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# Marrying Minorities for More Children: One Child Policy and Cross-Ethnic Marriage in China

(Extended Abstract)

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ABSTRACT: “Marrying Minorities for More Children: One Child Policy and Cross-Ethnic Marriage in China”

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In most parts of China, couples with at least one side being an ethnic minority are allowed to give birth to two or more babies. We investigate how this privilege enhances minority groups' value in the marriage market. For the Han people with strong quantity preference or gender preference, this policy will strengthen their incentive to marry minority individuals. This is especially the case because, as the fine for violating the one-child policy has increased, so has the incentive to marry minority individuals. Using the variation of fines across different places and times to perform difference-in-difference tests on the effects of the one-child policy with marriage, we find that the proportion of Han-minority marriages increased significantly after local governments increased the fine. We also find that the education level of Han people in new Han-minority families decreased after the fine increased, which implies that a strong selection effect exists in marriage matching.

**Keyword:** interethnic marriage, family planning, China

## 1. Introduction

According to official classification, the population of China is composed of 56 ethnic groups, among which the Han group takes a dominant share of more than 90%. As China becomes more regionally integrated, increasing numbers of Han people migrate to regions originally occupied by minority groups. Even though it has been officially announced that all of the ethnic groups are offspring of the same status, ethnic tension is still one of the greatest internal challenges for the central government. The dominance in number and status of the Han group makes it more acceptable to offer some privileges to minority groups. On the other hand, the dominance in number of the Han group also ensures that the benefits of these privileges are limited to a small population. The benefits included priority in college entrance, in promotion within government agencies, and in family planning policies as well.

As early as the 1950s, some scholars started to worry about the high fertility rate in China and argued that it might impede economic growth. In particular, the failure of the “Great Leap Forward” forced the central government to use population size as one excuse for the failure. Since the early 1970s, China initiated a campaign for family planning with the slogan “Later, longer and fewer.” A series of policies were conducted to encourage marrying later, waiting longer between births, and having fewer children. At first, people in minority groups were exempted from all of these policies. This rationale behind such an exemption was mainly due to concerns about intensifying ethnic tension.

At the end of 1970s, a group headed by Song Jian, an expert in control theory, conducted a series of simulations on the population growth of China and submitted a report to the central government. In this report, the group insisted that China’s population had greatly exceeded its optimal size and suggested that one child per couple is the only way to the nation’s modernization. If this policy is followed, in 2060, the population size of China will reduce to 600-800 million, which was regarded as the optimal size for development in the group’s report.

In 1978, the China Youth League wrote an open letter to inform young couples that China was facing great threats from population growth and the only way to economic development was to only having one child per couple. In 1979, the one-child policy formally became an official limitation. Though ethnic minorities were not fully exempted from the one-child policy, they were to follow specific guidelines. Specifically, a second-child permit was granted to people belonging to ethnic groups comprised of fewer than ten million people. In fact, only the Zhuang ethnic group had a population larger than ten million, which was still only 2% of the whole population. A potential explanation is that the Zhuang ethnic group was integrated into the “Central Kingdom” of the Qin Dynasty as early as 2,000 years ago. The long history of cultural exchanges makes Han-Zhuang ethnic tension weaker than that of some other ethnic groups who were integrated later.

In the beginning, the one-child policy was strictly implemented and received wide criticism from internal and international scholars. Also, the implementation of the one-child policy encountered huge difficulties and resistance in rural areas. In 1984, the Secretariat of the Central Commission implemented a “conditional two-child policy,” which stipulated that rural couples could have a second birth if the first child is a girl. However, this didn’t mean that the one-child policy had totally lost support from Chinese society. Because almost all media in China were controlled by the government, the idea that “the national condition of having the world’s largest population size is responsible for the poverty in China” was accepted by most Chinese people. In fact, a survey of women in Beijing and Liaoning in 1989 indicated that over 83% of those surveyed agreed that “the nation has to adopt a policy to control population,” and over 85% agreed that “the individual must voluntarily submit to the policy of the nation” (Scharping, 2003).

