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An exploration of the impact of China's delayed retirement on fertility intentions

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Abstract. The current policy of delayed retirement in China is a hot topic, with many focusing on it to observe its potential impacts. This paper examines the mechanism through which China's progressive delayed retirement policy affects household fertility intentions. From the perspective of labor economics, this paper systematically analyzes the policy's dual effects using tools such as budget constraint lines and indifference curves. The study finds that the net effect of the policy on fertility intentions depends on the sophistication of supporting measures. Corresponding countermeasures are proposed: developing inclusive childcare services to fill the gap in intergenerational care, and strengthening policy support such as fertility subsidies, tax incentives, and protection of women's employment rights. This paper addresses the deficiency in existing research on the interaction mechanism between delayed retirement and fertility intentions, providing a theoretical reference for balancing responses to aging and long-term balanced population development.

Keywords: delayed retirement, fertility intentions, labor economics, intergenerational care, childcare services

1. Introduction

In recent years, China's demographic transition has entered a critical stage, with the dual challenges of deepening population aging and low fertility intentions becoming increasingly prominent. According to data from the National Bureau of Statistics, the proportion of the population aged 65 and above in China reached 15.4% in 2023, far exceeding the threshold for "deep aging" as defined by the United Nations. The labor market faces pressures of declining total supply and structural imbalance [1]. To address this, the 11th Session of the Standing Committee of the 14th National People's Congress adopted the Decision on Implementing Progressive Delay of Statutory Retirement Age on September 13, 2024, which will take effect on January 1, 2025. This policy aims to alleviate labor shortages and pension payment pressures by extending labor force participation. The delayed retirement policy must balance uniformity and differentiation, and its impact on the labor market will directly affect the resource allocation logic of household fertility decisions.

Meanwhile, China's fertility situation remains severe. Research by Yang Juhua indicates that young people's fertility concepts have shifted from prioritizing quantity to prioritizing quality, with educational anxiety and rising childcare costs further suppressing fertility intentions [2]. In this context, there is a complex interaction between the delayed retirement policy and fertility-related policy goals. Delayed retirement may ease the economic constraints on childbearing by increasing household income but could also exacerbate pressure on young parents by crowding out intergenerational care resources. Existing studies mostly explore the labor market effects of delayed retirement or the factors influencing fertility intentions in isolation, lacking a systematic analysis of their interaction from a labor economics perspective—especially neglecting the application of core theoretical frameworks such as household budget constraints and intergenerational resource allocation [3]. Clarifying the intrinsic link between delayed retirement policies and fertility intentions has thus become an urgent issue in the field of population and labor economics.

Existing research primarily focuses on the impact of delayed retirement on labor supply and pension sustainability, or separately analyzes factors affecting fertility intentions [4]. However, studies integrating these two from a micro labor economics perspective remain scarce. Based on Becker's economic analysis framework of fertility [5], this paper systematically examines the dual mechanisms of delayed retirement on fertility intentions using theoretical tools such as budget constraint lines and indifference curves, addressing the limitations of existing research that rely heavily on sociological qualitative analysis or single-variable regression.

2. Literature review

2.1. Concepts and research on related topics

2.1.1. Concepts related to China's retirement policy

The evolution of China's retirement policy is closely linked to demographic structure and economic development stages. In the early years of the People's Republic of China, given the abundant labor supply and the need to ensure elderly livelihoods, the 1951 Labor Insurance Regulations established a retirement age framework of 60 for male employees and 50 for female employees, which remained largely unchanged until the early 21st century [6]. The current retirement policy, still based on the 1951 framework with adjustments, will implement new retirement age regulations from 2025 under the Measures for Progressive Delay of Statutory Retirement Age issued by the State Council. Over 15 years, the statutory retirement age will be gradually raised from 60 to 63 for male employees, and from 50/55 to 55/58 for female employees, respectively.

2.1.2. Connotation and influencing factors of fertility intentions

Fertility intentions refer to the subjective expectations of individuals or households regarding the number, timing, and quality of children, serving as a precursor to fertility behavior. Their core connotation includes three dimensions: quantity intention, timing intention, and quality intention [7].

Economically, costs are a core constraint. Research by Zhao Zhong et al. [8] using CFPS data shows that a 10% increase in costs related to children's education, housing, and childcare reduces the ideal number of children per household by 0.12, with the inhibitory effect of fertility costs in first-tier cities significantly stronger than in rural areas. Policy support is also critical: reports from the National Health Commission indicate that policies such as fertility subsidies and housing preferences can enhance fertility intentions.

