.017*** (0.004)	-0.005*** (0.001)
Ln(total expenditures per capita)	0.006** (0.003)	-0.001*** (0.000)	0.007*** (0.001)	0.001*** (0.000)	0.001 (0.003)	-0.009*** (0.003)	-0.003** (0.001)
Household demographic structure	YES	YES	YES	YES	YES	YES	YES
Macroeconomic variables	YES	YES	YES	YES	YES	YES	YES
Observations	10,157	10,157	10,157	10,157	10,157	10,157	10,157
R-squared	0.161	0.217	0.162	0.113	0.111	0.103	0.134

Robust standard errors in parentheses are calculated by clustering over city level. * significant at 10%; ** significant at 5%; *** significant at 1%.

(1) Year dummies and city dummies are controlled in all columns.

(2) Household demographic structure includes family size, ratio of male family members aged 0-6, 7-18, 19-60, and above 60, ratio of female family members aged 0-6, 7-18, and 19-60. Ratio of female family members aged above 60 is omitted to avoid multi-collinearity. Macroeconomic variables include log GDP per capita, GDP growth rate, ratio of GDP in primary industry, ratio of GDP in secondary industry, log average wage in city level, ratio of SOE employees.

Appendix Table 12 IV Regressions with Initial City Level Variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Share of expenditures on:						
	Children education	Children clothes	Women clothes	Cosmetics	Men clothes	Cigarette	Alcohol
Post*Mig_density2000 (Post*Mig_density1990 as IV)	-0.066*** (0.021)	-0.012*** (0.004)	-0.038** (0.018)	-0.007** (0.003)	0.037** (0.017)	0.066** (0.030)	0.015** (0.007)
Husband's age	-0.001 (0.002)	-0.001* (0.000)	0.001 (0.001)	-0.001*** (0.000)	-0.002 (0.001)	-0.003 (0.003)	-0.001 (0.001)
Wife's age	0.002 (0.002)	-0.002*** (0.000)	-0.006*** (0.001)	-0.000* (0.000)	-0.001 (0.001)	-0.006* (0.003)	-0.000 (0.001)
Husband's schooling years	-0.004 (0.003)	0.002*** (0.000)	0.005*** (0.001)	0.000 (0.000)	0.005*** (0.001)	-0.021*** (0.004)	-0.004*** (0.001)
Wife's schooling years	0.004 (0.002)	0.001** (0.000)	0.010*** (0.001)	0.001*** (0.000)	0.006*** (0.001)	-0.017*** (0.004)	-0.005*** (0.001)
Ln(total expenditures per capita)	0.006** (0.003)	-0.001*** (0.000)	0.007*** (0.001)	0.001*** (0.000)	0.000 (0.003)	-0.009*** (0.003)	-0.003** (0.001)
Household demographic structure	YES	YES	YES	YES	YES	YES	YES
Macroeconomic variables	YES	YES	YES	YES	YES	YES	YES
Post*City variables in 1994	YES	YES	YES	YES	YES	YES	YES
Observations	10,157	10,157	10,157	10,157	10,157	10,157	10,157
R-squared	0.162	0.217	0.160	0.113	0.110	0.103	0.134

Robust standard errors in parentheses are calculated by clustering over city level. * significant at 10%; ** significant at 5%; *** significant at 1%.

(1) Year dummies and city dummies are controlled in all columns.

(2) Household demographic structure includes family size, ratio of male family members aged 0-6, 7-18, 19-60, and above 60, ratio of female family members aged 0-6, 7-18, and 19-60. Ratio of female family members aged above 60 is omitted to avoid multi-collinearity. Macroeconomic variables include log GDP per capita, GDP growth rate, ratio of GDP in primary industry, ratio of GDP in secondary industry, log average wage in city level, and ratio of SOE employees.

(3) City variables in 1994 include log GDP per capita in 1994 and urban employment rate in 1994.