However, due to information asymmetry, some local governments continued to implement a strict one-child policy in rural areas even after the “conditional two-child policy” was announced. This might be due to the official promotion mechanism in China. The political

system of China is quite different from those in Western countries. The central government holds the power to appoint the political leaders at the provincial level, while the local officials retain sufficient liberty in terms of policy implementation after being appointed. As Li and Zhou (2005) argued, the central government uses a tournament strategy to motivate local officials to work toward its goals. To put it simply, local officials would be ranked based on some statistical numbers, and their future opportunities of promotion would be determined by this rank. It's just like a tournament in which the winner usually takes all. Since the one-child policy was initiated, the birth rate decline became an important dimension of the whole evaluation. In some official documents, how the one-child policy was implemented was stated as a "one-ticket veto" in evaluating each local official's performance. Thus, the fierce competition among local officials provided strong incentive for them to continue implementing the one-child policy strictly even though the central government announced a relaxation of the policy, since local governments were also granted the authority to design their own policies in detail. However, interethnic peace is an even more important dimension in evaluating local officials' performance, especially for Minority Autonomous Regions such as Inner Mongolia, Xinjiang, and Tibet. Thus, in most cases, the local government permitted minority families to have two children but treated Han families strictly.

Though Han people often have feelings of superiority and think of themselves as more cultivated than minority people, interethnic marriage has a long history in China. For example, in cases where the Han people found that the military power of minority people was threatening the safety of their empire, a princess might marry the leader of a minority nation in exchange for peace. Figure 1 from Butera and Thierry (2012) shows that the shares of interethnic marriage in most provinces of China increased from 1990 to 2005. In their argument, the one-child policy may play a role in this trend through the channel of sex ratio. That is, the one-child policy distorted the sex ratio of Han people more and minority women have more opportunities to marry up into Han families. In the other words, men in minority groups will share the costs of an imbalanced sex ratio in the Han group indirectly. Their work mainly

focuses on such an indirect effect of the one-child policy, which happened several decades later after family planning policies were implemented. In contrast to Butera and Thierry (2012), this paper focuses on the direct effect. The permitting of two or more children to families with a minority member would make minority people more valuable in the marriage market. Moreover, this permit is only valued by Han people. Furthermore, Butera and Thierry's article (2012) potentially has the endogeneity problem. The positive association between sex ratio and interethnic marriage they found may be only correlation but not causality.

[Insert Figure 1]

This paper investigates the effects of the one-child policy on interethnic marriage in China. To solve the endogeneity problems, we employ the changes of fine on the provincial level as an exogenous shock to test our hypothesis. Our results show that when the amount of fine for violating the one-child policy increased, mixed marriages became more likely to happen. It's consistent with our hypothesis that exemptions for minority members add value to minority members in the marriage market. The larger the amount of fine implemented, the more value is added. We are also interested in the question of how the one-child policy affects the composition of mixed families. More specifically, under such family planning policies, would minority members marry better partners or worse ones? We propose that two effects may exist at the same time. The first one is a purchasing power effect. That is, after becoming more valuable in the marriage market, minority people can afford partners of better quality. However, the child preference of Han people is heterogeneous, and the heterogeneity may be correlated with the quality of the potential partner. For example, people who live in urban areas or are better educated usually have lower demand on the quantity of children. However, resident status and education are both important dimensions of partner quality in China. Then, a selection effect also exists. In contrast, the selection effect predicts that minority members would marry Han people with lower education achievement levels. Our empirical results show that minority people were more likely to marry less educated Han people after the level of fine

increased. This implies that the selection effect is much stronger and offsets the positive purchasing power effect. The empirical strategy used for our purpose is difference-in-difference (DID) estimation. In short, the DID method is to compare the ratio of mixed couples after the change of fine level with that before the change. In all cases, the provincial region increased the level of fine. The rationale behind such increases can be explained by the tournament of promotion discussed before. Admittedly, one potential drawback in our estimation is that the occurrence of policy changes may not be exogenous. The decision of whether and when to strengthen the punishment for violating the one-child policy is also affected by the proportion of people violating the one-child policy and by the regional ethnic composition.

