Assessing the Impact of Education Equity Policies on

Housing Market Prices: A Case Study of

the "Multi-School Zoning" Policy in Beijing

by

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Abstract

This thesis investigates the influence of the "Multi-School Zoning" policy on the housing market prices in Beijing, focusing on how educational equity policies affect real estate values through the lens of school zoning modifications. Utilizing a Difference-In-Differences (DID) approach, this study analyzes second-hand housing transaction data from 2016 to 2020 within Dongcheng and Xicheng districts. The introduction of the "multi-school zoning" policy, which redistributes students among schools regardless of their residential proximity to specific schools, aims to mitigate the disparities in educational opportunities that have historically driven up housing prices in desirable school attendance zones (SAZs). The findings suggest that the policy has successfully reduced housing prices in affected zones, thereby diminishing the education capitalization premium and contributing to a more equitable distribution of educational resources. This shift not only impacts housing affordability but also reflects broader societal gains in terms of reduced educational inequality. The research further delves into the dynamics between school reputation, educational risk, and housing prices, advocating for a balanced approach that integrates "equal opportunity" with "equal supply" measures such as "group school management" and "teacher inter-school rotation" to enhance overall educational quality.

Keywords: *Real Estate, Educational equity policy, School Attendance Zone, "Multi-School Zoning" policy, Difference-In-Differences, Primary Education*

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Looking ahead, I am excited to apply the knowledge and skills I have acquired through this research to future academic pursuits and to meet forthcoming challenges with the same determination and enthusiasm.

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I.   Introduction

Housing represents a critical facet of living conditions and remains a crucial point of economic discussions. Over the past decade, China's housing market has experienced a significant surge in prices, with first-tier cities seeing a fourfold increase, as demonstrated in Figure 1 (National Bureau of Statistics of China, 2024). Additionally, in 2023, spending on housing represents about 23% of an individual's annual total expenditure (National Bureau of Statistics of China, 2024). This escalating trend in housing costs, combined with housing's substantial share of personal expenditure, highlights the increasing economic burden faced by individuals, particularly in China's metropolitan areas.
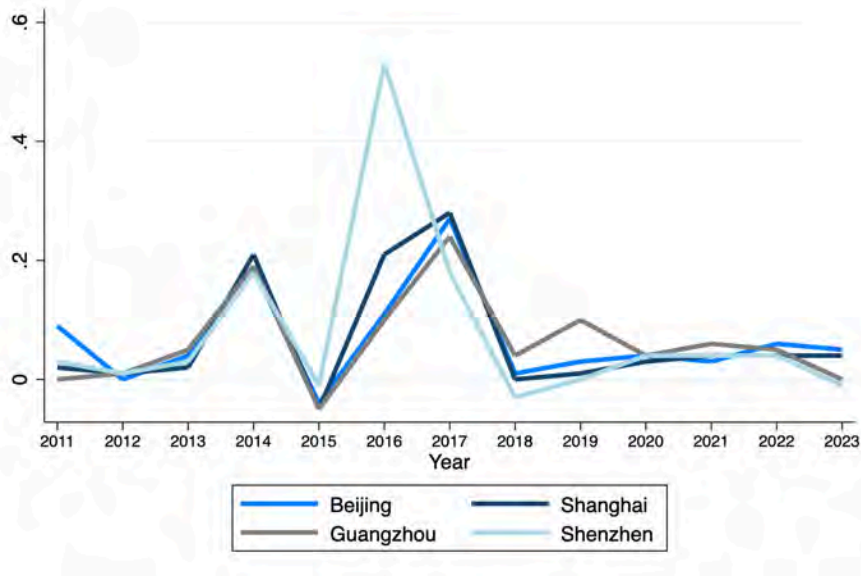

Figure 1. Annual Real Growth Rate of Housing Prices in China's First-tier Cities (2011-2023)

When individuals decide on their place of residence, a multitude of factors come into play. Notably in China, one of the paramount considerations is the quality of education available within the neighborhood. The period following China's reform and opening up has witnessed a

remarkable surge in the returns on education, along with a noticeable widening of the income gap. As a result, Chinese parents are increasingly motivated to ensure their children have a competitive edge from the very start. According to a nationwide survey on residential consumers conducted by the Beike Research Institute in 2021, 39.5 % of the respondents considering a change of residence identified addressing their children's educational needs as the primary driving force (2021).