Appendix Table 13 Using Households Having More Than One Child

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Share of expenditures on:						
	Children education	Children clothes	Women clothes	Cosmetics	Men clothes	Cigarette	Alcohol
Post*Mig_density2000 (Post*Mig_density1990 as IV)	-0.000 (0.131)	-0.047 (0.046)	0.083 (0.106)	0.022 (0.028)	0.040 (0.073)	-0.037 (0.136)	0.003 (0.037)
Husband's age	-0.003 (0.007)	-0.001 (0.001)	0.000 (0.003)	-0.001 (0.001)	-0.000 (0.003)	-0.004 (0.007)	-0.000 (0.002)
Wife's age	-0.004 (0.006)	-0.001 (0.001)	-0.004 (0.003)	0.000 (0.001)	-0.002 (0.003)	-0.002 (0.007)	-0.000 (0.002)
Husband's schooling years	0.011 (0.007)	0.002* (0.001)	-0.004 (0.002)	-0.000 (0.001)	0.004* (0.002)	-0.012 (0.008)	-0.002 (0.002)
Wife's schooling years	-0.001 (0.006)	-0.000 (0.001)	0.009*** (0.003)	0.001** (0.001)	0.007** (0.003)	-0.014* (0.007)	-0.005 (0.003)
Ln(total expenditures per capita)	0.011** (0.005)	-0.000 (0.000)	0.010*** (0.002)	0.001*** (0.000)	0.001 (0.004)	-0.002 (0.006)	-0.000 (0.002)
Household demographic structure	YES	YES	YES	YES	YES	YES	YES
Macroeconomic variables	YES	YES	YES	YES	YES	YES	YES
Post*City variables in 1994	YES	YES	YES	YES	YES	YES	YES
Observations	1,380	1,380	1,380	1,380	1,380	1,380	1,380
R-squared	0.259	0.207	0.231	0.135	0.134	0.159	0.184

Robust standard errors in parentheses are calculated by clustering over city level. * significant at 10%; ** significant at 5%; *** significant at 1%.

(1) Year dummies and city dummies are controlled in all columns.

(2) Household demographic structure includes family size, ratio of male family members aged 0-6, 7-18, 19-60, and above 60, ratio of female family members aged 0-6, 7-18, and 19-60. Ratio of female family members aged above 60 is omitted to avoid multi-collinearity. Macroeconomic variables include log GDP per capita, GDP growth rate, ratio of GDP in primary industry, ratio of GDP in secondary industry, log average wage in city level, and ratio of SOE employees.

(3) City variables in 1994 include log GDP per capita in 1994 and urban employment rate in 1994.

Appendix Table 14 Heterogeneous Effects Regarding Guang Dong and Beijing

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Share of expenditures on:						
	Children education	Children clothes	Women clothes	Cosmetics	Men clothes	Cigarette	Alcohol
Post*Mig_density2000*Guangdong and Beijing (Post*Mig_density1990*Guangdong and Beijing as IV)	-0.175 (0.592)	0.065 (0.203)	0.056 (0.455)	-0.093 (0.235)	0.182 (0.677)	-0.204 (1.277)	-0.114 (0.475)
Post*Mig_density2000 (Post*Mig_density1990 as IV)	0.072 (0.533)	-0.067 (0.184)	-0.045 (0.412)	0.066 (0.213)	-0.141 (0.614)	0.284 (1.154)	0.100 (0.429)
Post*Guangdong	0.010 (0.030)	-0.002 (0.010)	-0.008 (0.022)	0.007 (0.012)	-0.014 (0.034)	0.005 (0.065)	0.007 (0.024)
Post*Beijing	0.013 (0.033)	-0.004 (0.011)	-0.010 (0.024)	0.007 (0.013)	-0.009 (0.037)	0.007 (0.071)	0.009 (0.026)
Husband's age	-0.000 (0.002)	-0.001* (0.000)	0.001 (0.002)	-0.001*** (0.000)	-0.002 (0.001)	-0.003 (0.004)	-0.001 (0.001)
Wife's age	0.002 (0.002)	-0.002*** (0.000)	-0.006*** (0.001)	-0.000 (0.000)	-0.001 (0.001)	-0.006 (0.004)	-0.001 (0.001)
Husband's schooling years	-0.004 (0.003)	0.002*** (0.000)	0.005*** (0.001)	0.000 (0.000)	0.005*** (0.001)	-0.021*** (0.004)	-0.004*** (0.001)
Wife's schooling years	0.004 (0.002)	0.001** (0.000)	0.010*** (0.001)	0.001*** (0.000)	0.006*** (0.001)	-0.017*** (0.004)	-0.005*** (0.001)
Ln(total expenditures per capita)	0.006** (0.003)	-0.001*** (0.000)	0.007*** (0.001)	0.001*** (0.000)	0.000 (0.003)	-0.009** (0.004)	-0.003** (0.001)
Household demographic structure	YES	YES	YES	YES	YES	YES	YES
Macroeconomic variables	YES	YES	YES	YES	YES	YES	YES
Post*City variables in 1994	YES	YES	YES	YES	YES	YES	YES
Observations	10,157	10,157	10,157	10,157	10,157	10,157	10,157
R-squared	0.161	0.195	0.159	0.073	0.096	0.091	0.112

Robust standard errors in parentheses are calculated by clustering over city level. * significant at 10%; ** significant at 5%; *** significant at 1%.

(1) Year dummies and city dummies are controlled in all columns.