## 2. Literature Review

During the 1970s, the fertility rate in China had experienced a rapid decline. As Qian (2009) stated in her paper, the Chinese government offered economic incentives to parents who spaced their children's births over four years apart. In general, the one-child policy was started in 1979 and its enforcement has gradually tightened since then (Croll et al., 1985; Banister, 1987). Family planning was written into the Constitution in 1978 for the first time, and more details were added in the 1982 amended Constitution (Wang, 2012).

The central government allowed regional variations in the details of family planning policies, such as monetary penalties or subsidies (Greenlaugh, 1986). The one-child policy fine is formulated in multiples of local annual income (2011). Though monetary penalty is not the only tool for the one-child policy, it can be a good proxy for regional strictness. The annual data on provincial fines is from Ebenstein (2008). Figure 2 shows the pattern of fines for nine provinces from 1980-2000. From Figure 2, we can see that the changes occurred in different years diversely and the monetary punishment increased in most cases. The most significant change happened to Guangxi and Guizhou, and the fine increased from one-year annual

income to five-year annual income. Such a magnitude of change in fine would exert some influence on people's behavior in marriage market.

As other East Asian countries do, China has a long tradition of son preference, which may be explained by the deeply rooted Confucian value system (Attané, 2006). In some societies of China, only sons are regarded as descendants who would take on the responsibility of formally supporting elderly parents. Being sonless is thought to be extremely pathetic. Under conditions where selective abortion is not available or is costly, marrying a minority to gain an exemption for the one-child policy became an alternative way to enjoy more chances of having a son. Anderson and Leo (2009) discussed the possibility that the implementations of the OCP (one-child policy) have affected the formation of families in urban China. Their story is quite similar to ours. The OCP's restrictions and minority exemptions have added another dimension of consideration for marriageable-aged males and females making marriage decisions.

[Insert Figure 1]

### 3. Data and Analysis

Using data from the 2000 China census, Table 1 shows that the proportions of mixed marriages are around 2.2% of the total population and 3.1% of the married population. Here, mixed marriage is defined as a couple with one Han person and one minority person. Interethnic marriage of two different minority people is not counted because its sample size is relatively small. From the first column of Table 1, we can see that more than 80% of married couples are of both-Han type. The share of couples with one minority is around 2.5% in age groups above 40, and around 2.8% in age groups between 30-40. The minority wife and Han husband couple takes up a slightly larger share than the Han wife and minority husband couple. This supports the argument that the imbalanced sex ratio in the Han group pushes some Han people to search for their wives from minority societies.

[insert Table 1]

The exemption-of-one-child policy is only one dimension of the benefits provided to minority groups. Other benefits include bonus points in college entrance exams and promotion priority in government agencies. As discussed before, to relieve the worry of eliminating minority groups by interethnic marriage, the central government also allows children in mixed marriages to choose the mother's ethnic identity or the father's ethnic identity at their discretion. Table 2 shows the distribution of ethnic choices by children under nine years old. Obviously, if the mother is from the Han group and the father is from a minority group, their children would have around a 90% probability of identifying themselves as minority people. However, for mixed families with a minority wife and a Han husband, this probability is as low as one-half. It can be explained by some cultural traditions of patriarchal society in which children are regarded as more strongly connected with their fathers.

[insert Table 2]

We also compared the mean age of different marriage patterns in Figure 3. In general, marriages between minority individuals, regardless of whether they are interethnic or intraethnic marriages, have a mean age of marriage that is younger than that of other marriage patterns. However, the mean age of Han-minority marriages is no less than that of both-Han marriages. A possible reason is that some people meet their partners from other ethnic groups on college campuses; furthermore, higher-educated people tend to marry later.

[insert Table 3]

#### **4. Empirical Methods and Results**

Our one-child policy data is from Ebenstein (2010) and it was widely used in recent studies on China's one-child policy (Li et al., 2012; Huang et al., 2012). Ebenstein (2010) examines data on

regional and temporal variation in fines at the provincial level for unauthorized births and finds that higher-fine regimes are associated with higher sex ratios but lower fertility. Huang et al. (2012) investigate the one-child policy's effects on twins, and the results show that the policy fine is positively associated with twin incidences. It means people are more likely to falsely report two consecutive births as a twin when the fine on unauthorized birth becomes higher. This story is somehow consistent with our hypothesis that an individual's family behaviors may be affected by changes in fine policy.