From a sociocultural perspective, fertility intentions exhibit dynamic changes. The traditional concept of "more children bring more blessings" has weakened, and reduced intergenerational support has increased young parents' concerns about childbearing [9]. Meanwhile, the rising female labor force participation rate has intensified conflicts between childbearing and career development, becoming a significant factor suppressing fertility intentions. Additionally, demographic structural changes have compressed the fertility window, further reducing the conversion rate of actual fertility behavior [10].

2.2. Labor economics perspective on the impact mechanism of delayed retirement on fertility intentions

2.2.1. Promoting mechanisms of delayed retirement on fertility intentions

From a labor economics perspective, household fertility intentions—measured by the number of children—reflect a trade-off in resource allocation between the quantity and quality of children under budget constraints. Household income and childcare costs can be linked to the budget constraint line, while fertility intentions can be represented by indifference curves. The delayed retirement policy affects fertility by extending working years: elderly family members have less time to care for grandchildren, increasing the need for paid childcare (e.g., nurseries or nannies) and thus raising childcare costs. Simultaneously, delayed retirement directly increases household disposable income, shifting the budget constraint line outward and expanding the resource allocation space for childbearing and childcare.

As shown in Figure 1, initially, reduced childcare time from elderly family members due to delayed retirement raises childcare costs, shifting the budget constraint line from B0 to B1 and reducing the number of children from n0 to n1. However, increased household income shifts the budget constraint line outward from B1 to B2, increasing the number of children to n2 [11].

Delayed retirement enhances households' economic autonomy, reducing reliance on children for elderly support and indirectly releasing non-economic motives for childbearing. Traditional elderly support models positively correlate the number of children with old-age security [12]. By extending contribution periods and increasing pension levels, delayed retirement policies create more stable social security expectations, thereby boosting fertility desires.

Zhao Zhong's research finds that a 10% increase in the pension replacement rate reduces the motivation to have children for elderly support by 12.5% but increases the intention to have children for emotional needs by 9.3% [13]. In other words, households allocate fewer resources to elderly support, freeing up more funds for childbearing and childcare and thus enhancing fertility desires.

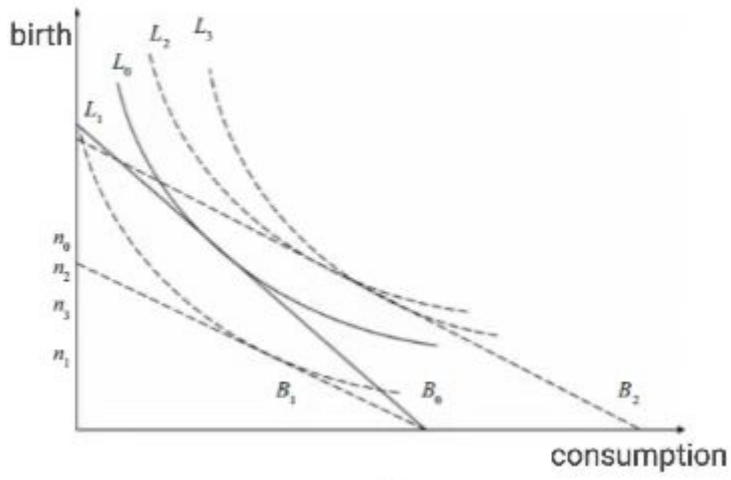

Figure 1. Impact of the budget constraint line on fertility intentions [11]

2.2.2. Inhibiting mechanisms of delayed retirement on fertility intentions

From a labor economics perspective, the indifference curve between leisure and childcare in the household utility function shifts systematically due to the delayed retirement policy. Currently, intergenerational care accounts for 68.7% of childcare in China [14], making the retirement timing of elderly family members a key variable in household childcare support.

Referring again to Figure 1, delayed retirement reduces elderly family members' time for grandchildren, shifting their consumption preferences from childcare to other expenditures. This causes the indifference curve to rotate from L2 to L3, leading to a decline in fertility intentions. In other words, the delayed retirement policy affects household fertility intentions through changes in consumption preferences.

Delayed retirement extends the tenure of older employees, intensifying intergenerational competition in the labor market. Young parents face dual pressures: squeezed career advancement opportunities and conflicts in allocating time to childcare, which suppress fertility intentions. From the perspective of labor supply, delayed retirement slows the exit of middle-aged and elderly workers, reducing career advancement opportunities for the 25-35 age group by 12.8% [15]. The cost of career interruptions due to childcare is further amplified by intensified competition, leading to lower fertility intentions.

