

Why Is It Challenging to Reverse the Ongoing Decline in China's Birth Rate Despite the Lenient Birth Policies? -An Analysis from Economic Perspective

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Abstract. In response to the potential crises posed by an aging population and labor shortages, the Chinese government took steps to address these challenges after ending the one-child policy. These efforts involved the gradual relaxation of birth policies, transitioning from the two-child policy to the more recent three-child policy. Despite these policy shifts, the persistent downward trajectory of birth rates has shown little sign of abating. This study attempts to analyze the reasons for this phenomenon from an economic perspective; in the pursuit of addressing the multifaceted challenge of declining birth rates, a nuanced understanding of these intertwined economic factors is crucial. These economic elements form a complex tapestry that includes soaring housing prices, the burden of mortgages, expenses associated with childbirth, the costs linked with raising children, and the opportunity cost of childbirth to career women. High property prices make the prospect of homeownership daunting for young families, further compounded by the financial obligations of mortgages. Additionally, the financial implications of education and child-rearing expenses and the opportunity cost of childbirth to career women present substantial considerations for prospective parents, often contributing to the reconsideration of family size.

Keywords: Family planning policy; economic factors; birth rate.

1. Introduction

Population has consistently been a crucial factor for the development of a nation. Since the beginning of the 21st century, China's birth rate has continuously shown a trend of decline. In response to concerns over an aging population and a potential labor force shortage, the Chinese government implemented the Two-Child Policy in 2016, replacing the previous One-Child Policy, which had been in place for decades. In 2021, the policy was further relaxed to allow couples to have up to three children under the Three-Child Policy. These policy shifts were aimed at encouraging higher birth rates and mitigating the challenges posed by an aging population. However, the downward trend in birth rates has not shown any improvement. Why is the gradually relaxed birth policy not alleviating the decline in birth rates? Understanding one of the most significant factors influencing birth rates - economic factors - is highly beneficial for grasping the essence of low birth rates.

2. Current Situation of China's Birth Rate and Its Economic Causes

2.1. Case Description

Since 1987, the infant birth rate has consistently declined. In 1990, it was 21.06%, dropping to 14.03% by 2000, further decreasing to 11.90% in 2010, and reaching a low of 8.52% in 2020 [1]. Therefore, despite the implementation of the double individual two-child, Individual two-child, comprehensive two-child and Three-Child Policies in 2011, 2013, 2016 and 2020 respectively, China has experienced a persistent and significant decrease in its birth rate.

2.2. External Factors Indirectly Related to the Children

2.2.1 Housing prices

While two-child and three-child policies aimed to encourage larger families, the soaring costs of housing have emerged as a formidable deterrent to fulfilling the desire for more children. Escalating urbanization and limited housing supply have led to exorbitant real estate prices in many metropolitan areas, resulting in a profound financial strain on young couples.

Average housing prices in five cities from 2013 to 2018

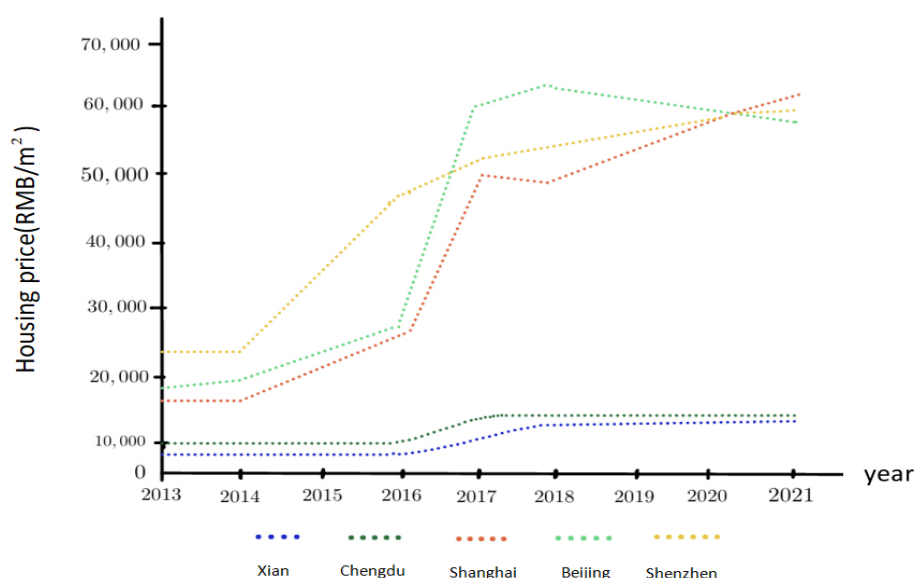


Fig. 1 Average housing prices in five cities from 2013 to 2018 [2]

As shown in Figure 1, since 2017, residential prices in first-tier cities such as Shanghai, Beijing, as well as second-tier cities like Chengdu and Xian, have shown an overall upward trend. The rising housing prices encroach upon the consumption of having children, a normal commodity, leading to a decrease in families' willingness to have children and creating a negative substitution effect [3]. After controlling for variables, researchers found that in an expensive housing market, the birth of the first child is delayed by around 4 to 5 years [4]. The rapid increase in housing costs, coupled with the need to provide a stable and comfortable living environment for their existing children, often compels couples to delay or even reconsider expanding their families. Not to mention that housing, often part of dowry or bride price in Chinese tradition, will be predictably more costly at children's future marriage age. As a result, despite the progressive relaxation of birth policies, the formidable weight of housing expenses has cast a shadow over the revival of higher birth rates in China.