Table 3 shows the results of logit regression on marriages of three types: both Han, interethnic and both minority. As mentioned before, "interethnic" here only includes couples of one Han and one minority member. Marriages of people from two ethnic groups are counted as "both minor" type. For each regression, the individual's education, age and resident status are controlled. To make the results more robust, we also ran regressions with the fine level of last year in the second regression of each year controlled (the lagged fine is indexed as "fine\_1"). The results show that more interethnic marriages happened as the fine on unauthorized birth increased, though the coefficient in the second regression is not statistically significant. Moreover, we find that marriages of the "both minority" type significantly decreased and the marriages of the "both Han" type also decreased, but not significantly. The results support our hypothesis that stricter monetary punishment, when authorized, will induce more interethnic marriages instead of intraethnic marriages.

[insert Table 3]

We also investigate how policy changes affect the average education of mixed marriages. If the purchasing power effect is stronger than the selection effect, a positive association is expected. Otherwise, a negative association is expected. Table 4 shows the results of our regression. In this regression, only mixed marriages and both-Han marriages are included in our sample. An interaction variable is constructed by interacting the fine with marriage type (mixed marriages

are indexed as “1” and both-Han marriages are indexed as “0”). We find a negative coefficient of the interaction variable. This means higher fines on unauthorized births leads to the decline of the Han partner’s educational achievement in a mixed marriage. It implies that the selection effect dominated the purchasing power effect. We also include a one-year lag of fine level and its interaction with marriage type for a robustness check. The significance disappears in the new regression, but the sign of coefficient is unchanged. Consistent with common sense, male and urban residents would be expected to be the best educated. Also, couples in a mixed marriage have higher educational achievements than those in a both-Han marriage. As explained before, it may be caused by a selection effect that education provides opportunities for minority members to meet Han people on campus or in the workplace.

[insert Table 4]

## 5. Conclusion

This paper investigates how China’s one-child policy and minority exemptions affect interethnic marriage. We employ the changes of monetary punishment on the provincial level as an exogenous shock to test our hypotheses. The results show that strengthening the punishment for unauthorized second births would encourage more mixed marriages. We also find that the average educational achievement of a Han partner in a mixed marriage significantly declined as the fine increased. Such a phenomenon may be explained by selection effect that low-educated individuals have stronger preferences for sons or the quantity of children.

Compared with selective abortion, marrying a minority doesn’t affect the balance of sex ratio. On the other hand, interethnic marriages may promote interethnic exchange between the Han group and minority groups. However, some people also worry about the loss of minority identities. According to related laws, couples have the liberty of choosing their children’s ethnic identity, either following the father or following the mother. Also, when the child grows up to be over 18 years old, he or she can change the ethnic identity upon his or her own

decision. As mentioned before, minority members also enjoy the benefits in terms of education and promotion. Thus, these policies will increase the size of minority groups in the context of increasing interethnic marriage. However, they may only promote the nominated identities of minority members but not the social identities, which are more likely to be determined by other factors (Hout & Goldstein, 1994).

Our paper also has some limitations. First, the occurrence of policy changes in monetary punishment may not be exogenous but instead may have correlation with other factors that also affect interethnic marriages. Second, our estimations implicitly assume that there is no inter-provincial migration, yet the ratio of marriage migration has continued to increase since the reform in 1978. Between the years of 1985 and 1990 alone, 2.9 million Chinese women migrated for marriage reasons across boundaries (Davin, 2005). We don't think the problem of migration is big enough to change our conclusions. At the same time, some research also shows that during most of the time of our data, especially for rural China, most marriages happened in local areas (Fan & Li, 2002). Third, education, the proxy of a partner's quality, also may be correlated with interethnic marriage. For example, using data in the United States, Mamet (2005) finds that higher education tends to increase the chances of intermarriage among young adults of ethnic minority backgrounds. All of these listed problems may impact the validity of our exogenous variable, but we don't think they are severe enough to invalidate our conclusions.

