

Chris Liu

Mark Baker

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Nearby Enrollment Policy and School District Housing in Nanchang:

The Prime Culprit of Irrationality and Educational Non-Equalization

1. Introduction

Being one of the families in China who can afford school district housing and enjoy the housing policy privilege, my family spent three hundred thousand yuan on a new apartment at Park Road in Nanchang, Jiangxi, when I was in second grade. Before moving, my family and I lived in a neighborhood with carefully designed layout and organized property management system. The apartment was in an old neighborhood near the center of Nanchang and next to the second-best junior high school, Yuxin Junior High School, in the city. I did not quite understand why my family moved to a new apartment with everything older and smaller at the beginning. Later I knew my parents bought this apartment for me, more specifically, for me to attend Yuxin Junior High School in four years. After I graduated from junior high school, we again moved to a more modern neighborhood and sold the previous apartment with over one million yuan. Being one of the “beneficiaries” of nearby enrollment policy, the housing plays an important role in my admission process.

To ensure the equal education rights of children, nearby enrollment is a policy aimed at implementing compulsory education for primary and junior high school students. Under the policy, all students have the equal chance to enroll in different schools in the various district based on the location of their family’s hukou (a system of household registration, which records

the address of where people live). Government divides the city into many school districts, and those neighborhoods closer to the school are called “school district housing.”

According to my research, I found evidence showing that the school district housing policy in my city neither tends to achieve education fairness nor social fairness; instead, it is causing problems, including people irrational attitude and unfair educational resources, and to those lower-income families, this policy creates a significant gap in terms of education. The overpriced school district housing affects other people’s decision and increases the cost of buying a home. The school district housing policy gave students whose family can afford to buy an apartment near such kind of high-quality junior high school the privilege, but the children in those ordinaries families, which account for the majority of Chinese families, could already lose at the starting line. To not let their children fall behind, Chinese parents will do anything to buy the school district housing, including the “fake divorce” gate which “allows” a family to buy two school district housing. Generally, the price of school district housing has a direct influence on most of the people, and the examples above will be discussed and analyzed later in this paper.

The rest of this paper is presented as follows. The second section introduces the background information of the policy and concepts related to school district housing. The third section will analyze the Donghu District school district housing data from Chinese Real Estate Association. The fourth section will discuss and analyze the irrationality and unfair education. The fifth section will draw the conclusion.

2. Context

2.1 Nanchang

Nanchang, the capital of Jiangxi Province, is located in the southeast of China. Nanchang

has 5.46 million people and covers a total area of 7400km². The city is made up of six districts, including Donghu, Xihu, Qingyunpu, Qingshanhu, Wanli, and Xinjian district.

2.2 Nearby enrollment policy and school district

Nearby enrollment has been playing an essential role in Chinese compulsory education for a long time. According to Wen, who studies the school district and housing price in Hangzhou, “in the early 1980s, the Chinese government issued ‘the decision on universal primary education,’ aiming to make the school layout and education form fit the people’s way of life, and enable students to effortlessly attend a nearby school” (73). This act represents the beginning of the implementation of the educational system, and also built the foundation for Compulsory Education Law, which regulates the basic procedure of primary and junior high school enrollment of students from the first to the ninth grade. The article twelve in the Higher Education Law, which was announced in 1998 by the Ministry of Education of the People’s Republic of China, states that “school-age children will attend schools without examination, and the local government should ensure that school-age children attend schools based on the hukou” (Ministry of Education of China).

The concept of a school district was derived from the nearby enrollment policy. In 2014, the Chinese Education Bureau issued “Implementation Suggestions on Further Ensuring Primary School Graduate Students Entering A Junior High School by Nearby Enrollment,” which requires schools in all provinces and autonomous regions in China to implement the current nearby enrollment policy (1). The policy differs from provinces, dividing each city into different school district based on the location and density of primary and junior high schools. More specifically, the policy makes it completely clear that which student living in which building located on which road will attend which primary or junior high school. In the “Notice of the Nanchang municipal education bureau on the announcement of the 2018 Nanchang junior high

school enrollment school district” issued by Education Bureau of Nanchang, it divides the admission as a system with six priorities, acting strictly according to hukou, homeowner, actual residence, and whether is within the school district to make sure students are admitted properly (3). For example, a student will be the most likely to be with hukou and residence within the school district and parents being the homeowner; a student will have less chance if one or more conditions are not met. To ensure the research accuracy and validity, I will mainly focus on case of the particular school district I used to live in, Donghu District located at the center of Nanchang, and also several other representative examples in other city in China to prove Nanchang is not an outlier in terms of housing price.