In urban China, the enrollment process for primary schools is primarily determined by the "nearby enrollment" rule, which hinges on a child's hukou (household registration), often linked to the family's homeownership status. Given the unequal distribution of high-quality educational resources, families often go to great lengths to purchase homes within proximity to high-quality School Attendance Zones (SAZs) to secure their children's access to superior primary education. Consequently, the real estate prices in these high-quality primary SAZs command a premium due to the added educational benefits they offer.

While existing research has predominantly concentrated on the positive impact of the quality of education within a neighborhood on housing prices, limited attention has been devoted to the reciprocal influence of educational equity policies on housing prices. As such, to assess the impact of educational policies on mitigating the rise in housing costs, this study selects the "multi-school zoning policy" as a case in point and takes Beijing as a focal case study. This research is structured as follows: Section II reviews existing literature. Section III describes the primary education system central to the case study. Section IV introduces the model and data used in the study. The results are detailed in Section V. Section VI discusses the implications of the findings and provides a conclusion.

II. Literature

Researchers have long been engaged in quantifying the education premium on the housing market. For instance, Han et al. assessed the education premium associated with good primary schools in Beijing from 2013 to 2016 and reported a premium of approximately 11%, which increased annually (2020). Similarly, Liu et al.'s study on housing premiums in Shanghai from January to October 2019 found that the housing price premium for access to high-quality primary schools was approximately 15.6% (Liu et al., 2022). In the literature, estimations of the education premium in China exhibit a notable variance, spanning from 8.1% to 20% (Chan et al., 2020; Feng & Lu, 2010; Hu et al., 2014). This range consistently surpasses the findings observed in other countries, where the education premium is typically less than 5%, underscoring the heightened demand among Chinese urban families for access to high-quality educational resources (Black & Sandra, 1999; Davidoff & Leigh, 2008; Fack & Grenet, 2010; Gibbons & Machin, 2006). This difference in the education premium between China and other countries is primarily due to the lack of private education institutions in China, limiting parents' options for school enrollment. Additionally, since one cannot enjoy the benefits of high-quality SAZs by renting, people often make huge efforts to purchase "School District Housing".

However, the increasing housing prices, primarily propelled by the education premium, have posed a range of challenges in urban areas. As argued by Jeanty et al., the surge in housing costs can potentially compel high-skilled workers to migrate out of cities, consequently diminishing the cities' overall competitiveness (2010). Additionally, it can exacerbate social stratification, fostering educational and residential segregation, thereby hampering intergenerational mobility (Zhang & Chen, 2018). Acknowledging these pressing challenges, the Chinese government has undertaken concerted efforts since around 2018 to curb the growth of

education premiums through a series of policies aimed at ensuring educational equity. For instance, in Beijing, this has included the implementation of a "multi-school zoning" policy and a "teacher inter-school rotation" system.

III.   Background and Hypothesis Development

Beijing's primary education system and real estate market have drawn significant attention due to the city's position as the nation's capital. In order to advance educational equity, Beijing's city government has been strictly enforcing the policy of nearby enrollment since the 1980s, when it canceled the unified primary school entrance examination. Since then, enrollment in elementary school has been associated with homeownership. Simultaneously with the restructuring of the real estate sector, urban families' houses have progressively made their way onto the market and are able to be freely exchanged. This part provides an overview of the history of Beijing's primary education system, the focused districts under study, and the formation of our hypotheses.

A. Beijing's Primary Education System

Enrollment in Beijing's compulsory education is divided into two stages: kindergarten to primary school and primary school to junior high school. Beijing's approach to the first stage of compulsory education is intricately linked to residential patterns, reflecting a comprehensive system that emphasizes the "nearby enrollment" rule. This policy, rooted in the Compulsory Education Law, mandates that children attend schools close to their registered residence (1986). This was intended to simplify the enrollment process and make educational access equitable.