## Reference:

- [1] Anderson, Gordon, and Teng Wah Leo. "The One Child Policy and Family Formation in Urban China." (2007).
- [2] Attané, Isabelle. "The demographic impact of a female deficit in China, 2000–2050." *Population and Development Review* 32, no. 4 (2006): 755-770.
- [3] Banister, Judith. *China's changing population*. Stanford University Press, 1991.
- [4] Butera, Rachel, and Thierry Warin. "Chinese Interethnic Marriage: Passion or Rational Choice?" *International Journal of Economics and Business Research* (2012).
- [5] Croll, Elisabeth J., Delia Davin, and Penny Kane. *China's one-child family policy*. Macmillan, 1985.
- [6] Davin, Delia. "Marriage Migration in China The Enlargement of Marriage Markets in the Era of Market Reforms." *Indian Journal of Gender Studies* 12, no. 2-3 (2005): 173-188.
- [7] Ebenstein, Avraham. "The "Missing Girls" of China and the unintended consequences of the one child policy." *Journal of Human Resources* 45, no. 1 (2010): 87-115.
- [8] Fan, C. Cindy, and Ling Li. "Marriage and migration in transitional China: a field study of Gaozhou, western Guangdong." *Environment and Planning A* 34, no. 4 (2002): 619-638.
- [9] Greenhalgh, Susan. "Shifts in China's population policy, 1984-86: Views from the central, provincial, and local levels." *Population and Development Review* (1986): 491-515.
- [10] Hout, Michael, and Joshua R. Goldstein. "How 4.5 million Irish immigrants became 40 million Irish Americans: Demographic and subjective aspects of the ethnic composition of white Americans." *American Sociological Review* (1994): 64-82.
- [11] Huang, Wei, Xiaoyan Lei and Yaohui Zhao. "Are there man-made twins? One-child policy and twin incidences". Working paper (2012)
- [12] Li, H. B., and L. A. Zhou. "Political Turnover and Economic Performance: The Incentive Role of Personnel Control in China". *Journal of Public Economics* 89, no. 9-10 (Sep 2005): 1743-62.
- [13] Li, Hongbin, Junjian Yi, and Junsen Zhang. "Estimating the Effect of the One-Child Policy on the Sex Ratio Imbalance in China: Identification Based on the Difference-in-Differences." *Demography* 48, no. 4 (2011): 1535-1557.
- [14] Qian, Nancy. *Quantity-quality and the one child policy: The only-child disadvantage in school enrollment in rural China*. No. w14973. National Bureau of Economic Research, 2009.
- [15] Scharping, Thomas. *Birth control in China, 1949-2000*. Routledge, 2003.
- [16] Wang, Fei. "Family planning policy in China: measurement and impact on fertility", PAA paper, 2012.
- [17] Wei, Shang-Jin, and Xiaobo Zhang. "The Competitive Saving Motive: Evidence from Rising Sex Ratios and Savings Rates in China." *Journal of Political Economy* 119, no. 3 (2011).