3. Impacts and countermeasures

3.1. Impacts of delayed retirement

As discussed, delayed retirement increases household income, expands childcare budgets, and reduces resource allocation to elderly support—all of which can enhance fertility intentions, stabilize population size, and alleviate aging. However, it also shifts consumption preferences (with delayed retirees preferring non-childcare expenditures) and increases employment pressure on young parents, thereby suppressing fertility desires.

3.2. Corresponding countermeasures

3.2.1. Addressing gaps through the development of childcare centers

Delayed retirement reduces intergenerational care as elderly family members work longer, directly tightening young parents' childcare time constraints. Expanding inclusive childcare centers can effectively fill the childcare gap and ease household childcare pressures. China is currently advancing the "14th Five-Year Plan" target of "5.5 nursery places per 1,000 people for children under 3 years old", reducing reliance on intergenerational care by increasing childcare service supply.

Studies show that a 10% increase in inclusive childcare coverage raises families' willingness to have a second child by 8.3% [16]. Additionally, flexible childcare services for dual-income families can better align with parents' work schedules, reducing the suppression of fertility intentions caused by conflicts between childcare and work.

3.2.2. Policy solutions by the state and government

The state can strengthen economic subsidies and tax incentives. Building on the existing three-child policy, it should expand the coverage of fertility subsidies. It should also optimize childcare leave systems: extend paternity leave to over 30 days and allow parents to use leave in segments to avoid career disruptions from concentrated leave. Governments and relevant departments must improve the protection of women's employment rights: legislate to prohibit enterprises from reducing female employees' salaries or terminating contracts due to childbearing, establish a "childbirth-friendly enterprise" certification system, and offer social security payment reductions to enterprises that implement maternity and breastfeeding leave, thereby reducing workplace discrimination against women due to childbearing [17].

3.2.3. Adaptation of international solutions to China's national conditions

Some countries have addressed the contradiction between delayed retirement and low fertility through policy combinations, and their experiences can be adjusted and adapted to China's national conditions:

The "age-friendly" childcare system in Nordic countries is instructive. For example, Sweden has adopted a combined policy of "fully free childcare services + 480 days of shared parental leave for parents", maintaining a total fertility rate of 1.7 while achieving a female labor force participation rate of 75%. However, it should be noted that Sweden's high welfare relies on high taxes, which is not fully compatible with China's fiscal principle of "ensuring basic needs and securing the bottom line". Therefore, priority can be given to piloting a mixed payment model of "government subsidies + family co-sharing" to reduce fiscal pressure [18].

The "corporate obligation for childcare support" system in Japan's "Outline for Measures Against Declining Birthrates" is worth referencing, which requires enterprises with more than 500 employees to establish childcare support facilities or provide childcare subsidies. This model can be adapted to China's industrial structure characteristics and first promoted in the Yangtze River Delta and Pearl River Delta regions with concentrated manufacturing industries. By having enterprises share social childcare costs, the government's fiscal burden can be alleviated [19].

In addition, Germany's "parental income replacement rate" policy can be adjusted to a "progressive replacement rate". The subsidy ratio for low- and middle-income families should be increased to avoid excessive occupation of public resources by high-income groups, which is more in line with China's needs for regulating income distribution.

4. Conclusion

Delayed retirement is a policy formulated based on China's national conditions and current situation, serving as a key measure to address population aging and labor shortages. Its impact on fertility and childcare is distinctly dualistic. From a labor economics perspective, promoting mechanisms include the outward shift of the fertility budget constraint line due to increased household income and the pension substitution effect, while inhibiting mechanisms involve the crowding-out of intergenerational care resources and rising time costs for young parents. The net effect of the policy on fertility intentions is not absolute but depends on the sophistication of supporting measures. China must continue developing childcare centers and improving related policies to ensure that the delayed retirement policy fulfills its intended role.

In the long term, the sustainability of delayed retirement policies depends on a triangular balance between labor supply, fertility support, and intergenerational equity. As demographic structures change and policy practices advance, it is necessary to continuously track policy effects and dynamically adjust supporting measures to achieve both effective aging responses and long-term balanced population development. It is expected that future delayed retirement policies will better adapt to China's conditions, effectively alleviating aging, ensuring labor supply, and benefiting both the nation and its people while safeguarding living standards.

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