Tradeoff between Entrepreneurship and Lineage: Evidence from China's Nationwide Two-Child Policy*

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ABSTRACT

We study how entrepreneurial choices are influenced by households' child-rearing opportunities. Employing a difference-in-differences approach by exploiting the introduction of China's nationwide two-child policy, we find a decreased (increased) likelihood of entrepreneurial participation (having a child) in households with a married woman aged between 20 and 40 years old. This tradeoff can be attributed to family risk consideration – we document lower revealed risk preference of households experiencing a recent childbirth and find stronger policy effects in households lacking intra-household risk-sharing and in those facing higher uncertainty about career prospects. More importantly, we find that the policy effect is stronger in families with the first child being female due to son preference. Our empirical evidence highlights demographic policy can give rise to unintended consequences in the determent of entrepreneurship.

Keywords: Entrepreneurship, Family Planning Policy, Household Economics, Risk Preference, Intra-household Risk Sharing

JEL Classification: I18, M40, G30, D80, O32

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1 Introduction

As entrepreneurship plays a vital role in economic growth, job creation, and wealth equality (e.g., Schumpeter (2008); Decker et al. (2014); Herranz et al. (2015)), a vast literature has focused on what drives individuals to become entrepreneurs.[1] Many scholars argue that risk associated with entrepreneurship mainly attributes to why individuals are deterred from starting their own business (e.g., Evans and Jovanovic (1989); Manso (2011); Gottlieb et al. (2022)). In particular, one important aspect of household labor decisions, with respect to entrepreneurship, is collective capacity to sustain risk in a household (e.g., Ortigueira and Siassi (2013)). However, much of the previous theoretical and empirical research has centered on risk factors that affect entrepreneurial decisions at the individual level, such as personal income and career prospects. On the other hand, the influence of household-level risk components on a household's entrepreneurial choices appears underexplored and calls for further investigation.

This paper aims to bridge this gap by exploring how household-level collective risk affects entrepreneurial choices. Ranging from financial stability, intra-household risk sharing, and housing security to the well-being of all family members, household-level risk differs from individual-level risk as it involves factors impacting the entire family. As such, there is a growing interest in understanding how family events influence individual members' risk attitudes and economic outcomes. For instance, research shows that fund managers who have experienced family bereavement tend to adopt lower risk strategies (Liu et al. (2023)), and single CEOs might engage in riskier investments to improve their attractiveness in the marriage market (Roussanov and Savor (2014)). These findings suggest that household

[1]For example, studies have identified several key factors that hinder individual entrepreneurial decisions, such as financial constraints, risk tolerance, career risk, entry regulation, and tax policy (e.g., Evans and Jovanovic (1989); Gentry and Hubbard (2000); Hurst and Lusardi (2004); Klapper et al. (2006); Cagetti and De Nardi (2006); Aghion et al. (2007); Manso (2011)).

traits and events are crucial in shaping individuals' job choices (including entrepreneurial decisions), highlighting the need to consider these alongside individual characteristics. Our study focuses on how the child-rearing intention, which is highly favorable in some cultures, influences entrepreneurial choices, highlighting the implications of expected childbirth on household-level risk preference.

A priori, it is unclear how parenthood affects entrepreneurship. On the one hand, families having or expecting a newborn baby may pursue entrepreneurship, seeking greater risk and higher income to support the additional family member. In contrast, they may opt out of entrepreneurship because they need a more stable labor income to cover long-term and substantial commitment.[2] Thus, the extent to which the inclination to childbirth influences household-level risk preference and consequently impacts on households' labor market decisions remains an empirical question. Generally speaking, since entrepreneurial choices and birth choices are endogenously determined in conjunction with each other for the same family, establishing causality between them is difficult.

China provides an ideal setting to examine this research question as it made transition into a new regime by abolishing the one-child policy that lasted for 36 years and introducing the nationwide two-child policy in 2016. Under the previous one-child policy, households were only allowed to have one child, and the violation of the law led to consequences of high financial penalty and loss of employment. However, such restriction was completely removed under the new policy that is applied nationwide in 2016, and each household received the permission to bear two children. Different from prior local or conditional policies,[3]

[2]Risk preference is a critical determinant of entrepreneurship (Hvide and Panos (2014); Kanbur (1979); Kihlstrom and Laffont (1979)) and is dynamic and responsive to internal and external life changes (Chetty and Szeidl (2007); Kettlewell (2019)).

[3]Prior policies were ineffective as we will discuss in Section 2.1. Although the central government started to allow local governments to relax the one-child policy from 2002, especially for families with husband and/or wife from single-child families, such modifications did not effectively promote childbirth because (i) these affected families are not majority of the population and their incentive for having the second child did not increase much; and (ii) local governments' policies were complicated by the conflict of "Hukou" and actual residence.

the policy in 2016 sent a clear message to the public and governments in all levels and indeed significantly increased the birth rate as well as the newborns as the second child. Hence, we exploit this policy introduction and the variation in the corresponding age of the child-bearable female in a household at that time. Using the differential degree of physical applicability, we aim to establish and quantify the influence of potential childbirth on entrepreneurial activities.

We use China Family Panel Studies (CFPS) as our dataset to study the research question in years around the two-child policy. These panel data are bi-annual surveys of Chinese households, which provide demographic information such as age, gender, number of children, and relationship to the respondent and socio-economic variables such as working status and industry of employment. Since our datasets are representative of the Chinese population, they allow us to examine the significant impact of the national birth policy on household-level entrepreneurial choices.

We adopt a difference-in-differences strategy to examine childbirth decisions and entrepreneurial decisions between families that have one married woman aged between 20 and 40 years old (referred to as the treated group thereafter) and other families (as the control group), exploiting the degree of physical capability for child-bearing at the time of the introduction of two-child policy. First, we find that families with a married woman with stronger physical capability to bear a child experience an 1.1 percentage point lower likelihood of having a family member who works as an entrepreneur, i.e., a person who reports to be self-employed (and generates substantial income), relative to other families.[4] Given that the unconditional mean of the likelihood of having an entrepreneurial member in a family is 9.3 percentage points, the policy change had a statistically and economically significant effect

[4]There could be concern that our treated group and control group have inherently different risk preference as well as different family characteristics such as family wealth, family expenditure size, etc. In order to mitigate this concern, we selected on samples from these two groups with similar family characteristics based on propensity score matching in Section 3.4 and find consistent results.

on reducing entrepreneurship. On the other hand, we do not find significant differences in both groups' entrepreneurship and childbirth in the period before the policy change, which supports the parallel trend assumption.

More to the point, we examine the heterogeneous treatment effects for families with and without child before the policy change. We hypothesize that the former group with legal binding conditions were given a larger degree of relaxation on their birth choices after the policy change, and if birth choices drive labor choices, then the former group should reveal a lower likelihood of entrepreneurship. Indeed, the former group experience a 2.1 percentage point lower likelihood of entrepreneurship with statistical significance, while the latter group experience an 0.7 percentage point lower likelihood of entrepreneurship, which is statistically insignificant. Therefore, the effects of the two-child policy on reduced entrepreneurial activities are mostly driven by the group with legal binding conditions, confirming that the pattern we discover is specific to child-rearing decisions.

To further ensure that fertility decisions are driving factors of entrepreneurial decisions in our setting, we show that the treated group delivered more births after the two-child policy, which is the intended consequence of the new birth policy. To be specific, the treated group delivered 0.32 more baby after the policy change, and this change in birth deliveries is very substantial, given that the unconditional mean number of births per household each survey year is 0.26.[5] More importantly, we do not find significant differences in two groups' child-rearing before the policy chance. Thus, this validation test supports the idea that the two-child policy was an exogenous shock that affected entrepreneurial activities via birth choices.

We acknowledge that different outcome variables tested in a difference-in-difference setting could be correlated with themselves, and thus conduct multiple testing correction (Heath

[5]This estimate is obtained even after we control for other determinants of birth documented in literature, including family wealth (Lovenheim and Mumford, 2013), mortgage (Hacamo, 2021), and uninsurable earnings risk (Sommer, 2016).

et al., 2023). In other words, fertility decisions and entrepreneurial decisions could be correlated. Yet, we find that even after the correction, the effects of the two-child policy are significant on both fertility outcome and entrepreneurship outcome.

We propose that family risk to be the mechanism underlying our main results. Childbirth as a major life event involves significant commitments, including irreversible consumption choices and an intensive psychological focus on childcare. Households entering parenthood may experience cognitive biases when faced with risky decisions that conflict with their new commitments. As a result, childbirth might alter such households' risk preferences, either leading them to avoid risks that threaten their commitments or to take risks in an attempt to justify these commitments. We design three sets of tests to support the family risk mechanism: risk preference shift, intra-household risk sharing, and uncertainty about career prospects.

For the first test, we rely on the revealed risk preference of the family head using a questionnaire assessing their propensity to take a risky cashflow instead of a guaranteed cashflow, and examine the impact of child-rearing on entrepreneurial decisions. Consistent with our previous finding, we find that the treated group that just had a newborn baby has lower risk tolerance. Thus, this direct observation on heterogeneous revealed risk preferences upon the recent experience of birth illustrates that birth decisions shape entrepreneurial decisions via shift in risk preference.

In the second test with respect to intra-household risk-sharing, we find that households with either a fewer number of income earners or a high concentration of income within a few members are less likely to engage in entrepreneurial activities upon childbirth compared to families with more evenly distributed income. This suggests that risk sharing among family members plays an essential role in household-level entrepreneurial decisions: entrepreneurial choices is a joint decision among family members in consideration of stabilizing cashflow to support childcare.

For the third test, we argue that the relative benefit of entrepreneurship compared to being employed decreases significantly upon childbirth if there is higher uncertainty in household heads' career prospects. High uncertainty in career prospects can be either a positive or negative factor, depending on the household's risk tolerance. Our empirical evidence suggests that families with a household head working in a risky industry are less likely to have an entrepreneur after the two-child policy. This supports that child-rearing has stronger negative effects on households facing greater uncertainty associated with the risk of entrepreneurial failure, thereby reducing their overall risk tolerance.

Last but not least, we report a very intriguing pattern related to the gender of the born children of families that had children in the pre-policy period: the policy effect is stronger among families that had a daughter as the first child. As Chinese is well-known to have son preference, families with a first female child may focus on giving birth to a male baby in the second round and thus postpone entrepreneurial plans. This finding confirms that the nature of the two-child policy is a demographic shock in combination with conformation to pervasive culture, yet the relaxation of stringency on birth also gave rise to unforeseen effects on the determent of entrepreneurship.