**Figure 1. Interethnic Marriage Rates (as Estimated by Biethnic Households)**

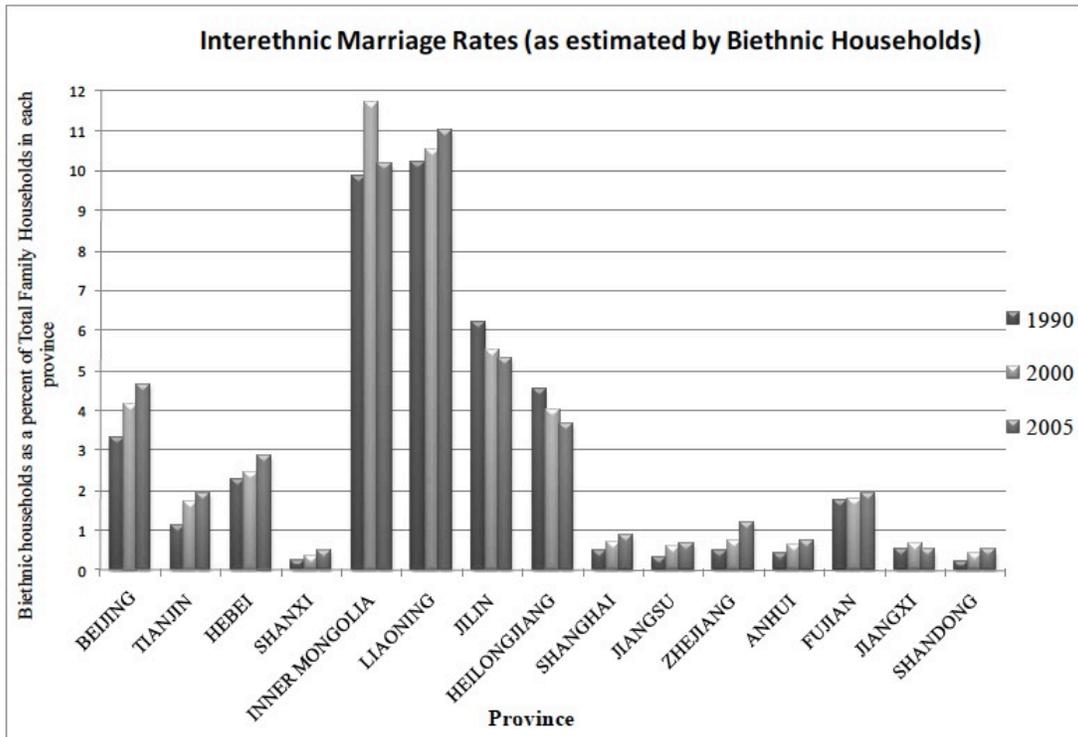


Fig 2a. One-Child Policy Fine