2.3 High-quality schools

High-quality schools refer to those schools with better funding or higher fee (for a public school, more funding is given; for a private school, higher fee is required), running school conditions, teacher quality, and students’ average performance. In Nanchang, high-quality schools are defined as key schools. Out of 220 primary schools in Nanchang, the top thirty primary schools are the so-called key schools, and seven of them are in Donghu District. Yuxin School of Nanchang, a nine-year compulsory education school with over sixty years of history, is located at the southeast corner of Donghu District and also next to the government of the province. Being regarded as the “urban garden,” Yuxin School has an enormous scale among all primary and junior high schools in Nanchang. Since Yuxin School has both primary school and junior high school, after I spent nine years studying at the main campus, the junior high school moved to a new campus two blocks away because of the increasing number of upcoming school-age children in the primary school campus.

Because the only way to get into a high-quality school is to live in its school district, outstanding performance is no longer students’ stepping stone to key schools, and students’

parents start to play an important role in the success of nine-year education of their children.

Seeing people are willing to pay a high price for housing, real estate companies consider it as a business opportunity and continue raising the price of school district housing. As housing price increases, buying a new house is still an easy way for rich families' children to attend better schools, but also a new prerequisite for ordinary families to enjoy the good education.

3. Data and Analysis

3.1 Study area and data source

As I mentioned earlier, the focus of this paper will be Nanchang. The data is obtained from the database of Chinese Real Estate Association. The housing data of school district housing in Donghu District covers the period from July 2010 to November 2018, containing the average housing unit price, total price, and housing area.

3.2 Exploratory data analysis

In this analysis, I will use the programming language Python and its data science libraries, including Numpy (linear algebra), Pandas (data preprocessing and manipulating), Matplotlib (data visualization). During the process, I used Jupyter Notebook (an interactive data science and scientific computing environment) as the development environment for Python, allowing you to execute code line by line. After importing the raw data using Pandas, I did a simple preprocessing to translate the column names into English and convert the numeric numbers in string form (not computable) to integers. After the data is well preprocessed, it is ready to be used as explanatory (independent) variable for x-axis and response (dependent) variable for y-axis. The Matplotlib library is used to generate the broken line graphs. I will use the summary statistics provide an overview of the data and plots to represent the housing price trend.