This paper makes a contribution to the literature on the economic effects of China's family planning policy. Prior literature has examined the social and economic effects of China's one-child policy.[6] In this regard, this paper provides a perspective on the link between China's birth policy and households' labor market choices. Beyond China's birth policy, this paper also adds to the literature on effects of demographic composition on the labor markets as the real impact of a family planning policy that actually encourages birth has been relatively

[6]For example, Wei and Zhang (2011) and Wei (2015) show that China's population control policy led to gender imbalance, which in turn led to the creation of entrepreneurial firms as the male population tends to appeal to the female population with wealth in the marriage market. Similarly, Huang et al. (2021b) document stricter fertility restrictions led to higher education levels, more white-collar jobs, and more female empowerment, while Huang et al. (2023) show that marriage distortion from the one-child policy leads to welfare loss. Also, Choukhmane et al. (2023) find that China's one-child policy attributed to a rise in the household savings rate and investment in children's education.

under-explored.[7] In particular, this study is the first to demonstrate that policies aimed at promoting population growth can have a short-term negative impact on entrepreneurship. Since both population growth and entrepreneurship (along with associated innovation) are crucial for economic growth, policymakers intending to encourage childbirth may need to raise the incentives and support provided to a level that facilitates the dual roles of young entrepreneurs in both career development and family expansion, rather than favoring one over the other.

Speaking more broadly, this paper adds to the behavioral economics literature on life events, family status, and family member interactions as determinants of risk preferences and their relation to firm behavior.[8] As for determinants of entrepreneurship, Alan et al. (2017) show that family members affect other members' risk appetite as the risk preference of a mother can pass down to her daughter, and Lindquist et al. (2013) show that individuals with parental entrepreneurship are more likely to be entrepreneurs themselves. In this respect, this paper adds potential childbirth as another family-related factor that determines entrepreneurial choices and household decisions.

Our paper also adds to the literature on determinants of entrepreneurship. These factors include economic, legal, and social aspects. For instance, the provision of capital encourages the creation of start-ups via accelerator programs (Cohen and Murray, 2019), local crowdfunding activities (Yu and Fleming, 2022), and banking deregulation (Black and Strahan, 2002; Kerr and Nanda, 2009), while regulation on patent infringement (Appel and Simintzi, 2019) and regulation on non-compete agreements (Jeffers, 2014) may create barriers to entry in entrepreneurship. Moreover, specific social factors of human capital including education

[7]Previous papers, for instance, primarily focus on the family planning policy that prevents an increase in the fertility rate. These works include the effects of contraceptives on women's labor participation (Bailey, 2006), on women's participation in professional programs such as law and medicine (Goldin and Katz, 2002), and on the gender gap in wages (Bailey et al., 2012).

[8]Single status (Roussanov and Savor, 2014) and bereavement of family members (Liu et al., 2023) affect managers' risk-taking in investment. Also, Bennedsen et al. (2007) show that appointing a family CEO leads to under-performance of firms among large firms.

of specialized university curriculum (Colombo and Piva, 2020), wage premium at different stages of life-cycle (Merida and Rocha, 2021), capabilities of multiple job functions (Lazear, 2004, 2005) are conductive to spurring entrepreneurial activities. In this regard, our paper highlights a unique, family-specific cultural factor for local entrepreneurship, which is different from prior studies that focus on financing, institutional environments, innovation spillovers, and human capital.

The structure of the paper is as follows. In Section 2, we provide detailed information about China's two-policy. In Section 3, we introduce longitudinal survey data of households in China, explain our identification strategy, and present empirical tests for identification. In Section 4, we discuss potential channels and alternative explanations. We conclude in Section 5.

2 Background Information and Related Literature

2.1 Two-Child Policy in China

In China, the family is considered to be the core unit of social foundations as the Confucian philosophy lays out the duty of every family member (Ma (2006)). In particular, children are expected to carry out filial piety to their parents so that the family functions in harmony (Li (2014)). In that sense, the idea that having more children brings prosperity to family is deeply engraved in Chinese culture. For instance, Gao and Qu (2019) and Xu and Liu (2021) find that elderly Chinese parents' life satisfaction increases with the number of children. In this regard, giving birth has been a valuable tradition in Chinese society.

Despite such culture, the Chinese Communist Party declared nationwide restriction on couples' bearing multiple children in 1979 as an effort to cope with the shortage of resources due to famine. The consequences of violating the one-child policy include monetary fines,

professional sanctions such as loss of employment, and sometimes administrative sanctions such as forced sterilizations or abortions.

While the Chinese government started to relax the one-child policy in the 2000s, most of these new policies were ineffective. In 2002, the central government allowed the one-child policy to be relaxed by local governments for "double-single" families with both the husband and wife from one-child families. This policy to allow "double-single" families to raise two children was gradually adopted by all provinces/cities in 2002-2011. However, such an initiative was not effective because double-single families are not common and their incentives are low. For example, less than 10% of such families in Shanghai applied to have their second child (and half of those indeed gave birth to their second child).[9] In 2013, the central government further relaxed the one-child policy to be relaxed by local governments for "one-single" families with either the husband or wife from a one-child family. This policy was not effective – only 5% of such families in Shanghai are willing to have their second child.[10]

Finally, the central government introduced the *universal* two-child policy in October, 2015: each family was allowed to bear two children regardless of their residential province and ethnicity, and this two-child policy came into effect on January 1, 2016. This policy appears to be effective in the short run: the government statistics suggest much more newborns in 2016 and 2017; more importantly, more than half of these newborns are second child.[11] We focus on the effect of the two-child policy in effect in 2016 to examine how it changed families' incentive to have another child and entrepreneurship for the following two reasons: first, as the statistics suggested, the two-child policy has a universal effect on newborns; and second,

[9] https://www.chinatimes.com/newspapers/20151229000899-260301?chdtv and http://cpc.people.com.cn/n/2014/0226/c83084-24466140.html

[10] http://politics.people.com.cn/BIG5/n/2015/0213/c1001-26560112.html and https://www.bbc.com/zhongwen/trad/focus_on_china/2014/12/141222_cr_singlechildpolicy

[11] https://www.stats.gov.cn/sj/sjjd/202302/t20230202_1895981.html and https://www.bbc.com/zhongwen/trad/chinese-news-57361169

unlike prior policies that may be complicated by the conflict of "Hukou" and residence (i.e., the registered location and actual location), the two-child policy is nationwide and sends a clear signal to all levels of governments.

In spirit of analyzing consequences of this regulation change, the recent literature has examined how China's two-child policy has affected individuals' economic and financial decision making. For instance, Baker et al. (2022) study the effects of the policy change on Chinese households' saving rates and finds that families who experienced the relaxation of constraints on additional birth increased savings due to worries about higher costs of raising a second child. Choi et al. (2024) study the impact of the policy change on individuals' borrowing decisions and find that Chinese female university students reduced borrowing and invested less in human capital due to the increased chance of childbearing and childcare and expected motherhood penalty in the labor market. However, how entrepreneurial choices have been shaped by the policy change is under-explored, and our paper fits into the literature on China's two-child policy.

2.2 Entrepreneurship in China

The literature on entrepreneurship in China has examined a variety of economic, financial, and institutional factors that shape entrepreneurial activity. As with other emerging economies, financial access—through venture capital and government support—plays a crucial role in enabling entrepreneurs to scale their ventures.

A recent study by Bernstein et al. (2020) emphasize how second-tier stock exchanges, which offer better shareholder protection, facilitate capital raising for younger, high-growth companies. Similarly, Oh et al. (2021) and Li and Wu (2014) explore the influence of housing prices and market dynamics on entrepreneurial decisions in China. In addition to financial factors, regional disparities, educational background, and labor market conditions also significantly affect entrepreneurial outcomes in China. Bai et al. (2024) highlight entrepreneurial

reluctance in China, finding that individuals with higher college entrance exam scores are less likely to start businesses, as they are more drawn to waged employment, particularly in the state sector. In a similar vein, Huang et al. (2021a) show that higher educational attainment generally drives a lower likelihood of entrepreneurship. Kong and Qin (2021) further investigate China-specific institutional factors, revealing that China's anti-corruption campaign has a positive impact on entrepreneurship, particularly in urban areas, by reducing rent-seeking behavior and easing financial constraints for non-state-owned enterprises. In terms of gender bias in Chinese entrepreneurship, Shu et al. (2025) find that the one-child policy resulted in lower participation rates among female entrepreneurs, as the penalty for having a second child discouraged entrepreneurial activity.

Nevertheless, prior studies on Chinese entrepreneurship often overlook the influence of risk preferences and cultural factors. The implications of our paper contribute to a deeper understanding of how other developing economies can foster robust entrepreneurial ecosystems.

2.3 Risk Preferences and Entrepreneurship

Risk preference is a crucial determinant of entrepreneurship; papers have theoretically and empirically documented that that higher risk tolerance leads to a higher likelihood of forming entrepreneurship (Hvide and Panos, 2014; Kanbur, 1979; Kihlstrom and Laffont, 1979). At the same time, papers have documented that risk aversion can dynamically change and in particular, amplify upon life events such big consumption commitments For instance, Chetty and Szeidl (2007) show that commitments such as housing or car purchase amplify the degree of risk aversion upon moderate-stake shocks such as losing a job temporarily. In our paper's setting, giving birth from the relaxation of birth policy leads to a permanently higher childcare expense, which serves as large consumption commitments that cannot be reversed. Likewise, Kettlewell (2019) shows that individuals' willingness to take financial

risks decreases upon parenthood. Linking these works together, we complement the literature on entrepreneurship by differentiating and focusing on on a risk preference shift due to a policy shock and illustrating its influence in entrepreneurship in China.

3 Empirical Analyses

3.1 Data

Our primary data source is China Family Panel Studies (CFPS) from Peking University, which are bi-annual surveys on households regarding their demographic information such as residence, hukou, gender, age, number of children, relationship to the respondent, and socio-economic characteristics such as entrepreneurial status, industry of employment, home-ownership, home value, mortgage value, receipt of government subsidies, and education expenditure. This dataset includes 12,072 unique households in the period between 2012 and 2020. Additionally, we use China's Yearbook data to include province-level characteristics such as the unemployment rate, GDP growth rate, and population growth rate. Appendix A provides a more detailed description of the database, and Appendix B lists all the definitions of data variables.

Table 1 presents summary statistics of our main data. *Entrepreneur* the variable of our focus, and it is an indicator variable equal to 1 if a family includes a family member who reports to be self-employed. In our robustness check, we consider alternative definitions for entrepreneurs, such as those reporting positive business income from self-employment or earning more than or equal to 20% of the total family income. As the mean likelihood of including an entrepreneurial member is 0.093, most families rather choose to work as wage earners to support family finance.