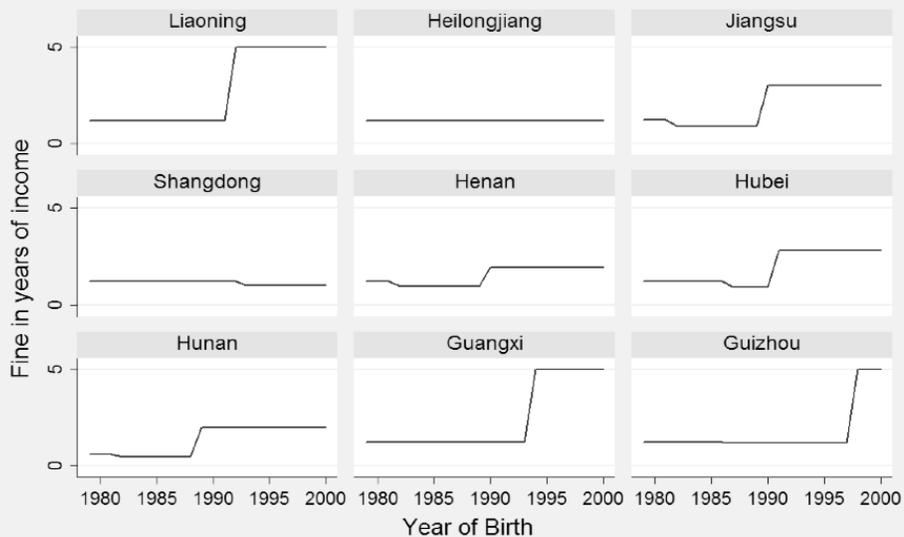
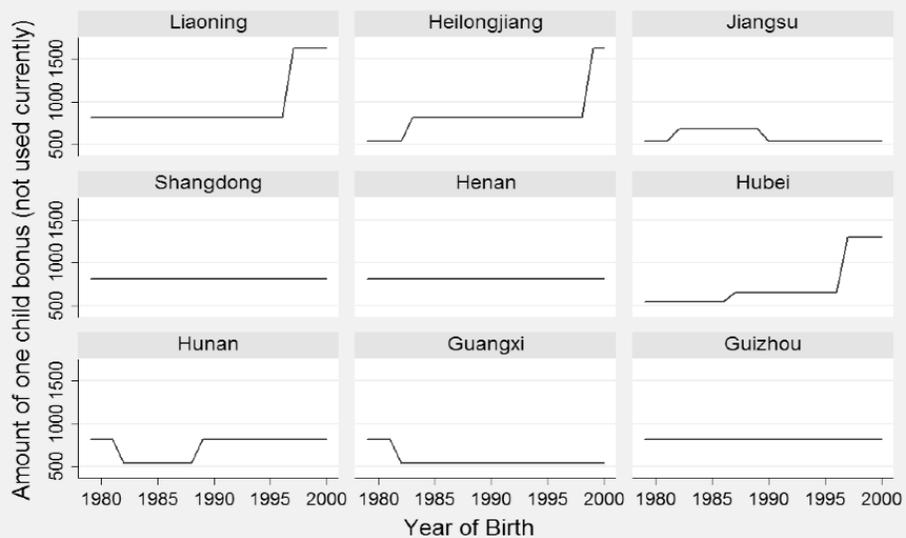
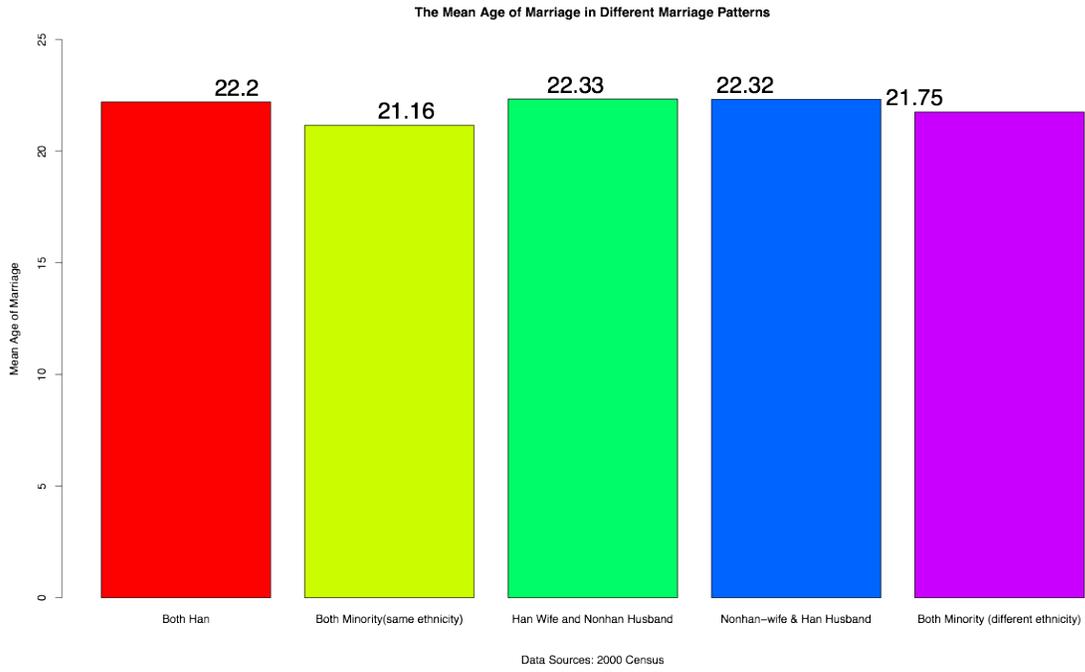