2.2.2 Mortgage payments

Beyond high housing prices, substantial mortgages create additional economic pressure, hindering couples from confidently embracing parenthood amid financial constraints. Rising home costs lead to sizable loans, particularly affecting youth relying on loans due to income levels. Prolonged mortgages heighten financial stress, with 76.8% of indebted households holding housing loans, averaging 389,000 yuan per household, 75.9% of total debt [2]. Resident housing loans typically require repayment over a period of 15 to 30 years, effectively spanning the entire reproductive age of a family.

Furthermore, the average size of the commodity houses purchased by the current younger generation is decreasing. If they intend to have more children, it is highly likely that they would need to switch to larger houses, which undoubtedly adds to the cost of having multiple children [5]. This is especially pertinent for families that already have one child. Increasing the number of children would necessitate larger living spaces, and rising housing prices imply the need to repay larger

housing loans. Consequently, the ability of families to bear the costs of childbirth decreases, making them even less likely to make the decision to have multiple children.

In such circumstances, the funds available for raising children are significantly reduced, prompting many families to choose to limit the number of children they have. Despite eased family planning policies, housing loan strain remains pivotal in shaping reproductive choices, reducing the inclination for childbirth.

2.3. Internal Factors Directly Related to Children

2.3.1 The necessary educational expenses

After decades of rapid development, the Chinese economy has entered a downward phase. The upward trajectory is no longer capable of continuous expansion as before. In the pursuit of this narrow upward path, people compete with each other, continuously investing resources, yet achieving no improvements [2]. Eventually, they revert to the initial state [2].

This situation is reflected in child education as well. The admission rate to domestic higher education institutions is fixed. Moreover, the enrollment numbers for high-level universities no longer increase. Therefore, despite high school students' efforts, only a minority can attend these schools. If one fails to enter a highly-ranked university, their future career prospects could be disadvantaged. Consequently, most families are forced to increase their educational investments.

The contradiction lies in the fact that if only a portion of families increase their investments, those children may succeed in the competition, entering top-tier universities through the narrow admission pathway. However, if all families increase their investments, the situation circles back to a distribution where some children attend renowned universities while others attend regular ones. In this way, without increased investment, one is eliminated, and with increased investment, the status quo can merely be maintained. Ultimately, parents are left with no choice but to continue increasing their investments.

Predictably, parents extend the timeline of additional education expenses to make their children more competitive from an early age. Prior to kindergarten, families with means provide various forms of early education, either through early education institutions or at home. Early education centers are costly, while home-based methods are relatively cheaper but require significant human resources and expenses for books, media, and teaching materials.

The financial pressure of raising children becomes even more apparent when they attend kindergarten. Pre-primary education is characterized by inadequate public education supply and high fees for private education. Some higher-income families opt for Montessori or international kindergartens with astonishingly high tuition fees.

Simultaneously, from the compulsory education stage onwards, children in China often engage in various extracurricular classes and enrichment courses, especially during the primary and secondary school years. Research indicates that developed countries like Sweden, France, and Austria allocate around 5% of their personal wealth to education for individuals aged 0 to 24 [6]. In the United States, it's below 20%, and in Japan, it's not above 30% [6]. In contrast, Chinese families invest over half of their resources in child rearing and education [6]. This education investment model has been ingrained in China for a long time, making substantial education spending an inevitable consequence of childbirth.

2.3.2 The costs of raising children

In addition to education, the cost of raising children encompasses various aspects, with the most fundamental being child-raising expenses and time costs [7]. Financial expenses encompass expenditures related to a child's clothing, food, health, and medical needs, while time costs manifest in the time spent caring for a child, leading to foregone market income [7].

The Yuchuan Institute of Population Studies once estimated the cost of raising children aged 0-17. Based on this estimation method, the following table provides an estimate of the cost of giving birth to and raising a child in families from 2018 to 2021 [7].

Figure 2 provided above illustrates a clear upward trend in the average cost associated with giving birth to and raising children aged 0-17 across the years 2018 to 2022 [8].