3.2 Main Effects

We use a difference-in-differences approach in biannually CFPS-surveyed families from 2012 to 2020 to analyze how household entrepreneurial activities vary with the introduction of the two-child policy across families with different exposures to it. More specifically, we estimate the following difference-in-differences (DID) regression:

$$Y_{i,j,t} = \beta \cdot Treated_i \times Post_t + \delta \cdot Z_{i,j,t} + \eta_i + \mu_j + \phi_t + \epsilon_{i,j,t}, \tag{1}$$

where i represents household in the CFPS surveys, j represents province, and t represents year. The main dependent variable $Y_{i,j,t}$ is an indicator variable of whether household i has a self-employed member (which represents household i's entrepreneurial choices) or the number of newborn babies over the past 2 survey years (which represents the household's birth choices). $Treated_i$ is an indicator variable equal to one if household i includes a married woman whose age is between 20 and 40 years old in the pre-policy period, thus having a higher degree of physical applicability to giving birth (and zero if household i does not have a married woman aged between 20 and 40 years old in the pre-policy period),[12] and $Post_t$ is an indicator variable equal to one if the observation is made after the two-child policy (i.e., 2016, 2018, and 2020), and zero otherwise (i.e., 2012 and 2014). In addition to estimating Equation (1) for the entire sample, we estimate it for two sub-samples separately: the first sub-sample group labeled "no-child families" includes families that did not have any child before the policy change and thus were unaffected (or less affected) by the two-child policy, and the

[12]World Health Organization defines fertility age to be between 15 and 49 years. Thus the control group can possibly deliver a baby after the two-child policy, but at lower chance due to weaker physical applicability. We acknowledge that some control groups in the pre-period may exhibit the characteristics of treated groups in the post-period if married women aged 20-40 join the households, while some treated groups in the pre-period may exhibit the characteristics of control groups if married women aged 20-40 leave the households during the post-period. This change in the composition of treated and control groups could potentially confound our results. However, this bias is likely to work against our findings, making it more difficult to identify significant effects in the treated sample during the post-period.

second sub-sample group labeled "families with one or more children" includes families that already had children before the policy change and thus could deliver birth additionally after the new policy relaxed stringency on birth regulation.

$Z_{i,j,t}$ is a set of control variables for household-level characteristics including family income, family size, education expenditure, government subsidy, urban indicator, mortgage amount, home value, and homeownership status, and province-level characteristics including unemployment rate, GDP growth rate, and population growth rate. We include household fixed effects (η_i) in all our specifications and utilize within-household variation to estimate the economic impact of childbirth. Any time-invariant household-level unobservable factors, such as family tradition, that might simultaneously affect households' entrepreneurial decisions and birth choices can be captured. We also include fixed effects for the residence province (μ_j) to capture time-invariant province-specific unobservable characteristics, such as business cycles and regulatory changes. Likewise, year fixed effects (ϕ_t) are also included to mitigate the concern that year-specific economic conditions may drive our results.[13]

We estimate Equation (1) using a linear probability model (LPM) because Probit and logit regression estimates may be inconsistent under an extensive list of fixed effects (i.e., the incidental parameter problem, Wooldridge (2002)). We cluster standard errors at the household level.

The key coefficient of interest is our DID estimate, β, which measures the causal effect of the two-child policy on household decisions in the labor market and family planning. It essentially captures the entrepreneurial and birth choices for households with a wife with higher physical applicability to delivering a baby relative to households with a wife with lower physical applicability. In addition to a full-sample analysis, we also split the sample into two sub-samples based on whether a family has any child before the two-child policy.

[13]As an alternative specification, we put household fixed effects as well as province-by-year fixed effects to capture time-varying unobservable characteristics at the province level.

If the two-child policy affects households' entrepreneurial and birth decisions, we expect the DID estimates to be stronger in the sub-sample with one child already.

Panel A of Table 2 presents the estimation results for Equation (1) on how Chinese households' entrepreneurial choices (*Entrepreneur*) vary by the degree of physical applicability of a married woman to child-bearing before and after the policy. In Columns 1 and 2, we estimate policy effects on the full sample and find that the treated group including a married woman with stronger physical applicability are about 0.9 percentage point to 1.1 percentage points less likely to have an entrepreneur in the household compared to the control group including a married woman with weaker physical applicability. As shown in Internet Appendix Table IA.1, both a decline in the motive to start new entrepreneurship and an increase in the motive to quit existing entrepreneurship drove this empirical result. Given that the unconditional likelihood of entrepreneurship is 9 percentage points, Chinese households' labor choices significantly changed after the policy. Our empirical evidence suggests that the motive to keep a stable income source to pay for childcare costs dominates the motive to seek higher financial compensation from entrepreneurship to feed an extra mouth.

The identifying assumption of a difference-in-differences strategy is parallel trends whereby the treated group and the control group indicate similar entrepreneurial trends before the two-child policy, but at the time of the introduction of the new policy, the exogenous timing led the treated group to be one with higher physical applicability and the control group to be the one with lower physical applicability by construction of these two groups. Column 3 of Table 2 shows that a statistically significant decline in the likelihood of having an entrepreneur after the policy change in families with a married woman aged between 20 and 40 years old.[14] Hence, these results support the interpretation that the demographic shock at the national level causally reduced the likelihood of entrepreneurship at the household level.

[14]We carry out the same parallel trend test on PSM matched sample in Section 3.3, and find a stark contract of entrepreneurial activities in the years before the two-child policy and after the two-child policy.

In Panel B of Table 2, we report estimates of Equation 1 across two different sub-sample groups: no-child families and families with one or more children. Columns 1 and 2 show that the former group experience a drop of 0.6 percentage point to 0.7 percentage point in the likelihood of having an entrepreneurial member, which are not statistically significant, whereas Columns 4 and 5 show that the latter group experience a drop of 1.9 percentage points to 2.1 percentage points in the likelihood of having an entrepreneurial member. This differential effect attributes to a varying degree of freedom to deliver a new baby, which should be a more relevant factor to the group with binding conditions, while the group with non-binding conditions could still be affected as they may develop a new family plan in the long term after the new policy. Similarly, Columns 3 and 6 report a stronger response in the entrepreneurial activities in the years after the two-child policy for the families with one or more children. In this regard, we find that entrepreneurial choices were differently affected by the legal binding conditions in the pre-policy period.

3.3 Validation Tests: Child Birth

After presenting evidence for a causal effect of birth policy shocks on entrepreneurial choices, we implement a validation test to examine if the two-child policy indeed led to more birth among the treated group, and hence having a newborn baby causes reduced entrepreneurship. We again adopt Equation (1) with the number of newborn babies as the outcome variable in Panel A of Table 3. Columns 1 and 2 show that the treated group were giving about 0.30 to 0.32 more births relative to the control group even after we control for birth determinants documented in the literature including uninsurable earnings risk (Sommer, 2016), mortgage (Hacamo, 2021), and family wealth (Lovenheim and Mumford, 2013). Given that the unconditional mean number of newborn babies per household in a given survey year is 0.26, the two-child policy had a statistically and economically significant effect on fertility, which confirms that the policy is effective in our sample.

Furthermore, Column 3 reports that the treated group and the control group indicated similar trends in child-bearing in the pre-policy period, and this finding gives rise to the interpretation that the two-child policy indeed had impact on the birth choices of relatively younger households, which in turn affected their entrepreneurial choices. Hence, this set of results indicate grant of more freedom on birth gave rise to a lower likelihood of entrepreneurial activities.

The recent literature documents that one needs to make adjustment for correlation between different outcome variables upon conducting an analysis using a difference-in-difference approach. In our case, the fertility decision variable and the entrepreneurial activity variable can be correlated with each other. Following Heath et al. (2023), we conducted multiple testing correction with 1000 boostraps and we report p-values of the coefficient for these two outcome variables in the specification with household, province, and year fixed effects as well as in the specification with household and province-by-year fixed effects. Figure 1 shows that p-values on these variables are all below 0.05, confirming that two-child policy had causal effect on both birth decisions and entrepreneurial decisions.

3.4 Robustness Checks

In addition to main results, we run various robustness tests to verify that our results remain statistically significant to different specifications. First, we run a synthetic difference-in-difference, following Arkhangelsky et al. (2021) in order to mitigate the concern that baseline Equation (1) provides a biased estimate if the treated group and the control group are innately different due to the age differential. We regress the entrepreneurial choice variable on control variables, collect residuals, and regress the residuals on the interaction of the treatment dummy and the post dummy. Panel A of Table 4 shows that we still find similar significant effects of the two-child policy on birth choices and entrepreneurial choices.

Second, again to provide assurance that innately characteristics difference between the

treated group and the control group are not driving the empirical results, we conduct a robustness check by means of matching the characteristics of our treated group those of our control group, using the nearest neighbor propensity score matching technique. Specifically, we obtain the control sample by estimating the probability of having a married woman whose age is between 20 and 40 years old at the time in 2014 using the covariate variables listed in Table 2. We then use the predicted probability to match, without replacement, a treated household with a control household in the same province and year that has the closest propensity score, using a caliper of 0.001. We compare pre-conditions between the treated and control groups using pre-period data in Internet Appendix Table IA.2 Panel A. We find that the mean values of the matching variables in the pre-policy period are significantly different between the treated group and the control group, but the mean differences in these variables become insignificant after the matching, as shown in Panel B of Internet Appendix Table IA.2. We then use the Lawley-Hotelling trace test to examine the joint significance of the differences across all characteristics. As the p-value is 0.98, we fail to reject that all variables together are significantly different. These test results suggest that our matching approach performs reasonably well and that matched control households are very similar to treatment households; thus, the random assignment assumption underlying our difference-in-difference analysis is supported.

Panel B of Table 4 presents robust results from this propensity score matching: Columns 1 and 2 show that the treated group experienced a drop in the likelihood of having an entrepreneurial member by 2.6 percentage points to 2.7 percentage points. More to the point, the magnitude of the effect on the entrepreneurial choice for the matched-sample is larger to that in the main sample in Panel A of Table 2; if anything, the true effects of the two-child policy could be stronger, once we take into account for differences in the characteristics of households. Thus, our results cannot be attributed to differences in household characteristics, and it must be the new birth policy that had a substantial impact on entrepreneurial choices.

Third, we use alternative definitions of entrepreneurship in Panel A of Internet Appendix Table IA.3 as we want to focus on serious entrepreneurs who bring a significant proportion of labor income to their families as opposed to entrepreneurs who simply run a small project as a trial for a short time. In Columns 1 and 2, we use as the new outcome variable an indicator variable of whether family has a family member who reports to be self-employed and makes non-zero business income from entrepreneurship. We find that the treated group experienced a drop in the likelihood of having an entrepreneurial member by 0.9 to 1.2 percentage points, based on the new definition. In Columns 3 and 4, we use as the new outcome variable an indicator variable of whether a family has an entrepreneur who makes more than or equal to 20% of the total family income. We find that the treated group experienced a drop in the likelihood of having an entrepreneurial member by 0.7 to 0.9 percentage points. Therefore, the effects of the birth policy remain significantly negative on entrepreneurship when we consider serious entrepreneurs.