Over the years, Beijing has refined this system by abolishing the elementary school graduation examination in 1993 and focusing on residence-based enrollment rather than

academic performance (The People's Government of Beijing Municipality, 1993). This shift was further reinforced by binding primary school enrollment rights to household locations and developing a computerized system to manage these enrollments. By 2005, Beijing was strictly implementing examination-free, nearby enrollment, with further restrictions placed in 2012 to eliminate the "recommended student" process that allowed some students to bypass the nearby enrollment rule (Beijing Municipal Education Commission, 2014). However, the adherence to nearby enrollment has had unintended consequences. It has amplified disparities in educational quality because of the uneven distribution of high-quality schools. This, in turn, has led to a surge in demand for "school district housing" in areas with prestigious schools, inflating real estate prices significantly. Parents hoping to secure advantageous educational outcomes for their children are thus compelled to invest in expensive properties within these high-demand school attendance zones (SAZs).

Moreover, the policy variations between different districts in Beijing, where educational quality fluctuates considerably, complicate the landscape further. Every year, each district's education commission issues specific enrollment guidelines, which parents must navigate carefully.

These dynamics illustrate a complex interaction between education policy, real estate markets, and social equity, highlighting how policies intended to simplify and equalize educational access can, in practice, lead to increased socioeconomic stratification.

B. Multi-school Zoning Policy

The "multi-school zoning policy" was initially introduced in Dongcheng District in 2018, marking a pivotal shift in enrollment procedures. Under this policy, the Education Commission of Dongcheng District began the practice of recording the actual residential address and the

school attended by school-age children during their enrollment registration process. Notably, for families who acquired property rights certificates for their residential housing after June 30, 2018, their school-age children would be enrolled in Dongcheng District through a computer-assigned multi-school zoning system (Dongcheng District People's Government of Beijing Municipality, 2018). This marked a departure from the prior practice of children being guaranteed enrollment in the nearest school based on the address of the family's property rights, introducing an element of uncertainty into school enrollment and the quality of education that children receive.

Two years later, Xicheng District, located nearby, introduced a similar policy for the 2020 academic year. This guideline stipulated that commencing on July 31, 2020, families who purchase property within Xicheng District and obtain property ownership certificates will no longer be allocated to specific registered enrollment zone schools. Instead, all admissions will be determined through a multi-school zoning system within the residential district or adjacent districts (Xicheng District People's Government of Beijing Municipality, 2020).

C. Districts

The temporal discrepancy in policy implementation offers a valuable opportunity to conduct a comparative analysis between the two districts and assess the extent to which these policies impact the housing market. Notably, these two districts are both centrally located, exhibiting similar sizes and populations, which makes them an ideal choice for a meaningful comparison.
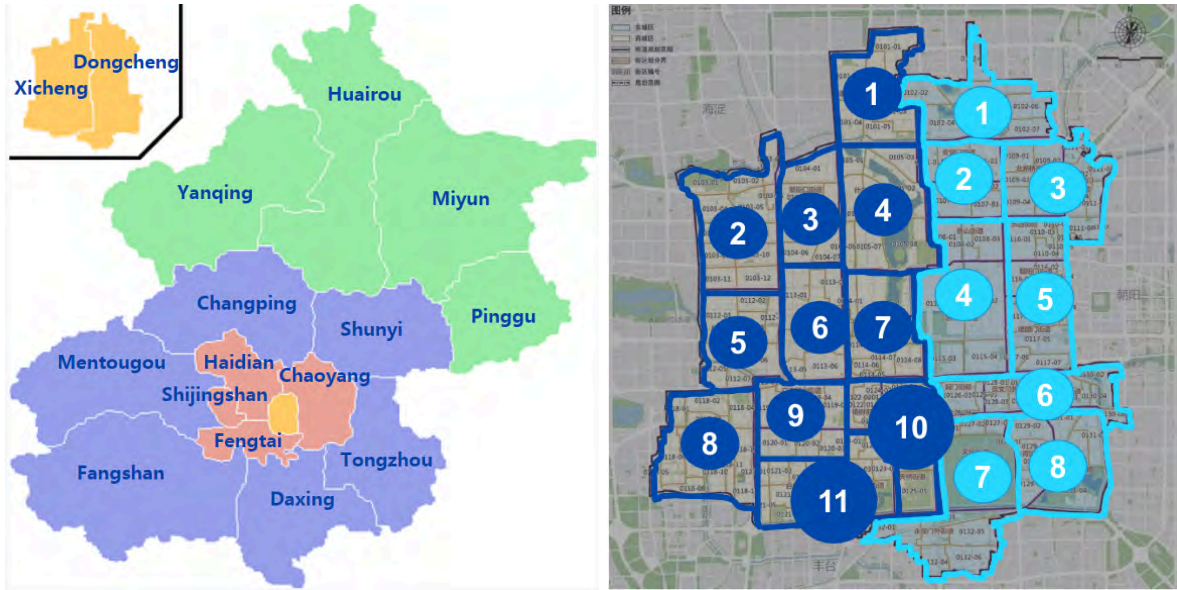
Figure 2. Dongcheng and Xicheng Districts on the map