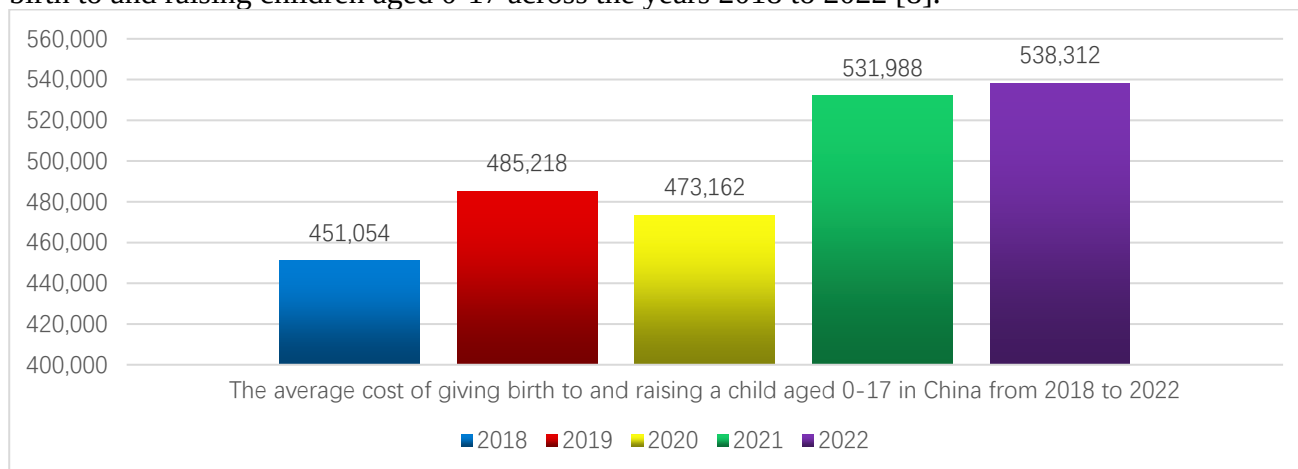


Fig. 2 The average cost of giving birth to raising a child aged 0-17 in China (2018-2022) [8]

The primary driver behind the persistently low birth rate at present is the substantial financial burden posed by childbirth, upbringing, and education. This has led to the emergence of issues centered around "affordability of childbirth" and "affordability of child-rearing" [9]. Consequently, the significant expenses related to education and child-rearing play a pivotal role in shaping reproductive decisions. These financial considerations have contributed to a declining inclination towards having children, despite the government's endeavors to encourage larger families.

2.3.3 The opportunity cost brought to career women by childbirth

Despite the implementation of policies in China that encourage families to have a second or even a third child, the birth rate may not see a significant increase due to the substantial impact of childbirth on women's salaries, resulting in a heightened opportunity cost. These policies aimed to address demographic challenges and an aging population, but the economic implications for women cannot be ignored. When women decide to have more children, they often need to take extended maternity leaves or reduce their working hours to care for their children, which directly affects their career progression and income. As a result, many women are faced with the difficult choice of balancing their careers and family life, and the potential loss of income can be a significant deterrent to having more children. The increase in the education level of women of childbearing age leads to an increase in their wage income, which raises the opportunity cost of having children (the wage income that women of childbearing age give up by choosing to have a second child). The higher opportunity cost inevitably results in a higher cost of having children, leading to a reduced demand for children among women of childbearing age [10]. Thus, while these policies may encourage some families to expand, the overall birth rate may not experience the desired surge as long as the economic consequences for women remain a substantial barrier to larger families.

3. Conclusion

This study's findings provide a comprehensive understanding of the persistently declining birth rate in China, even in the face of the government's continuous efforts to introduce more lenient birth policies. Delving deeper into the issue, it becomes evident that the root cause lies in the intricate web of economic factors that exert a substantial influence on individuals' decisions regarding family planning.

Among the factors that do not exert a direct impact on fertility rates, the incessantly escalating housing prices stand out prominently. As housing costs rise unabatedly, the dream of owning a home becomes increasingly elusive for many young couples. Coupled with this, the weight of additional financial commitments stemming from mortgage payments adds to the economic strain on households. This financial strain, often linked with the uncertainties of the property market, casts a shadow over

family planning considerations, as couples hesitate to bring children into an environment of economic uncertainty.

On the other hand, factors directly influencing fertility rates are notably education and child-rearing expenses, as well as the opportunity cost of childbirth brought to career women. The escalating cost of education, from primary through tertiary levels, places a considerable financial burden on families. Beyond this, the cumulative costs of raising and nurturing a child, from healthcare to extracurricular activities, further compound the economic challenges faced by prospective parents. Additionally, the significant impact of childbirth on women's careers, including potential income loss and career setbacks, adds another layer of complexity to the decision-making process, further influencing the fertility rates among women in the workforce. These financial implications alter the calculus of family planning, leading couples to recalibrate their aspirations for family size.

Taken together, these multifaceted economic factors collectively erode the fertility desires of couples. The allure of owning a home is dampened by the financial hurdles it entails, the rising costs of education and child-rearing underscore the substantial economic investment required for raising a child, and the opportunity cost of childbirth has to be taken in to account. As a result, the government's reliance solely on birth-focused policies is insufficient to counteract the larger economic dynamics at play.

In crafting effective strategies to address the persistent decline in birth rates, policymakers must take into account this intricate interplay of economic factors. A holistic approach that encompasses housing affordability, education costs, and support mechanisms for child-rearing could prove instrumental in creating an environment where couples feel economically secure and empowered to embrace parenthood. It is through this comprehensive lens that the government can foster an environment conducive to reversing the downward trajectory of birth rates and ensuring a more sustainable demographic future for the nation.

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