ISSN 2959-6149

## The Impact of Rising House Prices on Young People's Fertility

## Ziwenqi Zhang

Jamescook University, 387380, Singapore \*e-mail: 1912904980@qq.com

#### **Abstract:**

At present, the problems of population aging and low fertility of young people in China have become more and more serious, which has become an important factor restricting economic and social development. Although the "comprehensive" policy has been implemented and has achieved certain effects, the willingness of young people to give birth is still low. At the same time, the rise of housing prices has become one of the major social and livelihood issues, and the impact of housing prices on people's fertility intentions has also received widespread attention from scholars at home and abroad. Based on this, this study takes young people of childbearing age in China as the research object, adopts the research method to study the impact of rising housing prices on the fertility behaviour of young people in the city, and based on the conclusions drawn, puts forward targeted suggestions for the benign development of the real estate market and the effective implementation of the population policy.

**Keywords:** housing prices, young people, fertility intentions, impacts

### 1 Introduction

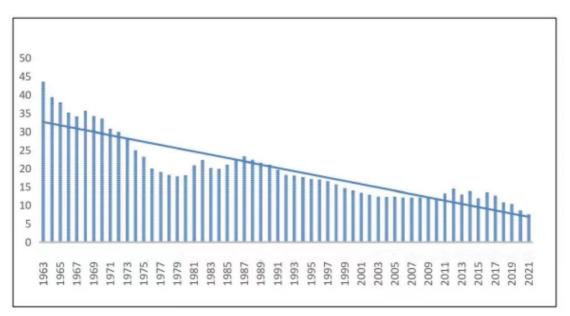
Over the past half century, there has been a persistent downward trend in the global fertility rate. According to the statistics of the World Bank, the global average total fertility rate has been declining since 1964 and is projected to fall to 2.316 by 2022 (close to the natural replacement level of 2.1 [1]). Continuing fertility decline will directly lead to shrinking population size and aging population structure, and, further, lead to a number of problems such as labour force attenuation, declining economic growth, and increasing social burdens, which will ultimately affect the sustainable development of the world. Young people are a major force for social development and make great contributions to socio-economic development. Housing plays a pivotal role in the establishment of a family, the survival of the family, and the upbringing of children. From the perspective of household expenditure, housing and childcare are two of the most important expenditures. In recent years, as housing prices continue to rise rapidly, so housing expenditures have also risen, which has had a significant impact on the fertility intentions of young people of childbearing age. At the same time, public opinion also generally believes that high housing prices are the main reason for the lower fertility intentions of young people of childbearing age. However, there is less research in the existing literature on the interaction between housing prices and fertility intentions among urban people

of childbearing age. Therefore, this study focuses on the impact of rising housing prices on young people's fertility intentions.

### 2 Analysis of the current situation of the national birth rate

# 2.1 Analysis of changes in population growth

According to the birth rate data from 1978 to 2020 in Figure 1 below, 1978 was the year when China fully implemented family planning, at this time, the national birth rate was 18.25 per thousand, and as of 2020, the national birth rate was 8.52 per thousand, and the birth rate fell by about 10 per thousand in 22 years. 2010-2020, there was a slight rebound in the birth rate in the decade, and in 2012, due to the separate policy, there was a slight increase in the birth rate. rebound, in 2012 by the separate policy, the birth rate rose to 14 per thousand, and then began to decline in the next few years, to 2016 by the impact of the policy and rose, and then continued to decline, and the overall performance of the birth rate is still showing a downward trend remains unchanged, 2020 national census data show that the national birth rate was 8.5 per thousand, as of 2021, the birth rate Once again, the birth rate declined by 1 per 1,000 from the previous year, making it the lowest on record.



Source: National Statistical Office Figure 1 Birth rate by year

### 2.2 Analysis of growth rate changes in population growth rates

Table 1 Birth rate and growth rate by year

Year	Birth rate (%)	Growth rate	Year	Birth rate (%)	Growth rate
2003	12.41	-3.50%	2012	14.57	9.80%
2004	12.29	-0.97%	2013	13.03	-10.57%
2005	12.4	0.90%	2014	13.83	6.14%
2006	12.09	-2.50%	2015	11.99	-13.30%
2007	12.1	0.08%	2016	13.57	13.18%
2008	12.14	0.33%	2017	12.64	-6.85%
2009	11.95	-1.57%	2018	10.86	-14.08%
2010	11.9	-0.42%	2019	10.41	-4.14%
2011	13.27	11.51%	2020	8.52	-18.16%

Source: National Statistical Office

According to the data of birth rate and its growth rate from 2003 to 2020 in Table 1, not only does the overall birth rate show a decreasing trend, but the level of its growth rate also declines, and the decreasing trend intensifies year by year. Before 2011, most of the growth rates of the birth rate are negative, or the growth rate is small, and the decline in the birth rate remains unchanged. In 2011, the birth rate rose by 1.37 percentage points, with a growth rate of 11.51%. In 2012, the birth rate was still on the rise, with an increase of 1.3 percentage points compared to 2011, and a growth rate of 9.8%, which may be due to the impact of the "Double Individual" policy

implemented in 2011. However, in the subsequent years, the birth rate continued to maintain a downward trend. In 2016, the birth rate rebounded slightly due to the optimal adjustment of fertility policies, and then continued to decline, with the rate of decline increasing, to 8.52‰ by 2020, a decline of 18.16 percentage points.