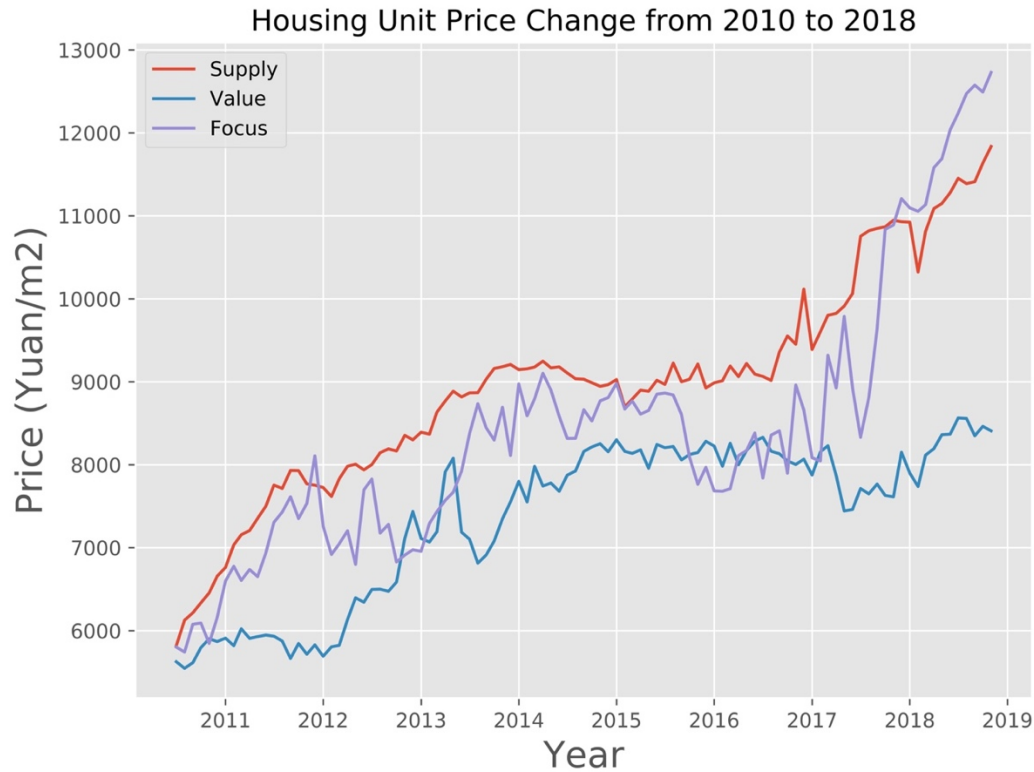
3.2.1 Unit price

The housing unit price represents the price of the school district housing per square meter. The summary statistics of the unit price of school district housing in Donghu District is shown as follows. The data consists of 101 months, covering from July 2010 to November 2018. In eight years, the recent average school district housing price nearly doubled supply price in 2010. If compared to the “value” column, the minimum housing price is 5,546 yuan, which is about three hundred yuan less than the transaction price, the price agreed between the house buyer and the real estate seller. When it comes to 2018, the difference between them is more than three thousand yuan. Since the value column represents the total rental housing price for thirty years, it means that if a family bought a school district housing with rather than renting it, they need to pay more than three thousand yuan for every square meter.

Table 1 Summary Statistics of Housing Unit Price

Characteristics	Supply (Yuan/m ²)	Value (Yuan/m ²)	Focus (Yuan/m ²)
Count	101.00	101.00	101.00
Mean	8959.33	7368.96	8431.27
Standard deviation	1302.79	956.23	1587.12
Minimum	5871.00	5546.00	5742.00
25%	8145.00	6497.00	7351.00
Median	9016.00	7767.00	8317.00
75%	9389.00	8156.00	8850.00
Maximum	11836.00	8564.00	12729.00

Note: 1. “Supply” represents the actual transaction data. “Value” represents the estimated total value of the rental housing for thirty years. “Focus” represents the housing price data retrieved from city real estate website. Later data also applies. 2. 1 USD \approx 6.9 CNY in 2018.



The nearby enrollment policy change has a direct influence on school district housing price. The line plot above offers a more straightforward representation of the difference between the transaction price and total rental price. If we look more carefully at the line plot, most of the major changes of the transaction price happen during the middle of the year, when the government makes changes to the junior high school enrollment district (which usually happens in July) because the possible changes in size of both school and neighborhood. These changes usually include the redesign of the school district, rank of the school, and others. The obvious observation includes the year 2010, 2011, 2013, 2017, and 2018.

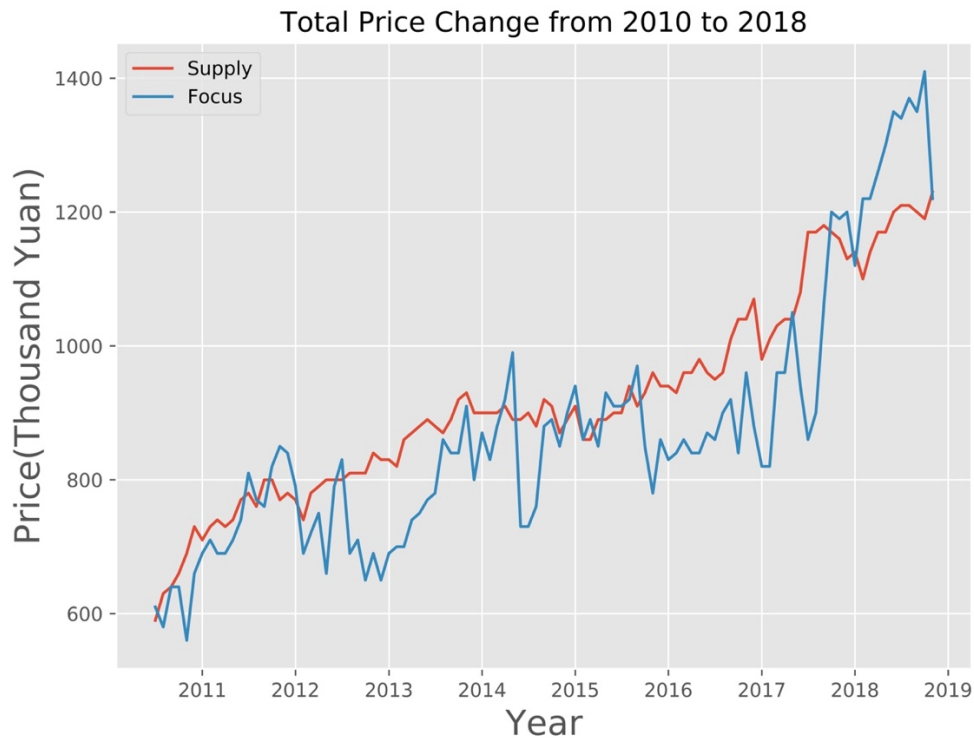
3.2.2 Total Price

Both the summary statistics and line plot of the total housing price change in Donghu District show that the price in the focus column is lower than the price in the supply column before late 2017. This means that people bought school district housing at a higher price than housing price shown on the real estate website. After late 2017, the price of real estate companies

increases rapidly. According to the previous curve, when the focus price falls or stays unchanged, the transaction price is stable, but when the focus price increases, the transaction price increases shortly after. The significant change can be found in the year 2013 and 2017.