Fourth, we make sure that our empirical results are not driven by bad controls. In order to show that the two-child policy is the main driver of entrepreneurial choices, we run the baseline Equation 1 without including any control variables. Panel B of Internet Appendix Table IA.3 shows that our baseline results do not suffer from bad control issues. Similarly, Columns 3 and 4 show that our results on serious entrepreneurs are robust without including any control variables. In this respect, we document that the introduction of the new birth policy is the main determinant of entrepreneurial choices.

4 Mechanisms and Alternative Explanations

4.1 Mechanisms: Risk Preference

4.1.1 Risk preference changes

As discussed earlier, we argue that households' risk preference changes upon giving birth and consequently this change leads to avoiding entrepreneurship. Given that parenthood increases individuals' risk aversion (Kettlewell, 2019), and that lower risk tolerance reduces the likelihood of entrepreneurship (Kanbur (1979); Kihlstrom and Laffont (1979); Hvide and Panos (2014)), we expect the two-child policy influences households' entrepreneurial choices through changes in their risk preferences.

To support this mechanism, we propose three sets of tests addressing changes in risk preferences from different perspectives. The first test is related to revealed risk preferences based on direct survey responses. For that matter, we rely on a questionnaire which was available during the 2018 survey year, which we use to seek households' revealed risk preference.[15] The survey question asks whether the respondents would prefer a fixed amount at varying degrees or a fair coin toss gamble which would provide 200 RMB if the face is head and nothing if the face is tail.[16]

Based on their certainty equivalent, we categorize respondents into three different risk types (Risk Category): 1 if the certainty equivalent is less than 100 (risk-averse), 2 if the

[15]Since this questionnaire was only available in 2018, we compare risk preference of households cross-sectionally across families and exploit the variation in whether they just delivered a newborn baby in that survey year.

[16]The questionnaire first asks whether the respondents would be willing to take a fixed amount of 100 RMB or take the coin toss. If the respondents prefer the former, they move on to the next question whether they prefer a fixed amount of 80 RMB or the coin toss. If the respondents prefer the coin toss in the first question, they move on to the next question whether they prefer 120 RMB or the coin toss. In this manner, the questionnaire uses 50 RMB, 80 RMB, 100 RMB, 120 RMB, and 150 RMB as different choices for the fixed amounts. Using the highest fixed amount that the respondents prefer as their certainty equivalent, we can measure their revealed risk preferences.

certainty equivalent is equal to 100 (risk-neutral), and 3 if the certainty equivalent is greater than 100 (risk-seeking). Additionally, we confine the sample to respondents who answered all the "Big Three" financial literacy questions in Lusardi and Mitchell (2011) correctly so that we can filter out those who did not understand the purpose of survey questions measuring certainty equivalent. Then, we select the categorical risk preference of the family member with the highest income and run an ordered logit regression, using the categorical risk preference as the dependent variable. We estimate the following model using a sample of 689 unique household observations from the CFPS database in 2018:

$$Y_i = \beta \cdot Treated_i \times New\ Born\ in\ 2018_i + \alpha \cdot Treated_i + \gamma New\ Born\ in\ 2018_i + \delta \cdot Z_i + \eta_i + \mu_j + \epsilon_i, \tag{2}$$

where *New Born in 2018*$_i$ is an indicator variable that equals one if household i had a newborn baby in that survey year and zero otherwise. All other variables have been defined earlier.

We present the estimation results of Equation (2) in Table 5. Columns 1 and 2 of Table 5 show that the treated group that experienced the delivery of a newborn baby in that survey year indicates a significantly lower revealed risk preference. On the other hand, Column 3 shows that there is no difference in revealed risk preference between the treated group and the control group when we do not consider the recent birth. Thus, we provide suggestive evidence that shift in risk preference upon the recent experience of child birth could in turn affect entrepreneurial choices as opposed to innate heterogeneous preferences that shape labor choices.

4.1.2 Risk sharing

For the second test, risk sharing at the household level is at play: we argue that entrepreneurial status may not be sustained if labor income sources are not well-diversified

within a household. For this channel, we split the sample into families with a low or high number of income earners based on whether the number of family members earning positive labor income is greater than or at (or below) the sample median. We then test whether households with a low number of income earners remain their likelihood of engaging in entrepreneurial activities after a possible childbirth. We estimate Equation (1) in these two sub-samples. Panel A of Table 6 shows that entrepreneurial activities decreased only for families with fewer family members who provide a different source of household income. This finding supports the risk preference change mechanism.

Similarly, we test whether a household with a high concentration of labor income in one family member experiences a decline in entrepreneurship by splitting the sample into families with a concentration rate greater than or equal to the sample median and families with a concentration rate lower than the sample median. We estimate Equation (1) using these two sub-samples. Panel B of Table 6 shows that entrepreneurial activities decreased only for families with high income concentration. In other words, only when the household-level income risk of an entrepreneur is shared with other family members, can the family support this entrepreneurial activity.

These results on the risk-sharing aspect within a family are consistent with findings in literature on intra-household risk-sharing in labor markets. In particular, Ortigueira and Siassi (2013) find that labor supply goes up for a spouse in case the other spouse becomes unemployed among families with a low level of wealth, and Shore (2010) finds counter-cyclical risk-sharing benefits of marriage due to diversified labor income risks. Likewise, Wang (2019) documents an added-worker effect whereby workers' job search intensity goes up upon the unemployment of their spouse. In this respect, we document that entrepreneurship is another dimension of choices in the labor market in which risk sharing among family members plays an essential role.

4.1.3 Career uncertainty

The third test is about career uncertainty: the relative benefit of being an entrepreneur compared to being employed decreases significantly upon childbirth if there is higher uncertainty in household heads' career prospects.[17] High uncertainty in career prospects can be either a positive or negative factor, depending on the household's risk tolerance. Risk-seeking households may view high uncertainty as an opportunity for entrepreneurship (i.e., high real option value of experimentation), while risk-averse households might see it as a deterrent. For this test, we examine whether households respond differently to possible childbirth when they face varying degrees of uncertainty in their career prospects. To measure uncertainty in career prospects, following the approach of Gottlieb et al. (2022), we match the family head's industry in our dataset with two-digit NAICS codes and compute industry-level 2-year failure rates of private firms in China using data from Bureau van Dijk's Orbis database.[18] We estimate Equation (1) in these two sub-samples separated by the median industry failure rate. Columns 1 and 2 of Table 7 show that the treated households whose family heads work in industries with higher failure probabilities experienced a decline in entrepreneurial activities after the two-child policy,[19] whereas Columns 3 and 4 show that there is no such change among householdes whose family heads work in industries with lower failure rate.

[17] Household-level career prospects involve the combined income levels of all working household members and the potential for future income growth based on career advancements. This also includes the likelihood of continued employment for all working members, considering factors such as job security in their respective fields and the impact of economic fluctuations.

[18] We construct the failure rate based on the existence of financial reports in this dataset; for a given firm in a year, we record it to have survived if its financial report is again included in the data two years later, and then aggregate the survival rate to the industry level.

[19] Based on Bureau van Dijk's Orbis database, we find that in the sample period, China experienced relatively low survival rates in the following sectors: Education, Culture, sports and recreation, Health, social security and public welfare, Real estate, Hotel and catering service, Agriculture, forestry, animal husbandry and fishery, Construction, and Production and supply of electricity, gas and water (in the increasing order of survival rates). On the contrary, it experienced relatively high survival rates in the following sectors: Water resource, environment and public facility management, Transportation, storage, and postal service, Public administration and social organization, Mining, Information transmission, computer service and software, Scientific research, technical service and geological prospecting, Wholesale and retail, and Manufacturing (in the increasing order of survival rates).

Hence, the risk aversion of entrepreneurs relative to wage earners amplifies upon possible birth when they work in an industry with a high chance of failure, and it leads to a lower likelihood of entrepreneurship.

4.2 Alternative Explanations

In this section, we further discuss alternative explanations for our baseline result. The first is financial constraints: entrepreneurs could choose to discontinue their entrepreneurship due to a lack of financial resources in their family, regardless of their risk tolerance. We divide our sample into those who have high (above the median family wealth) and low family wealth (below the median family wealth) to test this alternative story. We estimate Equation (1) in each of these two sub-samples, and report the results in Panel A of Internet Appendix Table IA.4. We find that there is no statistically significant difference in entrepreneurial choices between these two groups. Hence, it is a matter of risk preference that determines entrepreneurial choices even if entrepreneurs may have enough finance in their family.

Another possible alternative channel is time constraints whereby time spent on childcare crowds out time that should be spent on fostering entrepreneurial businesses, leading to reduction in entrepreneurship. If that is the case, we should find differential entrepreneurial choices between families of a large size (above the median family size) and families of a small size (below the median family size) as the presence of non-parents family members such as grandparents may reduce workload from childcare and enable parents to focus on entrepreneurship. We estimate Equation (1) in each of these two sub-samples, and report the results in Panel B of Internet Appendix Table IA.4. We find that there is no differential impact of the policy on entrepreneurial status across these two groups. Therefore, we rule out this time constraint explanation.

4.3 Cultural Factor: Patriarchy and Lineage

China has been known for son preference, and gender imbalance during the one-child policy is documented in the literature (Wei and Zhang, 2011; Wei, 2015). In this respect, we test if this cultural factor played a role in impacting fertility choices and ultimately, entrepreneurial choices after the two-child policy was introduced. In particular, we estimate Equation (1) by focusing on families with one or more children (as in Panel B of Table 2) that are split to two sub-samples by the gender of the first child. Columns 1 and 2 of Table 8 show that families with the first child being a girl experienced a drop of 4.5 percentage points to 5.0 percentage points in the likelihood of having an entrepreneurial member, which is statistically significant, but Columns 3 and 4 show that families with the first child being a boy did not experience much change in the entrepreneurial choices. In other words, there is economic significance in the effect across the two sub-samples, and son preference is associated with a lower likelihood of entrepreneurship as families with a first female child may focus on giving birth to a male baby and thus postpone entrepreneurial plans. This finding further confirms that the nature of the two-child policy is a demographic shock in combination with conformation to pervasive culture, yet the relaxation of stringency on birth also gave rise to unforeseen effects on the determent of entrepreneurship.

5 Conclusion

In this paper, we investigate how China's nationwide two-child policy led to changes in households' entrepreneurial choices and child-raising decisions. We document that households with a married woman with strong physical applicability to childbirth at the time of the introduction of the two-child policy were more likely to prioritize childbirth and were less likely to be entrepreneurs after the regulatory change. This is a significant change in labor

activities, given that entrepreneurship in our data produces positive labor income and makes up a significant fraction of family income. We implement several tests based on revealed risk preferences, intra-household risk-sharing, and career uncertainty of household heads, which collectively validate the reduced risk preference mechanism. In this respect, this paper sheds light on the implications of family planning, not just on demographic changes but on labor market outcomes, calling for a careful design of birth policy in conjunction with labor policy and/or science and technology development. Moreover, given the critical roles of both population and entrepreneurship in economic growth, policies facilitating the dual roles of young entrepreneurs in both career development and family expansion are called for.