District	Dongcheng	Xicheng
Area	41.9 km²	50.7 km²
Population* (million)	0.70	1.10
Number of primary schools*	54	66
Number of School Attendance Zones* (SAZs)	8	11

*As of 2022

Table 1. General information about Dongcheng and Xicheng Districts

D. Consumers' Reaction Speed to the Policy Implementations

To thoroughly assess the impact of education-equity policies on the housing market, it is essential to analyze the nuances of consumer response times following the implementation of

such policies. My research identifies a consistent pattern of rapid consumer reactions to the introduction of the multi-school zoning policy in Dongcheng District, Beijing, in May 2018.

Analysis of data from Beijing Daily highlights a significant increase in second-hand housing transactions, which peaked at a 14-month high concurrently with the policy's initiation (2018). This trend is visually confirmed through a graphical analysis from May 2018 to May 2020 based on the data from China Index Holdings, showing a marked increase in transaction volumes, with the affected district recording the highest growth rate over this period (CREIS, 2023).

Additionally, research conducted by the real estate agency Wo Ai Wo Jia underscores a marked preference for the Housing Provident Fund as the predominant loan option among homebuyers in May 2018 (Beijing Daily, 2018). This preference, primarily motivated by the desire for homeownership rather than investment, was especially pronounced among first-time buyers and those upgrading their properties. The firm demand exhibited by these buyers indicates that the motivations behind purchasing decisions were significantly influenced by the impending multi-school zoning policy, set to be enacted in June 2018.

The data convincingly demonstrates that potential homebuyers were strategically timing their purchases to benefit from the anticipated advantages of the new zoning policy. This suggests that consumer responses were both immediate and strategic, affirming the profound influence of education-equity policies on housing market dynamics.
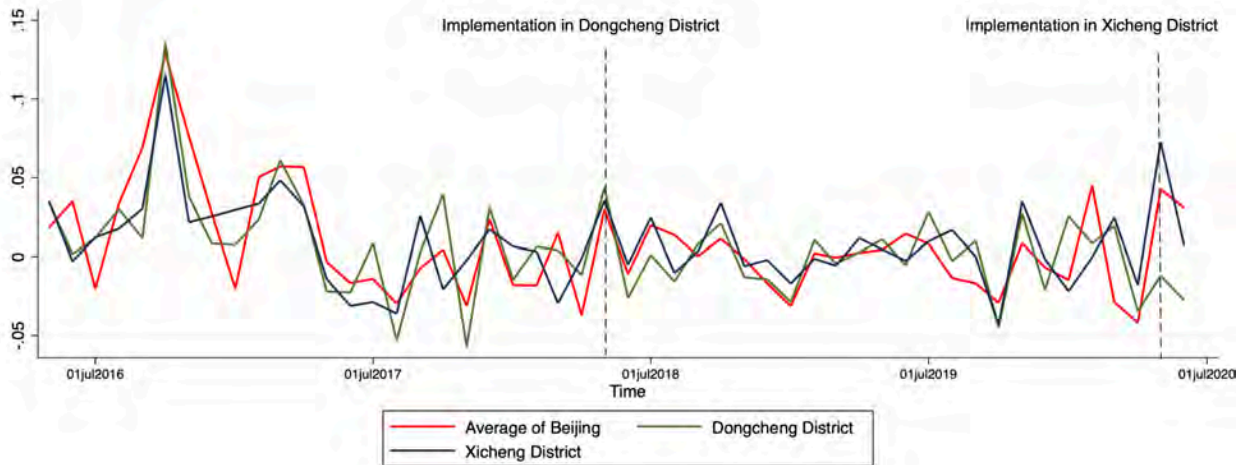
Figure 3. Monthly Growth Rate of Second-hand Housing Transaction Volume in Beijing