Table 2 Summary Statistics of Total Price

Characteristics	Supply (Thousand Yuan/m ²)	Focus (Thousand Yuan/m ²)
Count	101.00	101.00
Mean	918.22	873.56
Standard deviation	149.67	189.28
Minimum	590.00	560.00
25%	810.00	740.00
Median	900.00	840.00
75%	1010.00	920.00
Maximum	1230.00	1410.00



3.2.3 Housing Area

For the housing area, the summary statistics seems to be fairly normal.

Table 3 Summary Statistics of Housing Area

Characteristics	Supply (m ²)	Focus (m ²)
Count	101.00	101.00
Mean	101.34	102.23
Standard deviation	3.70	5.52
Minimum	95.51	83.14
25%	97.76	98.83
Median	100.77	102.87
75%	104.86	106.85
Maximum	109.39	111.10

4. Results and Discussions

4.1 Irrational people

The rapid increase of the school district housing price twists people's attitude toward "buying a house." Feng and Lu, who study the effect of 52 residential areas in Shanghai to analyze the effect of newly released information about designating high-quality schools on the housing price in Shanghai, describes the current phenomena as follows:

Parents with higher socioeconomic status are therefore much more likely to secure their choice of school directly by purchasing a house in a specific district or by bribing officials and teachers able to influence the admission decision, as opposed to seeking to exert political influence on the city's government's education policies. (296)

Because of the birth of school district housing and its rapidly increasing price, people's way to deal with similar types of problems has been changed under the influence of the high price. They gradually realize that the only way to send their children to a good school is through buying

school district housing, and that is true under the nearby enrollment policy. The idea that “using the money to solve the problem” is so deeply rooted in people’s mind that they cannot come up with the right way if the phenomena continue, and the truth is that money is only the solution if the policy remains the same. Such injustice is derived from another injustice, and it will create more injustice. As a result, school enrollment will become a shadow market.

The increasing school district housing price also affects people’s decision and makes people irrational about “buying a house.” Gao mentions phenomena in his writing about Chinese real estate that “in newspaper and dinner table conversations, stories abound of husbands and wives filing fake divorces to get around stringent real estate purchasing restrictions for families” (Gao). Regarding the school district housing policy, a family can only buy one apartment. To buy multiple school district housing or to invest them, parents are losing their minds. In Chinese tradition, making sure our children successfully go to a good school is part of parents’ responsibility, and under the pressure of fierce competition, it gradually becomes a new standard, or a new hype. Using fake divorces to buy more district housing is neither rational nor legal, but more and more parents are willing to do so. Whether the divorce file is real or fake, such phenomena are disturbing the equilibrium of the enrollment system and even the whole society. Gao also states that “there are also tales of acrimonious disputes between the parents of divorcing couples when both sets claim ownership of the couple’s apartment because they contributed to the purchase” (Gao). Events like this never happened until the madness of school district housing happened. Parents’ kindness of buying housing in the school district finally results in family break-up. Given all that, the cost of merely a school district housing seems to be too expansive. Worst of all, people are willing to pay such cost.

4.2 Educational non-equalization

Children from ordinary families (families with average income) who do not live in high-quality school districts are deprived of their rights to receive a better education under the policy, which can be defined as an indirect form of educational unfairness. Feng and Lu state that “if parents do not have hukou where they reside, or do not own housing in the area, their children can attend only ordinary public or private schools, but not any quality public schools nearby” (294). Since school district housing becomes the only variable regarding admission, the possibility of students living in other district attending a high-quality primary or junior high school drops from small to near zero. If this is the case, it seems buying a new school district apartment is the only way to better education.