Fig 2b. One-Child Policy Bonus



Graphs by province

**Figure 3. The Mean Age of Marriage (female) in Different Patterns**



**Table 1. The Ratio of Mixed Marriage (China Census, 2000)**

Age Group	Both Han	Both Minority (same ethnicity)	Han-Wife & Nonhan-Husband	Nonhan-Wife & Han-Husband	Both Minority (different ethnicity)	Single	Can't Match
15-19	0.6	0.3	0.0	0.1	0.0	98.9	0.1
20-24	31.4	3.8	0.7	0.9	0.3	57.2	5.8
25-29	71.2	5.4	1.1	1.6	0.4	9.5	10.8
30-34	80.3	5.2	1.2	1.6	0.3	2.7	8.7
35-39	81.8	5.2	1.2	1.6	0.3	2.6	7.4
40-44	83.3	5.1	1.3	1.4	0.2	3.3	5.4
45-49	83.5	4.7	1.1	1.2	0.2	4.1	5.3
<b>Total</b>	62.7	4.3	1.0	1.2	0.3	24.2	6.5
<b>Total Number</b>	205504	14104	3142	3956	824	79230	21247

**Table 2. The Ethnic Identification of Kids in Mixed Families (China Census, 2000)**

	Both Han	Han Mom and Non-han Dad	Non-Han Mom & Han Dad
<b>Age</b>	64.8	88.1	49.24
<b>0</b>	71.1	91.7	57.28
<b>1</b>	68.8	93	54.09
<b>2</b>	69.7	93.7	53.49
<b>3</b>	67.1	88.3	53.20
<b>4</b>	66.7	92.5	49.46
<b>5</b>	67	88.5	52.92
<b>6</b>	66.9	89.1	48.25
<b>7</b>	68.3	94.7	50.78
<b>9</b>	64.2	91.9	45.91
<b>Total</b>	67.4	91.1	51.31

**Table 3. Empirical Results: fine on unauthorized birth vs. marriage pattern**

Type	(1)	(2)	(3)	(4)	(5)	(6)
	Both Han	Both Han	Inter-ethnic	Inter-ethnic	Both Minor	Both Minor
<b>fine</b>	-0.0692 (0.0502)	0.00702 (0.0700)	0.248** (0.0983)	0.0916 (0.139)	-0.179*** (0.0552)	-0.0986 (0.0738)
<b>fine_1</b>		-0.104 (0.0820)		0.214 (0.159)		-0.110 (0.0811)
<b>urban</b>	1.734*** (0.317)	1.735*** (0.317)	-0.0435 (0.159)	-0.0436 (0.159)	-1.691*** (0.289)	-1.691*** (0.289)
<b>education dummies</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Year dummies</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Age dummies</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Constant</b>	77.57*** (4.967)	77.57*** (4.968)	-6.042*** (1.536)	-6.034*** (1.527)	28.47*** (5.142)	28.47*** (5.139)
<b>Observations</b>	202,194	202,194	202,194	202,194	202,194	202,194
<b>R-squared</b>	0.065	0.065	0.007	0.007	0.075	0.075
<b>Number of area</b>	345	345	345	345	345	345

**Table 4. Empirical Results: fine on unauthorized birth vs. Han's education**

	(1)	(2)	(3)	(4)
	edu	edu	edu	edu
<b>type</b>	0.0434*** (0.0138)	0.0443*** (0.0138)	0.0455*** (0.0166)	0.0468*** (0.0164)
<b>fineXtype</b>	-0.0142** (0.00721)	-0.00202 (0.0179)	-0.0126 (0.00860)	-0.00154 (0.0186)
<b>fine_1Xtype</b>		-0.0142 (0.0176)		-0.0131 (0.0173)
<b>fine</b>	-0.00350 (0.00253)	-0.00534 (0.00350)	-0.000543 (0.00244)	-0.00311 (0.00348)
<b>fine_1</b>		0.00243 (0.00329)		0.00346 (0.00311)
<b>male</b>	0.468*** (0.0139)	0.468*** (0.0139)	0.421*** (0.0140)	0.421*** (0.0140)
<b>urban</b>	0.309*** (0.00524)	0.309*** (0.00524)	0.307*** (0.00511)	0.307*** (0.00511)
<b>Age dummies</b>	Yes	Yes	Yes	Yes
<b>Year dummies</b>	Yes	Yes	No	No
<b>Observations</b>	373,188	373,188	300,864	300,864
<b>R-squared</b>	0.422	0.422	0.408	0.408
<b>Number of area</b>	345	345	345	345