

Fertility Decisions among ethnic minority groups in China

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I. Introduction and Literature review

As a part preferential policy for ethnic minorities in China, most ethnic minority couples were allowed to have a second child under the One-Child Policy regime (OCP). Meanwhile, their urban Han counterparts could only have one child except for Han couples living in approved areas and tightly-controlled situations (Law of the People's Republic of China on Population and Family Planning, 1978, 1982 and 2001). Well-established evidence shows the OCP played a major role in China's transition to a society with prolonged low fertility, rapid aging and a shortage of females (Cai, 2010 and 2013; Judith, 2004; Ebenstein, 2010). It is less well-known the OCP was not absolute. In addition to allowances for two children among ethnic minority couples, state and local level exemptions of OCP were applied in rural areas.

In 2013, the state council relaxed OCP restrictions in situations where either a husband or wife was from a one-child family. Couples could be approved to have a second child regardless of the "Hukou"¹ status they had. This relaxation is expected to encourage more Han couples to have a second child since they were the main ethnicity had to follow the OCP. However, the evidence (Knodel and Walle, 1979; Montgomery and Casterline, 1993) suggests that the fertility decisions among ethnic minorities may affect by the relaxation as well. When the proportion of couples having a second child or desiring a second child increased, these couples could "pull" more couples toward having a second birth (Kevern and Freese, 2014). Social interactions, and diffusion mattered in Chinese couples' decision making.

On the other hand, given the estimated cost of raising a child now exceeds one million RMB and the intense competition among children in urban China, couples might choose not to have a second child, which exemplifies some perspectives of the Quantity-Quality model (Becker and Lewis, 1973; Becker and Tomes, 1976). As the cost of having children increases parents will have fewer children, investing instead in child "quality".

Being the only child in the family was a new experience for many people born after the 1980s in urban areas of China; this experience shaped and changed their behaviors and childbearing attitudes compared to previous generations. However, less well established is the fertility outcomes for ethnic minorities as a peer effect response to the family planning policies in China. With high levels of migration from rural areas to urban areas (Zhao, 1999) and from Western provinces to Eastern coast provinces (Bao et al., 2007), a non-ignorable proportion of minorities moved to urban areas, where they lived in close association with the Han majority population.

¹ Hukou is the household registration system in China and starts from the 1950s.

The relaxation of the OCP in 2013 was a policy “shock” for Chinese females in their reproductive years. This exogenous shock provides a unique opportunity to understand fertility trends for Chinese couples and to examine whether the fertility decisions of ethnic minorities in China differed from the decisions of the Han majority. A central hypothesis of this paper is testing whether the 2013 OCP relaxation affected the demand for a second child by ethnic minorities relative to Han. The difference in difference (DID) design can isolate the causal effect from the 2013 OCP relaxation. Equation (1) presents the primary DID design. The dependent variable is a binary variable indicating whether the couple has only two children. One indicates the household has two children.

$$Second\ Birth_{it} = \beta_0 + \beta_1(year\ 2013 * Minority) + \beta_2 Minority + X_{it} + \varepsilon_{it} \quad (1)$$

II. Data and Method

This paper provides an empirical analysis of the China Family Panel Studies (CFPS). I utilized the CFPS 2016 Crossyear Database. Beginning in 1984, most couples with rural Hukou already had an exemption from the OCP. To focus on the impact of the policy changes, I therefore only included couples with urban Hukou and couples with rural Hukou transitioning to urban Hukou in my analysis.

In total, CFPS has 8,608 households; 4,462 of these households are either childless or include an eldest child born before 1980. 32.2% households only have one child; they make up the largest share among the identified households. 12.3% of households have two children born after the implementation of OCP. Among all the identified urban households, the average number of children is 1.44, which is slightly higher than the national average. The 2010 China Census² shows that among urban females 15-64 years old, the average number of live births is 1.35. Instead of a complete birth history, **Table 1** is a snapshot of birth history for the household in the year of 2016. It may underestimate the live births the females during reproductive years would have.

VI. Results

The odds ratios of having a second child between Han and ethnic minorities are reported in **Table 2**. Ethnic minorities are more likely to have a second child than their Han peers, and the 2013 OCP relaxation increases the likelihood of having a second child. However, none of the interaction terms between the ethnic minority and the 2013 OCP relaxation was significant among all the model specifications, which leads to a non-rejection of the null hypothesis.

Furthermore, the positive ethnic minority effect disappeared once I controlled for the gender of the first child, the OCP promotion at the community, and added province-level fixed effects. Have a first-born male significantly decreased the likelihood of having a second child, regardless couples’ ethnicity. This negative first-born male effect aligns with the son preferences in the literature. Meanwhile, mother of the child

² Table 2-6 of the “Tabulation on the 2010 Population Census of the People Republic of China.

having at least a bachelor degree largely decreased the likelihood of having a second child. We can reject hypothesis 3.

Table 1: CFPS Urban Sample Distribution by Number of Children in the Household, (2010—16)

Number of Children in the Household	N.	%
1	2,772	32.2
2	1,053	12.23
3	232	2.7
4	61	0.71
5	15	0.17
6	7	0.08
7	4	0.05
8	1	0.01
9	1	0.01
Do not meet the criteria	4,462	51.84
Total	8,608	100

Note: Do not meet the criteria means either the household is childless or the eldest child was born before the starting year (1980) of the OCP.

Table 2: Odds Ratio of Having a Second Child between Han and Ethnic Minorities, CFPS Urban Sample, (2010—16)

	(1)	(2)	(3)	(4)
Ethnic Minority	1.42**	1.37*	1.31	1.37
After the 2013 OCP relaxation (=1 if birth year of a second child >2013)	1.62***	1.83**	2.00***	1.90***
Ethnic Minority * After the 2013 OCP relaxation	0.18	0.17	0.18	0.21
Gender of the first child (=1, if it is a boy)	-	-	0.47***	0.41***
Bachelor and more advanced Degree (=1, if has at least a Bachelor degree)	-	0.19***	0.20***	0.20***
Human Capital	No	Yes	Yes	Yes
Community-level OCP Promotion	No	No	Yes	Yes
Province Fixed Effect	No	No	No	Yes
N	2,427	2,427	2,427	2,419

Note: The robust standard error is used in the analysis.

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