The following evidence proves that is not a choice. The average disposable income of citizens of Nanchang in a year is 37,675 Yuan. In the previous data analysis, the average housing price in Donghu District in 2018 is about 1, 230,000 Yuan. Assume both a child’s parents make 37,675 Yuan in a year, we use the average housing price divide by two times the income, and the result is 32 years. Hard-working and never spending money for 32 years allows a family to buy an apartment with just the average price, which proves the theory that it is impossible for a family with average income to afford a school district housing for their children. It also proves that these children have little chance to be admitted by high-quality schools. Although we cannot assert that students attending regular schools will not be successful in the future, the difference in education quality still has an incalculable influence on them, especially those gifted students. The finding in the previous data analysis shows that renting school district housing is a way for those children to attend good schools with a lower cost because the cost of renting a school district apartment for 30 years is 8564 for every square meter. The average area in the previous summary statistics of the supply housing area is about 101.34 square meter. Then, the cost of renting a school district housing is about 86788 yuan for three years after doing the calculation,

which is way lower than buying a school district housing. However, based on the admission priority in the context, the priority of a family renting school district housing is only in the fourth position, which is not a priority with a high possibility to be admitted. It also proves that neither buying a school district housing nor renting one are solutions for ordinary families.

Compared to ordinary families, children born in wealthy families have unique advantages regarding school district housing. Wen, who conducted an empirical study on Hangzhou's educational facilities and housing price, found the advantage of students living in school districts as follows:

Living in an area adjacent to a school has two obvious advantages. First, less time is spent on traveling to school, indicating greater security for children. Second, fetching the children is convenient, giving the parents a greater opportunity to participate in their children's study and strengthening the communication between parents and teachers. (157)

Less time on traveling does not only mean security for children but also more time to focus on other things, such as studying, playing with friends, and the chance to learn how to manage the extra time. With the convenience of fetching children, parents who communicate more with teachers tend to get feedback about their children's performance on time, which allows them to supervise their children more often at home. These two advantages are creating more invisible advantages. Children growing up in such environment are more educated and intelligent, and the gap between students which already existed, in the beginning, became wider and wider day by day.

For those students from lower-income families, because of the difference in educational quality, they need to study much harder. In key middle schools, most students' performance is higher than the average, and they experience much higher pressure. If someone is not studying as

hard as he or she can, teachers will provide additional help to ensure a high average enrollment rate in the future. In regular middle schools, students learn what they need to learn, and teachers teach what they need to teach. This usually results in students' bad performance and teacher's irresponsibility because many students in regular middle schools do not focus on their school work and teachers barely supervise them.

Because of educational non-equalization, some private educational institutions have cram schools for these students to catch up with those in key middle schools; however, most of these cram schools have a high fee and use it as a business opportunity to make money. According to Shou Feng, who wrote about the arbitrary charge problem, cram schools usually do not show the opening price, or just set the price randomly (Feng). Despite all of these, few cram schools can close the “gap” because students do not have the will to learn since they know that they already lost at the starting line, which is the situation on the day when they are enrolled. Thus, it increases the economic pressure of those lower-income families. Some students in regular schools still have a great talent, which allows them to have an outstanding performance even the environment is not good enough, but again, only a small amount of them can succeed in the college entrance exam, which is the most important exam in every Chinese student's life. Top universities usually focus more on key middle schools in the admission because the school itself has proved that these students studying here have the potential to be tested by more difficult challenges. Affected by the difference in education in both colleges and the social-economic status after they graduate, they can influence their family and the next generation. Due to the various types of factors, the gap in the future is immeasurable.

5. Conclusion

In the context of this paper, I introduced the reason why nearby enrollment policy was issued and how school district housing was formed in Nanchang. The purpose of both of them is to achieve educational equalization, ensuring school-age children's right to receive the education. As a policy to bring equalization, it caused people's irrationality and more non-equalization. People are experiencing the school district housing mania because of the high competitiveness in the housing market and educational market, and educational non-equalization is due to the economic inequality. However, both of the two problems are not the root problem; instead, the root problem is the unfair school quality. On the one hand, as long as high-quality schools exist, the school district housing will always be there, and the price will never fall because every family is eager to offer their children a better education. But on the other hand, due to the large population, high-quality school is an inevitable trend of Chinese educational structure and a representation of the law of the jungle. And those students from lower-income families will suffer in this "jungle," and it seems more ironic that whether a family is wealthy still plays an important role under the compulsory education.

Struggling with the school district housing hype not only will not change the current situation but also will cause more social issues. Since such "unfair" educational structure is unchangeable, what people can do is to unite and negotiate with the policy maker, the government or the education bureau of Nanchang, to see if the local government can improve the average school quality, or to give high-quality school quotas, which allows students from ordinary families to take their examination. If the Nanchang government and every family can participate in helping improve the policy and average school quality, people will surely sit down and rethink about the overpriced school district problem caused by the current meaningless hype, and those lower-income families will suffer less from the educational non-equalization.

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