## 3 Analysis of the Impact of Rising House Prices on Young People's Fertility Rate

# 3.1 Theoretical analysis of the impact of house prices on fertility intentions

(1) Excessive burden of home purchase crowds out the

cost of living

In recent years, government departments have been regulating the property market by frequently increasing home purchase loan interest rates, and house prices have been controlled to some extent in a short period of time. However, this has also increased the burden on homebuyers. The interest rate on personal housing loans is significantly higher than that of corporate loans. For residents who have taken out a loan to buy a house or plan to do so, the pressure of monthly repayments accounts for a large portion of their living expenses. The increased repayment pressure, coupled with the increasingly high cost of childbearing, makes it possible for residents to postpone childbearing after considering purchasing a house, thus reducing the birth rate.

(2) Expectations of rising house prices are too high, making residents prioritise home purchase

For a long time, housing prices have continued to rise. The high housing price expectations of residents will make the purchase of housing their priority choice, especially in China. Housing has always been a basic need, and before marriage and childbirth, the purchase of housing has become a prerequisite. Due to the choice to marry and give birth to a child without purchasing a house, the cost of childbearing is higher, and savings will be reduced. The continued rise in housing prices will lead to residents constantly postponing the purchase of housing, thus also postponing childbirth until after the purchase of a house, thereby reducing the population birth rate. Residents will only consider marriage and childbirth after purchasing housing. Therefore, the rise in housing prices is expected to increase the cost of housing, and as housing costs rise, residents' costs to buy a home for marriage increase. These factors have led to an increase in the cost of marriage and childbirth, further encouraging residents to postpone starting a family and having children. Consequently, the population birth rate has naturally declined.

(3) The wealth effect of rising house prices is not obvious In general theory, the rise in housing prices would in-

crease the fertility intentions of some residents. For those who can afford a one-time payment for a house or a multisuite family home, the increase in housing prices will raise their total family wealth. Consequently, the amount of wealth they can use to raise children may also increase, which in turn may enhance their fertility intentions. However, this conclusion is only applicable to residents who already own sufficient housing. This group of residents has enough wealth, so their fertility intentions are mostly unaffected by changes in the housing market. For most residents, houses primarily serve as a place to live, not as an investment. Therefore, the wealth effect of rising house prices is not significant for them, and the negative impact on the birth rate is much greater than the positive incentives for a small number of wealthy individuals.

# 3.2 Investigation and Analysis of the Influence of House Prices on Young People's Fertility Intention

# 3.2.1 Analysis of fertility intentions in different city sizes and classes

In this study, housing price, as an important explanatory and economic variable, affects urban young people's fertility in a number of ways, among which housing price is an important factor. Generally, as housing prices increase, the cost of purchasing a house will increase for urban youths, which will have an impact on their family's economic situation. This may lead them to be more cautious in planning their families, which in turn may reduce their willingness to have children. In large cities, the phenomenon of high housing prices is caused by limited land resources and the high costs that developers have to pay to invest in large-scale housing projects. This makes it difficult for urban youth to acquire houses, which is not conducive to their family planning. In third- and fourth-tier cities, where land resources are more plentiful and housing prices are relatively low, this naturally reduces the pressure on young people to have children.

Table 2 Comparison of fertility intentions by city size and class

city scale	fertility			
first-line city	High housing prices directly contribute to the difficulty of urban youth in purchasing a home, which is not conducive to fertility programmes; at the same time, higher levels of literacy and education and a relatively open-minded society may alleviate some of the pressure.			
second-tier city	It varies with the size and location of the city, but overall it seems that housing prices are relatively more stable and relatively easier to purchase and have children than in first-tier cities			
third- and fourth- tier cities	Because of the relative abundance of land resources, developers' investment costs are relatively low. As a result, housing prices are relatively low and there is relatively little pressure on young people to buy homes and have children.			

#### 3.2.2 Income factors and fertility intentions

According to relevant information, the average income of high-income young people of childbearing age is 164,390.85 yuan [3], and the proportion of those who want to have children is also the highest, and the proportion of those who want to have children is the highest among the high-income population, accounting for 70.28 per cent of the total high-income population, and the sample group of the low-income population is the group with a lower income, not the low-income group, and with the growth of income, the number of those who want to have children population shows a trend of decreasing and then increasing.