Appendix A Database Description

A.1 China Family Panel Studies (CFPS)

The China Family Panel Studies (CFPS) is a comprehensive longitudinal survey conducted by the Institute of Social Science Survey at Peking University (CFPS). Funded by the Chinese government through Peking University, the CFPS aims to collect data on Chinese communities, families, and individuals, focusing on both their economic and non-economic activities and behaviors.

Initiated in 2010 and conducted biennially, the CFPS tracks changes and trends over time, covering topics such as economic activities, education outcomes, family dynamics and structures, health and wellbeing, and social interactions. The survey spans both urban and rural areas across various provinces and regions in China, providing a comprehensive perspective on the lives of Chinese citizens. In the 2010 baseline survey, the CFPS interviewed approximately 15,000 families and around 30,000 individuals within these families, achieving a response rate of about 79%. The respondents are tracked through annual follow-up surveys, which ensures continuity and depth in the data collected.

Initial oversampling in five provinces, with 1,600 families in each, facilitates regional comparisons. The remaining sample, comprising 8,000 families, is drawn from other provinces to ensure nationwide representativeness through weighting. The 2010 CFPS baseline survey used a multi-stage probability drawing with implicit stratification, designed for cost-effectiveness and to enable the study of social contexts. This sampling process involved three stages: county (or equivalent), village (or equivalent), and then household. The CFPS employs computer-assisted personal interviewing (CAPI) technology, provided by the Survey Research Center (SRC) at the University of Michigan. This technology allows for the design of a complex interview schedule tailored to each household member, reducing measurement error and enabling close monitoring of interview quality in the field by the ISSS management team.

The CFPS's data collection method includes face-to-face interviews, self-administered questionnaires, and some web-based surveys, ensuring a diverse approach to data gathering and capturing various aspects of life in China. The survey encompasses thousands of households and individuals, thus providing a wide range of data points. Three key features of the CFPS are particularly notable: (1) All individuals over the age of 9 in a sampled household are interviewed, constituting the core members of the CFPS, (2) Children in CFPS house-

holds are also considered core members, with a core member exiting the study only through death, (3) Annual follow-ups are conducted with all core members of the CFPS.

Researchers and policymakers utilize the data collected through the CFPS to analyze various aspects of Chinese society, including trends in family structure, income inequality, social mobility, demographic changes, health, and education. The survey's findings provide insights into the evolving dynamics of Chinese society and contribute to informing both policy decisions and academic research.

Appendix B Data Variable Description

The table presents the description of variables of China Family Panel Studies (CFPS), China's Yearbook data used in this paper, and the definition of legal binding conditions with respect to additional birth in the period before the introduction of the two-child policy.

Data Variables	Description
CFPS Variables	
Entrepreneur (Indicator)	An indicator variable of whether a surveyed respondent's household includes an entrepreneurial member who reports to be self-employed
Number of Newborns	Number of newborn babies for a surveyed household over the past 2 years.
Log(1+Family Income)	Log of the total income received by all household members from various sources, including wages, agricultural earnings, business revenues, and other income.
Log(Family Size)	Log of the total number of family members in a surveyed household.
Log(1+Education Expenditure)	Log of the value of the amount a surveyed household has spent on child education, including food expense, boarding fee, school bus fee, textbooks, reference books, school supplies, and school activities.
Log(1+Gov Subsidy)	Log of the value of the sum of any government subsidies a surveyed household has received, including minimum living allowance, subsidy for low-income families, reforestation subsidy, agricultural subsidy, work injury subsidy, and disaster relief.
Urban (Indicator)	Indicator variable equal to one if a surveyed household's residence is in an urban area and equal to zero if the residence is in a rural area.
Log(1+Mortgage)	Log of the value of a mortgage in case a surveyed household has a mortgage.
Log(1+Home Ownership Value)	Log of the value of a house in case a surveyed household owns a house, i.e., Log(1+Home Value $\times$ 1(Home Ownership)).
Yearbook Variables	
Unemployment Rate	Unemployment rate in a given year at the province level.
GDP Growth Rate	Yearly GDP growth rate at the province level.
Population Growth Rate	Yearly population growth rate.
Binding Conditions	
No-child families	Families that did not have any child before the policy change Thus, these families could deliver a baby during one-child policy
Families with one or more children	Families that already had children before the policy change Thus, these families could not deliver an additional baby during one-child policy

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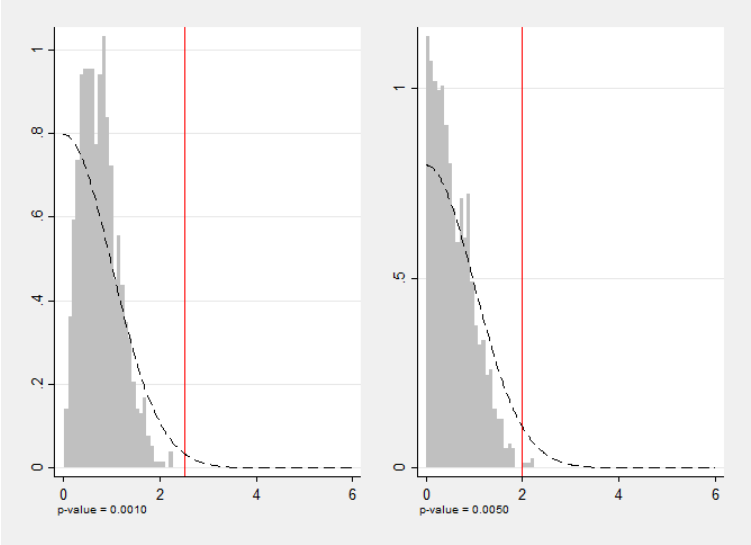
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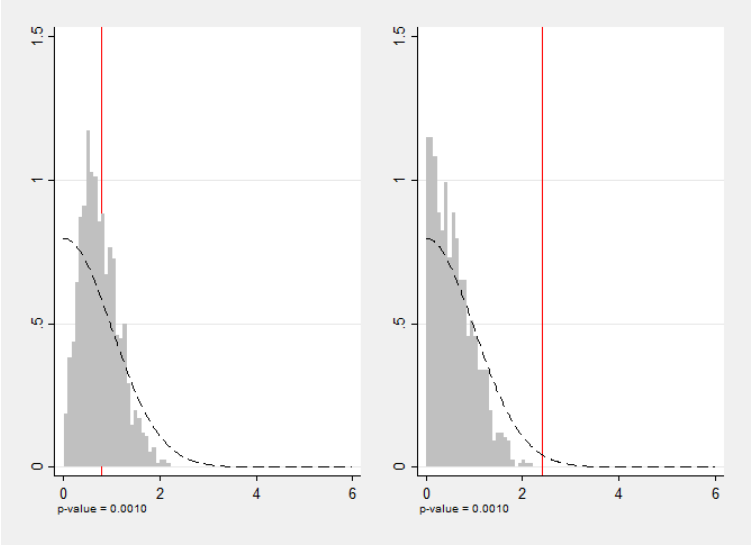
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Figure 1: Multiple Hypothesis Testing

This figure shows results on multiple hypothesis testing in which we test for the significance of our baseline estimates on birth dimension and entrepreneurship dimension jointly. It plots estimation coefficients out of 1000 bootstraps. In Panel A, we use household fixed effects, province fixed effects, and year fixed effects. In Panel B, we use household fixed effects, and province-by-year fixed effects. The left graph on each panel is simulated results on the birth choice variable and the right graph on each panel is simulated results on the entrepreneurial choice variable.



(A) Household, Province, Year FE



(B) Household, ProvinceXYear FE

Table 1: Summary Statistics

The table presents summary statistics for our main sample. The sample consists of 50,934 household-year observations (12,072 unique households) from the CFPS database for the sample period from 2012 to 2018. Detailed descriptions of all other variables are available in Appendix B.

	Mean	sd	p25	p50	p75	Obs.
Entrepreneur	0.093	0.291	0.000	0.000	0.000	50,934
Number of New Borns	0.262	0.535	0.000	0.000	0.000	50,934
Log(1+Family Income)	1.693	0.812	1.145	1.722	2.197	50,934
Log(Family Members)	1.185	0.513	0.693	1.099	1.609	50,934
Log(1+Education Expenditure)	0.234	0.360	0.000	0.000	0.392	50,934
Log(1+Gov Subsidy)	0.063	0.154	0.000	0.000	0.058	50,934
Urban (Indicator)	0.464	0.499	0.000	0.000	1.000	50,934
Log(1+Mortgage)	0.103	0.412	0.000	0.000	0.000	50,934
Log(House Ownership Value)	2.147	1.596	0.693	2.398	3.332	50,934
Unemployment Rate (%)	3.257	0.537	2.970	3.300	3.630	50,934
GDP Growth Rate (%)	7.369	2.657	6.100	7.600	8.900	50,934
Population Growth Rate	0.004	0.008	-0.002	0.004	0.008	50,934

Table 2: Baseline Results

The table presents regression results from the linear probability models that examine the effect of China's two-child policy on entrepreneurial choices. The sample consists of 50,934 household-year observations (12,072 unique households) from the CFPS database for the sample period from 2012 to 2020. The dependent variable is *Entrepreneur*, an indicator variable of whether a household has an entrepreneur among family members. *Treated* is an indicator variable equal to one for households that have a one married woman aged between 20 and 40 years old, and zero for households that do not have a maried woman aged between 20 and 40 years old. *Post* is one for household-year observations in the two-child policy period and zero for the pre-two-child policy period. Detailed descriptions of all other variables are available in Appendix B. In Panel A, we estimate the overall effects as well as dynamic effects of the two-child policy on entrepreneurial choices, using the full sample. In Panel Panel B, we separately report the results for households that did not have any families that did not have any child before the policy change and thus were not bound by the one-child policy and families that already had children and thus could not deliver birth additionally before the policy change and hence were bound by the one-child policy. Standard errors reported in parentheses are robust and clustered at the household level. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Panel A. Baseline Effects

