

The Impact of Housing Price Fluctuations on Family Fertility Decisions in Modern China: A Review of Theoretical Mechanisms and Empirical Evidence

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Abstract:

This study examines the intricate relationship between housing price fluctuation and household fertility decisions in present-day China, with a focus on the Guangdong-Hong Kong-Macao Greater Bay Area. The article creates a theory called the “dual-effect” that is based on the existing literature and that is made up of two components: a wealth effect and a crowding out effect, in light of that the area has a historically low total fertility rate at the same time as their housing market has unpredictable swings. The literature contains significant gaps, especially with respect to the non-attention to price volatility, and the regional institutional variety. We will use a hybrid research design, consisting of surveys, interviews, and policy research. The research aims to reveal particular mechanisms through which housing market characteristics affect fertility decisions. The research results will provide a comprehensive theoretical framework. There will be evidence-based, unified policy implications on housing stability and population sustainability in a high cost urban agglomeration.

Keywords: Housing price volatility, Fertility decisions, Wealth effect, Crowding-out effect, Greater Bay Area (GBA)

1. Introduction

China is navigating a profound demographic transition alongside a significant adjustment in its real estate market. The nation's total fertility rate has plummeted to approximately 1.0, one of the lowest in the world, while over 22% of the population is now

aged 60 or above, indicating rapid population aging. Concurrently, the housing market, particularly in pivotal regions like the Guangdong-Hong Kong-Macao Greater Bay Area (GBA), has been characterized by rapid price appreciation and notable periodic fluctuations. These parallel trends suggest a potential causal link, where housing market dynamics significantly

influence family fertility decisions. The situation is particularly acute in the GBA, where soaring and volatile housing costs within the unique “one country, two systems” framework create a natural experiment for studying this relationship. High housing costs are hypothesized to exert financial pressure on young families, potentially suppressing fertility through channels like the “crowding-out effect,” where mortgage and rental expenses divert resources from child-rearing. This can create a negative feedback loop: housing unaffordability leads to deferred childbearing, contributing to further demographic decline. However, prevailing research often focuses on static housing price levels, failing to adequately capture the impact of price volatility and the critical moderating role of diverse institutional contexts across the GBA. This study aims to address these gaps by providing a comprehensive review and proposing a refined research framework to elucidate this complex issue.

2. Literature Review and Theoretical Framework

There are two effects competing to explain the relationship between housing and fertility. With the wealth effect, consumption basically relies on prices.

2.1 The Wealth Effect and Crowding-out Effect

The wealth effect states that a rise in house prices increases the perceived wealth and collateral value of homeowners’ households. This, in turn, may loosen their budget constraint and encourage fertility. This is especially true for families with several properties. On the other hand, the so-called crowding-out effect assumes that high housing costs, which include all the costs associated with a mortgage or rent, absorb a large share of income and lower the money available for having children. In this way, it discourages fertility especially among young, asset-poor families. Therefore, a household’s ultimate fertility decision is theorized to be the net result of these two opposing forces, contingent upon its specific asset portfolio and housing tenure status.

2.2 An Integrated Theoretical Framework: The Role of Moderating Variables

Building on this, our research introduces a refined theoretical framework that posits the net effect of housing price fluctuations on fertility is not uniform but is moderated by key household and institutional characteristics. Specifically, we propose that factors such as a family’s asset structure (e.g., being a non-homeowner, single-property owner, or multi-property owner), institutional factors (e.g., permanent residency status, household registration type), and exposure to specific regional policies (e.g., Hong Kong’s

Top Talent Pass Scheme) critically determine whether the wealth effect or the crowding-out effect dominates in influencing fertility decisions. This integrated framework allows for a more nuanced, context-specific analysis of the housing-fertility nexus within the complex environment of the GBA.

2.3 Research Gaps and Contextual Specificity of the GBA

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3. Research Objectives and Key Issues

The primary objectives of this research are:

- (1) To form a comprehensive set of survey methods and an indicator system suitable for assessing the effects of regional housing price fluctuations and fertility policies.
- (2) To propose differentiated housing and fertility support policy combinations for various family types within the GBA.
- (3) To formulate housing support measures aimed at en-

hancing the effectiveness of talent policies and promoting regional talent stability and population sustainability. Issues to be addressed include testing the net strength of the wealth and crowding-out effect across homeowner groups and strategy development for acquiring more comparable, higher-quality data over GBA cities.

4. Methodology

4.1 Research Design

This research utilizes a mixed-methods framework, which is a combination of qualitative and quantitative techniques to obtain a triangulation of findings.

4.2 Data Collection

4.2.1 Questionnaire Survey

A questionnaire will be drawn up and administered by means of stratified random sampling in key GBA cities (Guangzhou, Shenzhen, Hong Kong, etc.). The strata are based on city, household registration status and income. A sample size of 2500 is planned, expecting the response rate to be more than 80%. The questionnaire will employ established scales, such as a housing burden perception scale and a fertility intentions scale, to ensure reliable and valid measurement of core constructs. It will also include modules to capture data on key moderating variables, including household composition, income, asset ownership, and household registration status.

4.2.2 Semi-structured Interviews.

To gather qualitative data on motivations and decision making, In-depth interviews will be conducted with 60-80 households of different types.

4.2.3 Policy Document Analysis

There will be a systematic collection and comparative analysis of the housing, talent, and fertility policies in the GBA.

4.3 Data Analysis

We will analyze quantitative data using statistical methods. Using Structural Equation Modeling (SEM), we will verify the hypothesized pathways of the dual-effect model. It will test the relationship between perceived price volatility and fertility behavior. Interviews will be analyzed qualitatively to identify themes and rationales for decisions made by respondents.

5. Expected Contributions and Novelty

This research contributes in several ways:

(1) The perspective introduces housing price volatility and

market uncertainty that captures a broader dynamic picture; these variables are more representative of the market than mere levels of prices.

(2) The methodology employs a mixed approach which uses surveys, interviews, and policy analysis and uses multi-stage sampling along-with SEM and QCA.

(3) The aim is to deepen our theoretical understanding of the double effect mechanism that is moderated by the family assets and institutional context. The results will likely contradict popular belief by suggesting the possible suppression of fertility by talent policies without housing support. The study will develop a policy package for regions with high density and high-mobility.

6. Conclusion

This review shows an important association between the fluctuations of housing price and fertility decisions in China. It proposes a dynamic and institutionally embedded framework of research. The study aims to go beyond analyses only and adopt the GBA's unique context to gain insights that can contribute theoretically as well as to policy-making. The expected results indicate the need for a coordinated "housing-fertility-employment" policy package in response to population sustainability and housing market stability challenges. Future studies will be based on actual data collection and analysis for validating and modifying the theoretical model.

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