(2016-2020)

E. Hypothesis Development

Referring to the pricing model developed by scholars (Shao et al., 2023), House prices (P) are influenced by three factors: residential attributes (H), the expected value of public services (S), and public service uncertainty (R). Using the hedonic pricing model, the house price equation can be expressed as P = P(H, S, R).

H (Residential Attributes) is influenced by physical properties such as size, orientation, age, and structure of the house. A better physical attribute corresponds to a higher price ($\partial P/\partial H > 0$).

S (Expected Value of Public Services) mainly revolves around the expected value of basic education accessible based on the house's location. A study led by Ren about the capitalization of education services and real estate market value made two assumptions about the expected value of public services. First, there are reputation differences among different elementary schools. Second, parents value the reputation of elementary schools and, within the limits of financial and other conditions, will make efforts to send their children to schools with a

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better reputation (2017). Thus, higher-reputation schools in the district can increase house prices due to parental preferences for better schools ($\partial P/\partial S > 0$).

R (Public Service Uncertainty) refers to the uncertainty introduced by policies such as "multiple school zoning." Under such policies, the uncertainty regarding which school a child will attend increases, and since families are typically risk-averse, this uncertainty can reduce house prices ($\partial P/\partial R < 0$).

Based on the analysis, for representative properties in Dongcheng District, the price before the implementation of the "multiple school zoning" policy was $P_0 = P(H_0, S_0, R_0)$, where the level of basic education was certain ($R_0 = 0$). After the implementation of the "multiple school zoning" policy, the price was $P_1 = P(H_1, S_1, R_1)$, as the new policy did not change the physical attributes of the properties or the average level of basic education in Dongcheng District, only the correlation between properties and basic education, i.e., $H_1 = H_0$, $S_1 = S_0$. However, this policy increased the uncertainty of the level of basic education ($R_1 > R_0$), leading to the hypothesis $P_1 < P_0$. That is to say that, we hypothesize that after the implementation of the "multi-school zoning" policy, the average housing prices of the district have experienced a relative decline compared to the surrounding areas.

Additionally, when comparing different School Assignment Zones (SAZs) within the district, the "multi-school zoning" policy has exacerbated the uncertainty of basic education levels in SAZs where the quality of schools varies significantly (a higher R_1). Consequently, we hypothesize that after implementing this policy, the average housing prices in SAZs with high uncertainty in school quality will experience a more substantial decrease. In contrast, SAZs with low uncertainty in school quality see a less pronounced decrease in house prices. This hypothesis

is also based on the increased risk aversion among families facing greater uncertainty in their children's educational outcomes.

However, to assess the uncertainty associated with each SAZ, our study focuses on two key factors: the variability in the quality of primary schools within each SAZ, and the risk associated with enrolling in a low-quality school. Our objective is to determine which of these factors has a greater impact on the overall uncertainty for each SAZ, providing a clearer understanding of where interventions might be most needed.

IV.   Data and Methodology

A. Data Selection

To assess the impact of the policy changes on housing prices, this research focuses on housing transaction data spanning from 2016 to 2020, sourced from the largest real estate agency in Beijing. Given that there has been limited new real estate development in central Beijing in recent years, this research specifically concentrates on the resale housing market in Xicheng and Dongcheng districts. The dataset encompasses essential information such as transaction prices, housing locations, floor areas, housing ages, and other fundamental housing characteristics.