	Entrepreneur		
	(1)	(2)	(3)
Treated × Post	-0.009**	-0.011**	
	(0.004)	(0.004)	
Treated × 1(Year = 2012)			-0.008
			(0.006)
Treated × 1(Year = 2016)			-0.014***
			(0.005)
Treated × 1(Year = 2018)			-0.004
			(0.006)
Treated × 1(Year = 2020)			-0.033***
			(0.009)
Log(1+Family Income)	0.063***	0.063***	0.063***
	(0.003)	(0.003)	(0.003)
Log(Family Members)	0.013***	0.014***	0.012***
	(0.004)	(0.004)	(0.004)
Log(1+Education Expenditure)	0.026***	0.026***	0.025***
	(0.005)	(0.005)	(0.005)
Log(1+Gov Subsidy)	-0.011	-0.011	-0.011
	(0.010)	(0.010)	(0.010)
Urban (Indicator)	0.028***	0.027***	0.027***
	(0.005)	(0.005)	(0.005)
Log(1+Mortgage)	0.015***	0.015***	0.015***
	(0.004)	(0.004)	(0.005)
Log(House Ownership Value)	0.002*	0.002**	0.002**
	(0.001)	(0.001)	(0.001)
Unemployment Rate	0.013**		
	(0.005)		
GDP Growth Rate	-0.001		
	(0.001)		
Population Growth Rate	1.029**		
	(0.523)		
Household fixed effects	Yes	Yes	Yes
Province fixed effects	Yes	No	No
Year fixed effects	Yes	No	No
Province × Year fixed effects	No	Yes	Yes
Observations	50,934	50,934	50,934
Adjusted R-squared	0.364	0.365	0.365

Panel B. Binding Conditions

	No-child families (Non-binding)			Families with one or more children (Binding)		
	(1)	(2)	(3)	(4)	(5)	(6)
Treated × Post	-0.006	-0.007		-0.019**	-0.021**	
	(0.006)	(0.006)		(0.009)	(0.009)	
Treated × 1(Year = 2012)			-0.014			-0.015
			(0.009)			(0.011)
Treated × 1(Year = 2016)			-0.012			-0.022**
			(0.012)			(0.011)
Treated × 1(Year = 2018)			-0.004			-0.007
			(0.010)			(0.011)
Treated × 1(Year = 2020)			-0.030***			-0.072***
			(0.009)			(0.018)
Log(1+Family Income)	0.069***	0.069***	0.069***	0.062***	0.062***	0.062***
	(0.008)	(0.008)	(0.008)	(0.004)	(0.004)	(0.004)
Log(Family Members)	0.018***	0.020***	0.019***	0.013**	0.011*	0.010
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Log(1+Education Expenditure)	0.028***	0.027***	0.026***	0.026***	0.026***	0.025***
	(0.009)	(0.009)	(0.009)	(0.007)	(0.008)	(0.008)
Log(1+Gov Subsidy)	-0.007	-0.005	-0.004	-0.013	-0.018	-0.017
	(0.015)	(0.016)	(0.015)	(0.016)	(0.016)	(0.016)
Urban (Indicator)	0.024**	0.023*	0.023*	0.036***	0.037***	0.036***
	(0.011)	(0.011)	(0.011)	(0.008)	(0.008)	(0.008)
Log(1+Mortgage)	0.021**	0.021**	0.021**	0.015**	0.014**	0.014**
	(0.010)	(0.010)	(0.010)	(0.006)	(0.006)	(0.006)
Log(House Ownership Value)	0.002	0.002	0.002	0.003	0.003	0.002
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Unemployment Rate	0.017			0.009		
	(0.010)			(0.008)		
GDP Growth Rate	-0.003*			0.003		
	(0.001)			(0.002)		
Population Growth Rate	1.395			-0.280		
	(1.045)			(0.837)		
Household fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Province fixed effects	Yes	No	No	Yes	No	No
Year fixed effects	Yes	No	No	Yes	No	No
Province × Year fixed effects	No	Yes	Yes	No	Yes	Yes
Observations	29,057	29,057	29,057	21,877	21,877	21,877
Adjusted R-squared	0.345	0.346	0.346	0.378	0.379	0.379

Table 3: Validation Test - Birth Choices

This table shows the results of a validation test investigating whether our treated group with stronger physical capability to give birth gave more birth than our control group with weaker physical capability. It reports estimation result of Equation 1 using the number of newborn babies over the past 2 years as the outcome variable. Standard errors reported in parentheses are robust and clustered at the household level. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

	Number of Newborns		
	(1)	(2)	(3)
Treated × Post	0.315***	0.298***	
	(0.009)	(0.009)	
Treated × 1(Year = 2012)			0.003
			(0.004)
Treated × 1(Year = 2016)			0.294***
			(0.009)
Treated × 1(Year = 2018)			0.296***
			(0.010)
Treated × 1(Year = 2020)			0.315***
			(0.012)
Log(1+Family Income)	-0.010***	-0.008***	-0.008***
	(0.003)	(0.003)	(0.003)
Log(Family Members)	0.046***	0.047***	0.049***
	(0.005)	(0.005)	(0.005)
Log(1+Education Expenditure)	0.034***	0.032***	0.033***
	(0.006)	(0.006)	(0.006)
Log(1+Gov Subsidy)	-0.018	-0.015	-0.016
	(0.012)	(0.012)	(0.012)
Urban (Indicator)	0.020***	0.017***	0.017***
	(0.006)	(0.006)	(0.006)
Log(1+Mortgage)	0.019***	0.020***	0.020***
	(0.005)	(0.005)	(0.005)
Log(House Ownership Value)	-0.003**	-0.003**	-0.003**
	(0.001)	(0.001)	(0.001)
Unemployment Rate	0.014*		
	(0.008)		
GDP Growth Rate	0.007***		
	(0.002)		
Population Growth Rate	1.506*		
	(0.816)		
Household fixed effects	Yes	Yes	Yes
Province fixed effects	Yes	No	No
Year fixed effects	Yes	No	No
Province × Year fixed effects	No	Yes	Yes
Observations	50,934	50,934	50,934
Adjusted R-squared	0.536	0.544	0.544

Table 4: Robustness Tests

This table presents several robustness tests, incorporating a different difference-in-differences approach and regression on a matched sample. Panel A reports results from a synthetic difference-in-difference approach in which we regress the outcome variable on control variables, collect residuals, and regress residuals on the main explanatory variables. Panel B reports results of estimation on Equation 1 on the matched sample with similar family characteristics between the treated group and the control group based on the nearest neighbor propensity score matching. Standard errors reported in parentheses are robust and clustered at the household level. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Panel A. Synthetic Difference-in-Differences

	Entrepreneur		
	(1)	(2)	(3)
Treated × Post	-0.008**	-0.011**	
	(0.004)	(0.004)	
Treated × 1(Year = 2012)			-0.007
			(0.006)
Treated × 1(Year = 2016)			-0.015***
			(0.005)
Treated × 1(Year = 2018)			-0.005
			(0.006)
Treated × 1(Year = 2020)			-0.029***
			(0.009)
Household fixed effects	Yes	Yes	Yes
Province fixed effects	Yes	No	No
Year fixed effects	Yes	No	No
Province × Year fixed effects	No	Yes	Yes
Observations	50,934	50,934	50,934
Adjusted R-squared	0.364	0.365	0.365

Panel B. Propensity Score Matching

	Entrepreneur		
	(1)	(2)	(3)
Treated × Post	-0.027***	-0.026***	
	(0.008)	(0.008)	
Treated × 1(Year = 2012)			-0.012
			(0.009)
Treated × 1(Year = 2016)			-0.026***
			(0.009)
Treated × 1(Year = 2018)			-0.019*
			(0.010)
Treated × 1(Year = 2020)			-0.058***
			(0.015)
Log(1+Family Income)	0.055***	0.056***	0.056***
	(0.005)	(0.005)	(0.005)
Log(Family Members)	0.003	0.001	0.001
	(0.007)	(0.007)	(0.007)
Log(1+Education Expenditure)	0.024***	0.023***	0.021**
	(0.008)	(0.008)	(0.008)
Log(1+Gov Subsidy)	0.016	0.019	0.020
	(0.020)	(0.020)	(0.020)
Urban (Indicator)	0.029***	0.028***	0.028***
	(0.009)	(0.009)	(0.009)
Log(1+Mortgage)	0.020**	0.019**	0.019**
	(0.008)	(0.008)	(0.008)
Log(House Ownership Value)	-0.000	-0.000	-0.000
	(0.002)	(0.002)	(0.002)
Unemployment Rate	0.019**		
	(0.008)		
GDP Growth Rate	0.000		
	(0.002)		
Population Growth Rate	2.499***		
	(0.862)		
Household fixed effects	Yes	Yes	Yes
Province fixed effects	Yes	No	No
Year fixed effects	Yes	No	No
Province × Year fixed effects	No	Yes	Yes
Observations	15,972	15,972	15,972
Adjusted R-squared	0.355	0.357	0.357

Table 5: Mechanism Test: Risk Preference

The table presents the results of ordered logit regression using risk category as the outcome variable. The sample consists of 689 unique household observations from the CFPS database in 2018. Based on a survey questionnaire to figure out certainty equivalent, risk category is defined as follows: 1 if highest income earner in a family is risk-averse, 2 if risk-neutral, and 3 if risk-seeking. This survey questionnaire is only available in 2018. *New Born in 2018* is an indicator variable that equals one if household had a newborn baby in 2018 survey year and zero otherwise. Standard errors reported in parentheses are robust and clustered at the province level. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

	Risk Category		
	(1)	(2)	(3)
Treated × New Born in 2018	-1.011*	-1.058*	
	(0.582)	(0.588)	
New Born in 2018	0.215	0.161	
	(0.544)	(0.548)	
Treated	-0.229	-0.124	-0.192
	(0.163)	(0.219)	(0.204)
Log(1+Family Income)		0.216	0.226
		(0.145)	(0.146)
Log(Family Members)		0.014	-0.035
		(0.248)	(0.264)
Log(1+Education Expenditure)		-0.309**	-0.273*
		(0.158)	(0.164)
Log(1+Gov Subsidy)		0.589	0.708
		(0.582)	(0.554)
Urban (Indicator)		-0.165	-0.178
		(0.394)	(0.398)
Log(1+Mortgage)		0.128	0.112
		(0.127)	(0.124)
Log(House Ownership Value)		-0.059*	-0.049
		(0.034)	(0.034)
Unemployment Rate		0.429*	0.385*
		(0.225)	(0.224)
GDP Growth Rate		-0.562***	-0.503***
		(0.138)	(0.131)
Population Growth Rate		31.435	22.780
		(27.453)	(23.237)
Province fixed effects	Yes	Yes	Yes
Observations	689	689	689
Adjusted R-squared	0.038	0.044	0.041