#### 3.2.3 Number of housing titles and fertility intentions

According to the number of housing titles owned, they are divided into no housing, one suite and multiple suites. From the table, we can find that the sample number of young people of childbearing age with no housing is 538, accounting for only 9.50 per cent of the whole; young people of childbearing age who already have one housing unit are 4,216, accounting for 74.26 per cent; young people of childbearing age who have more than one family in the survey respondents are only 929, accounting for only 16.36 per cent. Based on the data in the table, it is easy to see that the number of people in the sample who own a house still occupies the majority, while the proportion of young people of childbearing age who do not own a house and young people of childbearing age who have more than one house is relatively low, and the rate of homeownership among young people of childbearing age in the sample reaches 90.62 per cent.

Among youth of childbearing age without housing, 62.36 per cent were willing to have a first; among youth of childbearing age with only one housing unit, 62.08 per cent said they were willing to have a first; and among the group of youth of childbearing age with multiple housing units, 71.85 per cent were willing to have a first. The rate of willingness to have a second child is higher among young people of childbearing age who own more than one home than those who have only one home, while the rate of willingness to have a child is slightly higher among young people of childbearing age who have a home than those who do not have a home. And as more housing becomes available, the desire to have a child grows stronger as financial restrictions are gradually relaxed. In terms of total income, the average total income of young people of childbearing age without housing is 64,811.56 yuan, that of urban young people of childbearing age with one house is 72,024.83 yuan, and that of young people of childbearing age with more than one house is 118,563.62 yuan. As

the number of houses is increasing and the total income of couples is increasing, only high income can cover the high cost of purchase.

### 4. Recommendations

# 4.1 Continue to implement differentiated macro-controls and further control the rise of house prices

Highlighting the residential property of houses, houses will eventually return to the essence of their residential function, rather than being reduced to an investment tool. Since the housing reform, China's property market on the attributes of residential has never been a clear position, housing prices in full accordance with the market price, due to speculation in the home buyers or buyers are always higher than the price of housing, resulting in an unreasonable rise in prices, and the degree of development of the real estate market in different regions are different, each with their regional particularities, in order to avoid a one-size-fits-all type of policy regulation, affecting the effective implementation of the policy, in view of this In order to avoid a one-size-fits-all policy regulation, affecting the effective implementation of the policy, in view of this, local governments should implement differentiated real estate regulation policies according to their regional differences, and at the same time, in order to promote the healthy and stable development of the real estate market, it is necessary to establish and improve the long-term mechanism.

# 4.2 Give more benefits to childbearing families, such as joint paid maternity leave for couples

Nowadays, one of the reasons why women are reluctant to give birth to even one child is that they face the nurturing process alone during women's labour and the monthly period. To reduce the child-raising burden of working mothers, the government should consider sharing maternity leave between husband and wife and extending the number of days of men's leave in a planned and step-bystep manner. It is suggested that paternity leave be combined with maternity leave and taken by couples, with the leave-taker's full salary being paid during the period of leave as stipulated above. It will also reduce discrimination against female employees in the labour market. In addition, it will reduce gender discrimination in the workplace, ensure the interests of childbearing families, provide the same maternity leave to parents, and reduce the physiological and psychological pressure on mothers to raise their children.

# 4.3 Give more benefits to childbearing families, such as joint paid maternity leave for couples

Increasing the rate of home ownership among young people is very important to change the situation of low birth rate. In order to reverse the current downward trend in the low birth rate, it is necessary to increase support for young people, especially families with children, to purchase homes. Firstly, financial support can be given by lowering the down payment ratio to reduce the difficulty of home ownership; secondly, mortgage concessions can be given to reduce the pressure of monthly payments; thirdly, subsidies can be provided for home ownership to reduce the cost of home ownership; fourthly, mortgage addition and deduction can be made to reduce personal income tax. After the difficulty of young people's home purchases decreases, it will help to raise the willingness to give birth, which will in turn stabilise the birth rate of the population.

### References

[1] Li Jiangyi. Do high property prices lower the birth rate? ---

An analysis based on the new household economics theory[J]. Nankai Economic Research, 2019(04):58-80.

[2]Heckman J J, Walker J R. The Relationship between Wages and Income and the Timing and Spacing of Births: Evi dence from Swedish Longitudinal Data[J]. Econometrica, 1990, 58 (06):1411-1441.

[3] YANG Hualei, WU Yigen, ZHANG Bingxin. Urbanisation, Externalities and Fertility Level[J]. Population and Development, 2018, 24(04):48-55.

[4] Wang Guojun, Zhao Xiaojing, Zhou Xinfa. An empirical study on the influencing factors of China's birth rate - based on family planning policy, social security

Social Security Perspective[J]. Economic Issues,2020(02):7-11.

[5] LI Zhilong, CHEN Jiwei, FENG Shuazhang. The impact of rising house prices on the birth rate of married females[J]. Research on Labour Economy,2020,8(05):22-46.

[6] ZHANG Fen,FANG Yingfeng,PENG Haochen. Mechanisms of house price on household fertility decisions: An empirical study based on Chinese household tracking survey data[J]. Population Research, 2023, 47(02):96-111.