B. Identification of high-quality and high-variability SAZs

Since Beijing abolished the ranking system for primary schools in 2000, official rankings are no longer provided. However, there are widely accepted unofficial rankings that are frequently reposted by the media and recognized by parents. These rankings significantly influence families' decisions to buy homes in specific school districts. The more common rankings categorize Beijing's primary schools by reputation into first-tier level one, first-tier level two, second-tier level one, second-tier level two, and ordinary schools.

Thus, according to these reputation evaluations of primary schools in Dongcheng District as reported by the media and online forums, this research then assigns scores sequentially to each level of reputation evaluation for primary schools: assign 5 points to first-tier level one, 4 points to first-tier level two, 3 points to second-tier level one, 2 points to second-tier level two, and 1 point to ordinary primary schools (Parent Forum, 2020). Secondly, this research calculates the statistics of the mean and standard deviation of reputation evaluations for primary schools in Dongcheng District. Finally, based on the average scores and standard deviations of each SAZ, we classify SAZs within each area into high-score, medium-score, and low-score SAZs. Meanwhile, we calculate the standard deviation of reputation evaluations for primary schools within each SAZ and classify several SAZs within each area into high variability, medium variability, and low variability SAZs.

Furthermore, we determine the percentage likelihood of a student enrolling in an ordinary-tier school, which serves as a measure of risk for each SAZ. The SAZs are then classified into high-risk, medium-risk, and low-risk categories. Interestingly, it was found that the classification based on average scores aligns with the risk classification, indicating a correlation between the two metrics.

C. Methodology

This study utilizes the Difference-In-Differences (DID) model.

$$lnPrice_i = \beta_0 + \beta_1 * Time + \beta_2 * Policy + \gamma(Time * Policy) + \lambda X_i + \epsilon_i$$

In this formula, $Price_i$ is the transaction price of the housing and β_0 is the intercept of regression. *Time* is a dummy variable that takes the value 0 or 1 depending on whether the *i*th measurement refers to the pre or post "multi-school zoning policy" period respectively. *Policy* is

also a dummy variable that takes the value 0 or 1 depending on whether the ith measurement refers to an individual in the control group or the treatment group respectively. (*Time * Policy*) is an interaction term. It stores the multiplication of the two dummy variable values for the ith observation.

V.   Results

A. Descriptive Analysis

Table 1 presents descriptive statistics of the main indicators for the entire sample, Dongcheng District, and Xicheng District. The entire sample consists of 12,731 observations, with 4,975 observations in Dongcheng District and 7,756 observations in Xicheng District, the latter accounting for approximately sixty percent of the former. The average transaction price in Dongcheng District is around 95.3 thousand yuan per square meter, while in the same period, the average transaction price in Xicheng District is around 114.2 thousand yuan per square meter, indicating a proximity between the two. The average building area of properties in Dongcheng District is approximately 10 square meters higher than that in Xicheng District. There are no significant differences between the two districts in other property characteristics.

	Whole Sample			Dongcheng District			Xicheng District		
	Observations	Mean	Std. dev.	Observations	Mean	Std. dev.	Observations	Mean	Std. dev.
Housing price (10000 yuan/m²)	12,731	10.68	2.66	4,975	9.53	1.92	7,756	11.42	2.81
Building area	12,731	74.93	39.18	4,975	81.14	44.50	7,756	70.95	34.76
No. of bedrooms	12,731	1.98	0.79	4,975	2.01	0.81	7,756	1.97	0.78

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No. of living rooms	12,731	1.04	0.41	4,975	1.08	0.44	7,756	1.02	0.39
No. of kitchens	12,731	1.00	0.09	4,975	1.00	0.10	7,756	1.00	0.09
No. of bathrooms	12,731	1.14	0.39	4,975	1.18	0.45	7,756	1.11	0.35
Total floors	12,731	17.68	9.28	4,975	16.28	9.64	7,756	18.58	0.39
Floor of the housing	12,731	0.52	0.38	4,975	0.52	0.38	7,756	0.52	0.39

Table 2. Descriptive Statistics of the Whole Sample, Dongcheng District, and Xicheng District