Table 6: Mechanism Test: Intra-household Risk Sharing

The table presents regression results from the linear probability models that examine the effect of China's two-child policy on entrepreneurial choices, focusing on sub-samples based on intra-household risk sharing. We analyze sub-samples of households in Panel A based on the number of income earners, and in Panel B based on income concentrations. *High (Low) Number of Income Earners* equals one if the number of family members earning positive labor income is greater than (at or below) the sample median, and zero otherwise. *High (Low) Income Concentration* equals one if the highest individual income accounts for more than (at or below) the sample median share of total family income, and zero otherwise. Standard errors reported in parentheses are robust and clustered at the household level. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Panel A. Portfolio of Income Earners in Household

	Entrepreneur			
	Low Number of Income Earners (Lagged)		High Number of Income Earners (Lagged)	
	(1)	(2)	(3)	(4)
Treated × Post	-0.025***	-0.028***	0.001	-0.003
	(0.008)	(0.008)	(0.011)	(0.012)
Log(1+Family Income)	0.069***	0.070***	0.046***	0.047***
	(0.004)	(0.004)	(0.007)	(0.007)
Log(Family Members)	0.029***	0.028***	0.012	0.012
	(0.006)	(0.006)	(0.010)	(0.010)
Log(1+Education Expenditure)	0.038***	0.039***	0.012	0.010
	(0.008)	(0.008)	(0.013)	(0.013)
Log(1+Gov Subsidy)	-0.022	-0.024*	0.009	0.008
	(0.013)	(0.013)	(0.025)	(0.025)
Urban (Indicator)	0.041***	0.040***	0.029**	0.029***
	(0.007)	(0.007)	(0.011)	(0.011)
Log(1+Mortgage)	0.017**	0.017**	0.024**	0.024**
	(0.007)	(0.007)	(0.011)	(0.012)
Log(House Ownership Value)	0.005***	0.005***	0.001	0.001
	(0.002)	(0.002)	(0.003)	(0.003)
Unemployment Rate	0.018**		-0.005	
	(0.009)		(0.017)	
GDP Growth Rate	-0.001		-0.008*	
	(0.003)		(0.005)	
Population Growth Rate	0.809		3.666**	
	(1.176)		(1.856)	
Household fixed effects	Yes	Yes	Yes	Yes
Province fixed effects	Yes	No	Yes	No
Year fixed effects	Yes	No	Yes	No
Province × Year fixed effects	No	Yes	No	Yes
Observations	25,600	25,600	7,302	7,302
Adjusted R-squared	0.375	0.376	0.210	0.213

Panel B. Income Concentration of Household

	Entrepreneur			
	High Income Concentration		Low Income Concentration	
	(1)	(2)	(3)	(4)
Treated × Post	-0.010**	-0.012**	0.010	0.007
	(0.005)	(0.005)	(0.014)	(0.014)
Log(1+Family Income)	0.068***	0.069***	0.057***	0.059***
	(0.003)	(0.003)	(0.009)	(0.009)
Log(Family Members)	0.015***	0.016***	0.022*	0.023*
	(0.004)	(0.004)	(0.012)	(0.012)
Log(1+Education Expenditure)	0.029***	0.030***	0.017	0.015
	(0.006)	(0.006)	(0.014)	(0.014)
Log(1+Gov Subsidy)	-0.017*	-0.018*	0.001	-0.002
	(0.010)	(0.010)	(0.031)	(0.030)
Urban (Indicator)	0.031***	0.031***	0.023*	0.022
	(0.006)	(0.006)	(0.014)	(0.014)
Log(1+Mortgage)	0.013***	0.013***	0.015	0.011
	(0.005)	(0.005)	(0.013)	(0.013)
Log(House Ownership Value)	0.003**	0.003**	-0.003	-0.004
	(0.001)	(0.001)	(0.003)	(0.003)
Unemployment Rate	0.019***		-0.032	
	(0.006)		(0.020)	
GDP Growth Rate	-0.001		-0.006	
	(0.001)		(0.006)	
Population Growth Rate	0.869		5.378**	
	(0.608)		(2.643)	
Household fixed effects	Yes	Yes	Yes	Yes
Province fixed effects	Yes	No	Yes	No
Year fixed effects	Yes	No	Yes	No
Province × Year fixed effects	No	Yes	No	Yes
Observations	42,245	42,245	4,719	4,719
Adjusted R-squared	0.377	0.378	0.205	0.213

Table 7: Mechanism Test: Uncertainty about Career Prospects

The table presents regression results from the linear probability models that examine the effect of China's two-child policy on entrepreneurial choices, focusing on sub-samples based on uncertainty about career prospects. We test the impact of potential childbirth on the likelihood of pursuing entrepreneurship when facing varying degrees of uncertainty in career prospects. After matching the information of the industry in which the family head works in our main dataset with the Orbis dataset and the failure rate of an industry in a given year by computing the fraction of the number of Chinese firms surviving in the subsequent two years, we split the sample into industries with high failure rate, which is above the median industry failure rate, and industries with low failure rate, which is below the median industry failure rate. Standard errors reported in parentheses are robust and clustered at the household level. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

	Entrepreneur			
	Industry with High Failure Rate		Industry with Low Failure Rate	
	(1)	(2)	(3)	(4)
Treated × Post	-0.071*	-0.081*	0.028	0.018
	(0.043)	(0.048)	(0.029)	(0.032)
Log(1+Family Income)	0.022	0.021	0.049***	0.050***
	(0.028)	(0.030)	(0.018)	(0.019)
Log(Family Members)	0.097	0.102	0.013	0.015
	(0.069)	(0.069)	(0.044)	(0.042)
Log(1+Education Expenditure)	-0.019	-0.013	-0.110**	-0.110**
	(0.060)	(0.061)	(0.048)	(0.051)
Log(1+Gov Subsidy)	0.057	0.135	0.164	0.168
	(0.162)	(0.221)	(0.126)	(0.107)
Urban (Indicator)	0.018	0.017	0.007	0.012
	(0.046)	(0.053)	(0.060)	(0.062)
Log(1+Mortgage)	0.040	0.038	0.051**	0.054**
	(0.035)	(0.033)	(0.026)	(0.027)
Log(House Ownership Value)	0.007	0.009	0.004	0.003
	(0.009)	(0.009)	(0.007)	(0.007)
Unemployment Rate	-0.062		0.112	
	(0.097)		(0.090)	
GDP Growth Rate	-0.018		0.005	
	(0.015)		(0.018)	
Population Growth Rate	-5.050		2.968	
	(7.247)		(5.477)	
Household fixed effects	Yes	Yes	Yes	Yes
Province fixed effects	Yes	No	Yes	No
Year fixed effects	Yes	No	Yes	No
Province × Year fixed effects	No	Yes	No	Yes
Observations	939	933	1,177	1,173
Adjusted R-squared	0.375	0.369	0.328	0.320

Table 8: Cross-sectional Test by First Child Gender

This table examines the cross-sectional test based on the gender of the first child among the selected families that had children before the introduction of the two-child policy. Standard errors reported in parentheses are robust and clustered at the household level. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

	Entrepreneur			
	First Child is Female		First Child is Male	
	(1)	(2)	(3)	(4)
Treated × Post	-0.045**	-0.050**	-0.003	-0.014
	(0.021)	(0.021)	(0.017)	(0.018)
Log(1+Family Income)	0.066***	0.067***	0.052***	0.049***
	(0.009)	(0.009)	(0.009)	(0.009)
Log(Family Members)	-0.007	-0.007	0.027**	0.026**
	(0.014)	(0.014)	(0.013)	(0.013)
Log(1+Education Expenditure)	0.049***	0.043**	0.000	0.000
	(0.018)	(0.018)	(0.017)	(0.017)
Log(1+Gov Subsidy)	-0.031	-0.042	-0.010	-0.013
	(0.028)	(0.028)	(0.043)	(0.045)
Urban (Indicator)	0.029*	0.031*	0.020	0.020
	(0.017)	(0.017)	(0.016)	(0.016)
Log(1+Mortgage)	-0.014	-0.007	0.022	0.025
	(0.017)	(0.017)	(0.019)	(0.019)
Log(House Ownership Value)	0.004	0.006	0.002	0.002
	(0.004)	(0.004)	(0.004)	(0.004)
Unemployment Rate	0.019		-0.000	
	(0.018)		(0.018)	
GDP Growth Rate	-0.002		0.002	
	(0.004)		(0.004)	
Population Growth Rate	3.552**		-2.715*	
	(1.449)		(1.487)	
Household fixed effects	Yes	Yes	Yes	Yes
Province fixed effects	Yes	No	Yes	No
Year fixed effects	Yes	No	Yes	No
Province × Year fixed effects	No	Yes	No	Yes
Observations	4,594	4,594	4,324	4,324
Adjusted R-squared	0.349	0.353	0.380	0.381

Internet Appendix

Tradeoff between Entrepreneurship and Lineage:
Evidence from China's Nationwide Two-Child Policy

Table IA.1: Effects of Two-Child Policy on Changes in Entrepreneurial Activities

This table presents effects of the two-child policy on changes in entrepreneurial activities as opposed to the status of entrepreneurship. Columns 1 through 3 report effects on whether households become an entrepreneur, i.e., the outcome variable is an indicator variable equal to one if a household had no self-employed members in the previous survey year, but has at least one household member with self-employment in the current survey year. Columns 4 through 6 report effects on whether households quit entrepreneurship, i.e., the outcome variable is an indicator variable equal to one if a household had at least one self-employed member in the previous survey year, but no household members with self-employment in the current survey year. Standard errors reported in parentheses are robust and clustered at the household level. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

	Becoming Entrepreneur			Quitting Entrepreneur		
	(1)	(2)	(3)	(4)	(5)	(6)
Treated × Post	-0.014***	-0.015***		0.011***	0.011***	
	(0.004)	(0.004)		(0.004)	(0.004)	
Treated × 1(Year = 2012)			0.004			-0.009
			(0.006)			(0.006)
Treated × 1(Year = 2016)			-0.014**			0.010*
			(0.005)			(0.005)
Treated × 1(Year = 2018)			-0.007			-0.003
			(0.005)			(0.005)
Treated × 1(Year = 2020)			-0.022***			0.017**
			(0.007)			(0.008)
Log(1+Family Income)	0.042***	0.042***	0.042***	-0.022***	-0.022***	-0.022***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Log(Family Members)	0.006*	0.006*	0.005	-0.007**	-0.006*	-0.005
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Log(1+Education Expenditure)	0.012***	0.012***	0.011***	-0.006	-0.006	-0.005
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Log(1+Gov Subsidy)	-0.001	-0.001	-0.001	-0.002	-0.002	-0.002
	(0.009)	(0.009)	(0.009)	(0.008)	(0.008)	(0.008)
Urban (Indicator)	0.015***	0.015***	0.015***	-0.010**	-0.010**	-0.010**
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Log(1+Mortgage)	0.014***	0.014***	0.014***	-0.002	-0.003	-0.003
	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)
Log(House Ownership Value)	0.001	0.001	0.001	-0.001	-0.001	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Unemployment Rate	0.007			-0.007		
	(0.005)			(0.004)		
GDP Growth Rate	-0.002*			0.002**		
	(0.001)			(0.001)		
Population Growth Rate	0.405			-1.267***		
	(0.448)			(0.490)		
Household fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Province fixed effects	Yes	No	No	Yes	No	No
Year fixed effects	Yes	No	No	Yes	No	No
Province × Year fixed effects	No	Yes	Yes	No	Yes	Yes
Observations	50,934	50,934	50,934	50,934	50,934	50,934
Adjusted R-squared	0.025	0.027	0.027	0.042	0.044	0.044

Table IA.2: Descriptive Statistics for Propensity Score-Matched (PSM) Sample in Matching Treatment Probability

This table presents descriptive statistics for the propensity score-matched (PSM) sample in Panel B of Table 4. Panel A shows that the treated group and the control group indicate different characteristics. Then we match their characteristics in one survey period before the two-child policy in the following manner: we select the control sample by estimating the predicted probability of being in the treated group before the two-child policy using the control variables listed in Table 2 and selecting a household in the control group that has the closest propensity score to that of a household in the treatment group, using a caliper of 0.001 without replacement. The PSM sample consists of 3,564 (1,782 households in the treatment group and 1,782 households in the control group) households before the introduction of the two-child policy, and we compare below household-level and province-level characteristics between the treated and control groups in the pre-period. The F-statistic is reported at the bottom and is based upon a Multinomial ANOVA (MANOVA) test.

