

# The Impact of Housing Prices on Family Stability in China

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## Research Question

How does housing market volatility affect family stability in China? Specifically, I aim to explore whether fluctuations in housing prices lead to significant changes in family dynamics, particularly in decisions related to marriage and divorce. This research will also explore the heterogeneity of effects across different household characteristics, such as education, income, and the presence of children.

## Motivation

a. Importance: Housing prices have been a focal point of China's urbanization process, with sharp increases in recent years, creating significant wealth change for property owners. Decisions about marriage and divorce are often influenced by economic stability, and housing is a significant part of a couple's financial portfolio. Given the fixed costs of divorce and the fact that marriage can be viewed as a form of insurance against economic instability (especially in an incomplete labor market), I hypothesize that as the value of a household's wealth (primarily in property) increases, the benefits provided by the "marriage insurance" diminish. This could lead to higher divorce rates as property values rise. Understanding the relationship between housing market volatility and family structure is critical for predicting long-term social and economic trends.

b. Policy Implications: Insights from this study can inform housing and social policies aimed at mitigating the negative effects of rapid housing price growth on family stability. If rising housing prices lead to higher divorce rates, policymakers may need to implement targeted social programs or adjustments to divorce settlement regulations, particularly focusing on property distribution during divorce proceedings. For example, tax incentives or subsidies could be introduced for newlyweds or couples seeking housing, while other interventions could stabilize prices during periods of high volatility.

c. Economic Theory: This research tests theories related to household decision-making under uncertainty, such as Becker's theory of marriage as a contract of mutual labor, which suggests that two people living together fare better in uncertain labor markets. As property values rise, and with a joint ownership model assumed, the need for economic risk-sharing diminishes, reducing the incentive to stay married.

## Background

In the late 1990s, China began to shift away from its Soviet-style housing distribution system, moving towards market-oriented housing reforms. A key milestone in this transition was the issuance of a document by the State Council in 1998, titled "The Resolution on Continuing Urban Housing System Reform and Accelerating Housing Development." This marked the official end of the welfare housing system, which had been based on residents' work units, and urged individuals to purchase housing in the open market.

To promote home ownership, the government established a new housing finance system that made it easier for individuals to obtain mortgages. Between 1998 and 2002, the People's Bank of China, the country's central bank, lowered mortgage interest rates five times. These reforms rapidly accelerated the development of China's housing market, making real estate a key driver of the country's economic growth.

However, this boom came with challenges. As millions of rural migrants moved into cities during the early 2000s, urban housing demand soared, and property prices increased dramatically. According to the National Bureau of Statistics of China, housing prices in 35 major Chinese cities

rose by an average of 12.68% annually from 2002 to 2010. These price surges raised concerns about housing affordability and potential risks to social stability, prompting the government to take action.

In 2006, the State Council and its ministries introduced “National Article Six,” a document aimed at regulating the housing market by stabilizing prices. One key regulation was the introduction of a discontinuity in down payment ratios for properties based on their size. Homes under 90 square meters required a lower down payment of 20%, while those above the threshold needed a 30% down payment. This policy created a sharp division in the housing market, allowing for a natural experiment on the impact of housing prices on family outcomes.

This discontinuity was emphasized in subsequent policies, including the 9.27 Housing Finance Policy in 2007 and the New National Article Ten in 2010. These policies aimed to encourage the construction and purchase of smaller, more affordable housing units, while discouraging investment in larger, more expensive properties.

Note that in late 2000s and early 2010s, there were many other restrictive housing market cooling measures (such as National Article Eleven and the New National Article Eight) and other convoluted major macroeconomic and monetary policies. However, none of these regulations involved discontinuity in terms of house size, which is essential for the identification strategy.

## Literature Review

The relationship between economic factors and family outcomes has been well studied. Research on economic shocks and marriage (Oreffice and Quintana-Domeque, 2010) suggests that income instability influences marriage rates. Divorce is similarly affected by economic instability (Charles and Stephens, 2004), meanwhile, changes in the value of shared assets, like the family home playing a major role in asset division, and consequently can alter the division of assets in divorce cases (Brimig and Carbone, 1987).

In the Chinese context, scholars like have explored housing price growth and family dynamics, such as marriage decision (Zhao et al., 2023), intergenerational co-residence (Li and Wu, 2019), and household consumption (Yang et al., 2018). With respect to the methodology, several existing studies use the 90 square meters policy as a discontinuity point for analyzing various economic outcomes, with respect to labor supply (Li et al., 2020), child development (Li et al., 2023) and fertility (Ang et al., 2024).

However, little attention has been given to price volatility and its direct effects on divorce. This research will build upon existing work by focusing on property ownership and housing price fluctuations as key drivers of divorce and family instability.

## Empirical Strategy and Data Sources

a. Empirical Strategy: I propose a Regression Discontinuity Design (RDD) to analyze the impact of housing prices on family stability, using the policy threshold of 90 square meters as the key treatment variable. The policy from 2006-2010, which led to significant price differences between properties larger and smaller than 90 square meters, will provide the needed exogenous variation. This policy creates a natural breakpoint in housing prices, allowing us to examine the effect of being just above or below the 90 square meter threshold.

I will apply a donut RDD approach, excluding observations just around the 90 square meter threshold (between 10 and 100 square meters) to ensure robustness, and use instrumental variables (IV) such as land slope and city-level housing price trends to control for endogeneity.

b. Regression Specification: Our main regression specification will be:

$$Y_{it} = \alpha + \beta \text{HousingPriceVolatility}_{it} + \gamma X_{it} + \lambda_t + \delta_i + \epsilon_{it}$$

Where  $Y_{it}$  represents the divorce rate or family stability indicator (from CFPS, CHFS),  $\text{HousingPriceVolatility}_{it}$  is the housing price change within the household’s city,  $X_{it}$  includes household characteristics (education, income, presence of children),  $\lambda_t$  and  $\delta_i$  are time and city fixed effects,  $\epsilon_{it}$  is the error term.

c. Data Sources: I use China Family Panel Studies (CFPS) dataset. CFPS provides detailed panel data on family stability (marriage status, marriage year and month, divorce year and month),

property (area, value, brought time) and other control variable (income, demographic characteristics). For housing price data, the Chinese National Bureau of Statistics offers city-level monthly data, which can be used to calculate volatility and long-term trends.

## Contribution to the Literature

This research will make a unique contribution by exploring the intersection of housing price volatility and family decisions in China, using an empirical strategy centered around housing policy thresholds. While much of the literature has focused on how economic factors influence marriage and divorce, few studies have explicitly examined the role of property values and housing market volatility. This research will also contribute to broader discussions on the social impacts of China's rapid urbanization and housing market development.

## Expected Challenges

Endogeneity: One key challenge will be addressing potential endogeneity between housing prices and divorce rates. Rising housing prices may both result from and cause changes in family dynamics. To mitigate this, I may use land slope as an instrumental variable, as it is likely exogenous to family decisions but affects housing prices through its influence on construction costs and housing demand.

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