B. Quality of Different SAZ

SAZ	Number of Primary Schools	Quality Score	Classification	Standard Deviation of School Quality Scores	Classification	Percentage Likelihood of a Student Enrolling in an Ordinary-tier School	Classification
Hepingli	8	2.25	Medium Score	1.16	Medium Variability	38%	Medium Risk
Andingmen - Jiaodaokou	4	3.50	High Score	1.73	High Variability	25%	Low Risk
Beixinqiao - Dongzhimen	7	1.43	Low Score	0.79	Low Variability	71%	High Risk
Dongsishitiao - Chaoyangmen - Jianguomen	8	2.63	High Score	1.30	Medium Variability	13%	Low Risk
Jingshan - Donghuamen	7	2.14	Medium Score	1.21	Medium Variability	43%	Medium Risk
Longtan - Tiyuguan	5	2.40	Medium Score	1.67	High Variability	40%	Medium Risk
Donghuashi - Chongwenmen - Qianmen	5	1.80	Medium Score	0.84	Low Variability	40%	Medium Risk
Tiantan - Yongdingmen Wai	10	1.20	Low Score	0.63	Low Variability	90%	High Risk
Total	54	2.06		1.25		48%	

Table 3. Identification of high (low)-quality and high (low)-variability SAZs

C. Parallel Trends Test

According to the parallel trends test, p is over 0.05. This result fails to reject the null hypothesis, implying that both groups in the pre-treatment period (before June 2018) behaved in the same manner.

D. DiD Regression

Table 4 shows the DID estimation results of our study. All columns include time-fixed effects, with control variables as shown in the table. The results in columns (1) to (3) indicate that the "multi-school zoning" policy has a significant negative effect on house prices in Dongcheng District. Specifically, column (3) shows that this policy led to a 4.91% decrease in house prices, which is significant at the 1% level. According to descriptive statistics, a 4.91% decrease corresponds to a drop of about 4,679 yuan per square meter in the unit price and about 379,673 yuan in total price. The empirical results of Table 4 confirm research hypothesis 1, that the "multi-school zoning" policy has caused house prices in Dongcheng District to decline relatively compared to surrounding areas.

	DID		
	(1)	(2)	(3)
Time × Policy	-0.0486***	-0.0487***	-0.0491***
	(0.0004)	(0.0003)	(0.0004)
Interior Features		Controlled	Controlled
Exterior Features			Controlled

Fixed Effect	Time	Time	Time
N	12,731	12,731	12,731

Note: Robust standard errors are in brackets, *,**, and *** represent significance at the 10%, 5%, and 1% levels.

Table 4. Effect of the Policy on Housing Prices in Dongcheng District

After the "multi-school zoning" policy was implemented, the specific primary school associated with a property changed from one fixed school to potentially several schools within the zone. This shift means that the average reputation and the variability of elementary schools within the zone now influence family home-buying decisions.

Variability in school reputation within SAZs can be determined by calculating the standard deviation of reputation scores for all elementary schools within each zone. Table 5 analyzes the impact of the policy on SAZs with varying levels of variability. The results shown in column (3) indicate that property prices in both high and low variability SAZs decreased by about 6%, with this finding being statistically significant at the 1% level. These results don't support our second hypothesis, which posited that SAZs with high uncertainty would experience a more substantial decline in housing prices.

To further explore these outcomes, we examined whether the scores and the proportion of the lowest-rated schools within a district also affect home-buying decisions. The average reputation of SAZs is calculated by averaging the reputation scores of all elementary schools within each district. Additionally, the likelihood of attending a lower-rated school within the district was assessed. Our findings suggest that SAZs with higher average scores and lower risks of attending poorly rated schools fall into the "high score" group, while those with lower average scores and higher risks are categorized as the "low score" group.

Table 6 presents the analysis of district characteristic heterogeneity. The results in column (3) show that following the implementation of the "multi-school zoning" policy, property prices in low-mean SAZs (the baseline group) decreased by approximately 4% (significant at the 5% level), while high-mean SAZs experienced a 1% increase in housing prices, significant at the 10% level. This pattern indicates that districts with higher average reputation scores are more attractive to homebuyers. Furthermore, in accordance with the theory of loss aversion, buyers tend to avoid properties that would place them in SAZs with poorly rated schools. This result also reveals that the uncertainty associated with SAZs in our hypothesis is more strongly influenced by the average reputation of schools and the risk of enrolling in an ordinary school, rather than the variability in school quality within an SAZ.