Panel A. Full Sample in the Pre-period

	Treated (N=9,565)		Control (N=11,203)			
	Mean	Median	Mean	Median	Mean Diff	t-stat
Log(1+Family Income)	1.57	1.58	1.39	1.37	0.19***	19.36
Log(Family Members)	1.45	1.39	1.02	1.10	0.43***	76.83
Log(1+Education Expenditure)	0.24	0.10	0.19	0.00	0.06***	11.91
Log(1+Gov Subsidy)	0.06	0.02	0.06	0.01	0.00	0.14
Urban (Indicator)	0.41	0.00	0.46	0.00	-0.04***	-6.37
Log(1+Mortgage)	0.07	0.00	0.04	0.00	0.03***	6.24
Log(House Ownership Value)	2.08	2.40	1.90	1.95	0.18***	8.83
Unemployment Rate	3.25	3.27	3.33	3.33	-0.08***	-10.01
GDP Growth Rate	9.37	8.90	9.19	8.90	0.19***	7.00
Population Growth Rate	0.00	0.00	0.00	0.00	-0.00	-0.54

Panel B. Propensity Score Matched Sample in the Pre-period

	Treated (N=1,782)		Control (N=1,782)			
	Mean	Median	Mean	Median	Mean Diff	t-stat
Log(1+Family Income)	1.40	1.58	1.38	1.52	0.02	1.43
Log(Family Members)	1.19	1.10	1.19	1.10	-0.00	-0.12
Log(1+Education Expenditure)	0.20	0.00	0.20	0.05	0.01	0.53
Log(1+Gov Subsidy)	0.06	0.02	0.06	0.01	-0.00	-0.15
Urban (Indicator)	0.45	0.00	0.44	0.00	0.01	0.57
Log(1+Mortgage)	0.06	0.00	0.05	0.00	0.00	0.21
Log(House Ownership Value)	2.10	2.30	2.05	2.40	0.04	0.89
Unemployment Rate	3.32	3.34	3.32	3.34	0.00	0.00
GDP Growth Rate	8.14	8.70	8.14	8.70	0.00	0.00
Population Growth Rate	0.00	0.00	0.00	0.00	0.00	0.00
Joint test for the significance of t-values	statistics				F-value	p-value
Lawley-Hotelling trace	0.0008				0.3014	0.98

Table IA.3: Robustness Tests

This table presents various robustness tests, incorporating alternative definitions of entrepreneurship and tests for bad controls. In Panel A, we apply the definitions of serious entrepreneurs: whether a household includes an entrepreneur with non-zero business income or whether a household includes an entreprenur who makes up more than 20 percent of family income. In Panel B, we test for bad controls by running the baseline Equation 1 without including any control variables. Standard errors reported in parentheses are robust and clustered at the household level. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Panel A. Alternative Definitions of Entrepreneurship

	Entrepreneur: Non-Zero Business Income		Entrepreneur: Business Income $\geq$ 20% Family Income	
	(1)	(2)	(3)	(4)
Treated × Post	-0.009**	-0.012***	-0.007*	-0.009**
	(0.004)	(0.004)	(0.004)	(0.004)
Log(1+Family Income)	0.071***	0.071***	0.062***	0.063***
	(0.003)	(0.003)	(0.003)	(0.003)
Log(Family Members)	0.012***	0.012***	0.009***	0.010***
	(0.004)	(0.004)	(0.004)	(0.004)
Log(1+Education Expenditure)	0.023***	0.023***	0.025***	0.025***
	(0.005)	(0.005)	(0.005)	(0.005)
Log(1+Gov Subsidy)	-0.007	-0.006	-0.007	-0.006
	(0.009)	(0.009)	(0.009)	(0.009)
Urban (Indicator)	0.023***	0.023***	0.021***	0.021***
	(0.005)	(0.005)	(0.005)	(0.005)
Log(1+Mortgage)	0.007	0.007	0.010**	0.010**
	(0.004)	(0.004)	(0.004)	(0.004)
Log(House Ownership Value)	0.001	0.002	0.002	0.002*
	(0.001)	(0.001)	(0.001)	(0.001)
Unemployment Rate	0.012**		0.010**	
	(0.005)		(0.005)	
GDP Growth Rate	-0.001		-0.001	
	(0.001)		(0.001)	
Population Growth Rate	0.946*		0.668	
	(0.510)		(0.495)	
Household fixed effects	Yes	Yes	Yes	Yes
Province fixed effects	Yes	No	Yes	No
Year fixed effects	Yes	No	Yes	No
Province × Year fixed effects	No	Yes	No	Yes
Observations	50,934	50,934	50,934	50,934
Adjusted R-squared	0.364	0.365	0.352	0.353

Panel B. Tests for Bad Controls

	Entrepreneur		Entrepreneur: Non-Zero Business Income	Entrepreneur: Business Income $\geq$ 20% Family Income
	(1)	(2)	(3)	(4)
Treated $\times$ Post	-0.009**	-0.010**	-0.011**	-0.008*
	(0.004)	(0.004)	(0.004)	(0.004)
Household fixed effects	Yes	Yes	Yes	Yes
Province fixed effects	Yes	No	No	No
Year fixed effects	Yes	No	No	No
Province X Year fixed effects	No	Yes	Yes	Yes
Observations	50,934	50,934	50,934	50,934
Adjusted R-squared	0.341	0.342	0.341	0.333

Table IA.4: Alternative Hypotheses

This table presents tests results on alternative hypotheses. In Panel A, we test financial constraint channel splitting the sample into households with above or below the median level of wealth. In Panel B, we test time constraint channel splitting the sample into households with above or below the median number of family members, which is a proxy for the number of people who can take care of babies. Standard errors reported in parentheses are robust and clustered at the household level. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Panel A. Financial Constraints

	Entrepreneur			
	Households with Large Wealth		Households with Small Wealth	
	(1)	(2)	(3)	(4)
Treated × Post	-0.008	-0.008	-0.004	-0.004
	(0.008)	(0.008)	(0.005)	(0.005)
Log(1+Family Income)	0.065***	0.064***	0.028***	0.027***
	(0.005)	(0.005)	(0.003)	(0.003)
Log(Family Members)	0.023***	0.025***	-0.000	0.000
	(0.008)	(0.008)	(0.005)	(0.005)
Log(1+Education Expenditure)	0.025***	0.024***	0.004	0.004
	(0.008)	(0.008)	(0.006)	(0.006)
Log(1+Gov Subsidy)	-0.014	-0.016	-0.011	-0.011
	(0.019)	(0.019)	(0.010)	(0.010)
Urban (Indicator)	0.031***	0.030***	0.015**	0.015**
	(0.009)	(0.009)	(0.006)	(0.006)
Log(1+Mortgage)	0.012*	0.013**	0.011	0.012*
	(0.006)	(0.006)	(0.007)	(0.007)
Log(House Ownership Value)	-0.001	-0.001	-0.005***	-0.005***
	(0.002)	(0.002)	(0.002)	(0.002)
Unemployment Rate	0.013	0.000	0.016**	0.000
	(0.010)		(0.007)	
GDP Growth Rate	-0.008***		0.001	
	(0.002)		(0.001)	
Population Growth Rate	-0.216		0.745	
	(0.899)		(0.735)	
Household fixed effects	Yes	Yes	Yes	Yes
Province fixed effects	Yes	No	Yes	No
Year fixed effects	Yes	No	Yes	No
Province X Year fixed effects	No	Yes	No	Yes
Observations	24,586	24,586	24,589	24,589
Adjusted R-squared	0.411	0.412	0.393	0.394

Panel B. Time Constraints

	Entrepreneur			
	Large Households		Small Households	
	(1)	(2)	(3)	(4)
Treated × Post	-0.010*	-0.011*	-0.031**	-0.027**
	(0.006)	(0.006)	(0.014)	(0.014)
Log(1+Family Income)	0.065***	0.065***	0.049***	0.050***
	(0.003)	(0.003)	(0.006)	(0.006)
Log(Family Members)	0.018*	0.019**	0.018	0.017
	(0.009)	(0.009)	(0.012)	(0.011)
Log(1+Education Expenditure)	0.022***	0.022***	0.044**	0.045**
	(0.005)	(0.005)	(0.021)	(0.021)
Log(1+Gov Subsidy)	-0.021*	-0.020	0.031**	0.032**
	(0.012)	(0.012)	(0.015)	(0.015)
Urban (Indicator)	0.037***	0.038***	-0.014	-0.015*
	(0.007)	(0.007)	(0.009)	(0.009)
Log(1+Mortgage)	0.019***	0.019***	0.006	0.006
	(0.005)	(0.005)	(0.015)	(0.015)
Log(House Ownership Value)	0.003*	0.003**	-0.000	-0.000
	(0.001)	(0.001)	(0.002)	(0.002)
Unemployment Rate	0.013*		0.006	
	(0.007)		(0.010)	
GDP Growth Rate	-0.001		-0.002	
	(0.002)		(0.002)	
Population Growth Rate	0.117		1.127	
	(0.683)		(0.779)	
Household fixed effects	Yes	Yes	Yes	Yes
Province fixed effects	Yes	No	Yes	No
Year fixed effects	Yes	No	Yes	No
Province X Year fixed effects	No	Yes	No	Yes
Observations	36,973	36,973	13,961	13,961
Adjusted R-squared	0.401	0.402	0.424	0.426