(2) Household demographic structure includes family size, ratio of male family members aged 0-6, 7-18, 19-60, and above 60, ratio of female family members aged 0-6, 7-18, and 19-60. Ratio of female family members aged above 60 is omitted to avoid multi-collinearity. Macroeconomic variables include log GDP per capita, GDP growth rate, ratio of GDP in primary industry, ratio of GDP in secondary industry, log average wage in city level, and ratio of SOE employees.

(3) City variables in 1994 include log GDP per capita in 1994 and urban employment rate in 1994.

Appendix Table 15 Impact of the Policy on City Divorce Rates

	(1)	(2)	(3)
	Δ Divorce Rate between 1990 and 2000		
Mig_density1990	0.514* (0.294)		
Mig_density2000		0.008 (0.009)	
Mig_density2000 (Mig_density1990 as an IV)			0.122 (0.073)
Constant	0.004*** (0.001)	0.005*** (0.001)	0.008* (0.004)
Observations	47	47	47
R-squared	0.056	0.011	

Robust standard errors are in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

(1) Divorce rate is calculated as the ratio of divorced individuals over those who ever married, using data from 1990 and 2000 population census.

Appendix Table 16 Heterogeneous Effects in Terms of the Ages of Spouses

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Share of Expenditures on:						
	Children education	Children clothes	Women clothes	Cosmetics	Men clothes	Cigarette	Alcohol
Post*Mig_density2000*Both younger than 40 (Post*Mig_density1990*Both younger than 40 as an IV)	-0.186*** (0.058)	-0.044*** (0.009)	-0.014 (0.043)	-0.016 (0.012)	0.010 (0.033)	0.118* (0.067)	0.032 (0.023)
Post*Mig_density2000 (Post*Mig_density1990 as an IV)	-0.014 (0.029)	-0.007** (0.003)	-0.028* (0.017)	-0.005 (0.005)	0.034** (0.017)	0.035 (0.041)	0.009 (0.011)
Mig_density2000*Both younger than 40 (Mig_density1990*Both younger than 40 as an IV)	0.233* (0.121)	0.017*** (0.005)	-0.001 (0.015)	0.015*** (0.005)	-0.029** (0.015)	-0.120* (0.070)	-0.030 (0.018)
Post*Both younger than 40	0.015*** (0.005)	0.003*** (0.001)	0.008*** (0.003)	0.001 (0.001)	-0.001 (0.002)	-0.007 (0.006)	-0.002 (0.001)
Both younger than 40	-0.058*** (0.007)	0.007*** (0.001)	-0.005*** (0.002)	-0.001** (0.001)	-0.002 (0.002)	0.009* (0.005)	0.004*** (0.001)
Husband's age	-0.006** (0.003)	0.000 (0.000)	0.001 (0.002)	-0.001*** (0.000)	-0.002 (0.001)	-0.004 (0.003)	-0.001 (0.001)
Wife's age	-0.010*** (0.002)	0.000 (0.000)	-0.007*** (0.002)	-0.000 (0.000)	-0.003** (0.001)	-0.004 (0.004)	0.000 (0.001)
Husband's schooling years	0.002 (0.003)	0.001** (0.000)	0.005*** (0.001)	0.000 (0.000)	0.005*** (0.001)	-0.021*** (0.004)	-0.005*** (0.001)
Wife's schooling years	0.004 (0.002)	0.001*** (0.000)	0.010*** (0.001)	0.001*** (0.000)	0.006*** (0.001)	-0.017*** (0.004)	-0.004*** (0.001)
Ln(total expenditures per capita)	0.006** (0.003)	-0.001*** (0.000)	0.006*** (0.001)	0.001*** (0.000)	-0.000 (0.003)	-0.009*** (0.003)	-0.003** (0.001)
Household demographic structure	YES	YES	YES	YES	YES	YES	YES
Macroeconomic variables	YES	YES	YES	YES	YES	YES	YES
Observations	9,386	9,386	9,386	9,386	9,386	9,386	9,386
R-squared	0.181	0.277	0.165	0.114	0.114	0.102	0.131

Robust standard errors in parentheses are calculated by clustering over city level. * significant at 10%; ** significant at 5%; *** significant at 1%.

(1) Year dummies and city dummies are controlled in all columns.

(2) Household demographic structure includes family size, ratio of male family members aged 0-6, 7-18, 19-60, and above 60, ratio of female family members aged 0-6, 7-18, and 19-60. Ratio of female family members aged above 60 is omitted to avoid multi-collinearity. Macroeconomic variables include log GDP per capita, GDP growth rate, ratio of GDP in primary industry, ratio of GDP in secondary industry, log average wage in city level, and ratio of SOE employees.

(3) The sample used in this table includes households whose spouses are both younger than 40 or both older than (or equal to) 40.