	DID		
	(1)	(2)	(3)
$H\_Var \times Time \times Policy$	-0.0624***	-0.0619***	-0.0625***
	(0.0002)	(0.0007)	(0.0005)
$L\_Var \times Time \times Policy$	-0.0636***	-0.0636**	-0.0635**
	(0.0003)	(0.0020)	(0.0020)
Interior Features		Controlled	Controlled
Exterior Features			Controlled
Fixed Effect	Time	Time	Time
N	12,731	12,731	12,731

Note: Robust standard errors are in brackets, *,**, and *** represent significance at the 10%, 5%, and 1% levels.

Table 5. Effect of the Policy on Housing Prices in SAZs with High and Low Variability

DID

	(1)	(2)	(3)
H_Score×Time × *Policy*	0.0135*	0.0156*	0.0144*
	(0.0016)	(0.0017)	(0.0019)
L_Score×Time × *Policy*	-0.0406**	-0.0431**	-0.0413*
	(0.0016)	(0.0023)	(0.0033)
Interior Features		Controlled	Controlled
Exterior Features			Controlled
Fixed Effect	Time	Time	Time
N	12,731	12,731	12,731

Note: Robust standard errors are in brackets, *,**, and *** represent significance at the 10%, 5%, and 1% levels.

Table 6. Effect of the Policy on Housing Prices in SAZs with High and Low Average Reputation

Scores

VI.   Conclusion

This paper examines the capitalization effect of real estate on measures aimed at equalizing opportunities in basic education. By constructing a theoretical model to propose research hypotheses and studying second-hand housing transaction data in two urban districts of Beijing from July 2016 to June 2020, this study assesses the average capitalization effect of the "multi-school zoning" policy in Dongcheng District of Beijing. The identification strategy utilizes Difference in Differences (DID) methods. The findings indicate that the "multi-school zoning" policy significantly reduced the education capitalization premium within district housing, overall achieving the policy goal of lowering the price threshold for basic educational public services.

This finding suggests that interventions aimed at improving school reputations and reducing the prevalence of ordinary schools could be more effective in reducing SAZ uncertainty than focusing solely on equalizing school quality across the board.

Based on the research conclusions, the paper also suggests achieving a balanced development of primary education requires a dual approach that combines "equal opportunity" measures, such as the "multi-school zoning" policy, with "equal supply" initiatives. "Equal supply" measures address the distribution of resources and quality among schools. Two notable strategies suggested are "group school management" and "teacher inter-school rotation." "Group school management" involves grouping several schools under a shared administrative and resource management system, which allows for more effective allocation of resources, sharing of best practices, and overall improvement in school management efficiency. This system encourages schools to operate not in isolation but as part of a collaborative network, which can help raise the standards of lower-performing schools by learning from higher-performing ones.

"Teacher inter-school rotation" is also proposed as a means to distribute teaching expertise more evenly across schools. By systematically rotating teachers among schools within a district, this policy aims to mitigate disparities in teaching quality. It exposes students to a variety of teaching styles and expertise, while also fostering professional development among teachers as they adapt to different educational environments and challenges.

Together, these measures are intended to fundamentally promote the balanced development of primary education by ensuring that every child has access to high-quality educational opportunities, regardless of their school's location or reputation. By coordinating "equal opportunity" and "equal supply" strategies, the policy framework aims to create a more equitable educational landscape where every student can achieve their full potential.

However, this study faces several limitations that affect the validity and scope of its conclusions. One significant limitation is the small sample size, which arises from policy shifts in the control group, Xicheng District. These shifts limit our sample size and reduce the reliability of the data, potentially affecting the generalizability of the findings. Additionally, the research fails to distinguish effectively between the impact of the average reputation of schools and the risks associated with enrollment in low-quality schools. This ambiguity complicates the ability to precisely identify which factor plays a more significant role in influencing the uncertainty of SAZs. Addressing these limitations in future research could lead to more definitive conclusions and help tailor more effective educational policies.

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