

Chengdu's Real Estate Market (2019-2024): An Integrated Framework for Data-Driven Insights and Policy Analysis*

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This study integrates multiple sources of data (transaction data, policy text, public opinion data) with visualization techniques (such as heat maps, time-series trend charts, 3D building brochures) to construct an analysis framework for the Chengdu real estate market. By using the Adaptive Neuro-Fuzzy Inference System (ANFIS) prediction model, spatial GIS (Geographic Information System analysis) analysis, and interactive dashboards, this study reveals market differentiation, policy impacts, and changes in demand structure, thereby providing decision support for the government, enterprises, and homebuyers.

Keywords: Chengdu City, real estate market, data-driven insights, policy analysis

Background and Literature Review

Research Background

Fu Linghui, spokesperson for the National Bureau of Statistics and director of the Department of Comprehensive Statistics of the National Economy, stated that overall, the policy of promoting the real estate market to stop falling and stabilize has continued to be effective. The year-on-year decline in housing prices in 70 large and medium-sized cities continues to narrow, and the inventory of commercial housing continues to decrease (Pengpai News, 2025). In December 2024, the sales prices of newly-built commercial residential properties in first-tier cities increased by 0.2% compared to the previous month, while the sales prices of second-hand residential properties increased by 0.3% compared to the previous month, a decrease of 0.1% points from the previous month. Among them, Beijing, Shanghai, and Shenzhen rose by 0.5%, 0.9%, and 0.1% respectively, while Guangzhou fell by 0.3% (CNTV, 2025). The real estate market in Chengdu has significantly rebounded after the new policies in 2024, with 99,700 new houses sold and 231,400 second-hand houses sold (Meng, 2025). However, the market presents a differentiated pattern of “core area rising and peripheral pressure”¹.

Traditional statistical methods are difficult to handle high-dimensional data, such as policy price linkage and public opinion fluctuations, while single platform data lack multidimensional evidence. This article will combine interactive visual analysis and use multidimensional data visualization technology to analyze the

* **Fund:** Chengdu City Philosophy and Social Sciences Research Center “artificial intelligence + urban communication” theory and Application Research Center Project “Chengdu real estate vertical market public opinion data visualization research” (Project No. RZCC2025017).

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¹ Data from the National Bureau of Statistics.

changing trends of the Chengdu real estate market from 2024 to 2025, including the development of a multimodal data visualization system, exploration of macro market indicators (de cycle, price gradient), policy semantic mapping (cancellation of purchase restrictions, interest rate adjustments), emotional analysis of real estate public opinion (“park city” and “school district housing” hotspots), and the pulse impact of the “4.28 purchase restriction cancellation” on transaction volume.

Literature Review

Research on the evaluation model of property prices and influencing factors. Alibek Barlybayev conducted a study on the factors influencing price changes in the Kazakhstan real estate market, using an Adaptive Neuro-Fuzzy Inference System (ANFIS) to analyze and evaluate the impact of building materials, building age, decoration materials, and other factors on property prices (Barlybayev, Ongalov, Sharipbay, & Matkarimov, 2024). Al Abdulsalam proposed a new data analysis method for analyzing real-world data in the Dubai real estate brokerage market case study, using the Orange software suite to analyze collected data from selected markets. The study takes the Top 50 real estate brokerage firms in Dubai, UAE as samples to achieve enterprise visualization benchmarking, identification of similar enterprise characteristics, enterprise cluster profiling and comparative analysis, as well as the impact of various classification and numerical attributes on performance (Al Abdulsalam et al., 2024). Jassim Ahmad Al Gasawneh, K. N. AlZubi, A. H. Ngah, and K. A. Alaeddin Mohammad (2023) proposed a visual social media marketing (VSMM) dimension (information content, entertainment content, and paid content) model to analyze the relationship between electronic word-of-mouth (E-WOM) and customer intention to purchase, and examine the impact of VSMM on customer purchase intention in Jordanian real estate companies.

Practical research on analysis tools for the real estate market. In the previous text, Jassim Ahmad Al-Gasawneh et al. (2023) analyzed the relationship between real estate electronic word-of-mouth and purchase intention in Jordan. He used the Google Forms tool to collect data and analyzed the data using SPSS Version 18 and PLS-SEM Version 3.2.8 software to test hypotheses. In C. N. Hugo, P. D. Paola, and J. V. Martínez's (2023) study, QGIS 3.28.5 “Firenze” was used to generate a Digital Surface Model (DSM) to investigate the relationship between the geographic location of properties on the Spanish Golden Coast, their straight-line distance to the coast, and property prices.

Analysis of new real estate policies in Chengdu in 2024. In 2024, the focus of Chengdu's real estate regulation policies will shift from simply suppressing speculation to stimulating effective housing demand and market vitality (Lei, 2024). 2024 is the fourth year of the implementation of Chengdu's “14th Five Year Plan” (2021-2025) urban construction plan, which is at a critical stage of transition from “comprehensive implementation” to “deepening and structural adjustment in the middle and later stages”. Real estate related policies have shifted from goal setting to continuous implementation, structural optimization, and risk clearance.

In January 2024, the Department of Housing and Urban Rural Development of Sichuan Province proposed to adjust and optimize real estate policies at the Provincial Housing and Urban Rural Development Work Conference; intensify policy support for first-time homebuyers and improved housing; promote a multi-level housing supply system of “guarantee + market”; promote housing and urban-rural development to better meet the multi-level housing needs of residents (China News, 2024). In June 2024, the “Technical Regulations for Urban Planning and Management of Chengdu City (2024) (Draft for Soliciting Opinions)” (Chengdu Planning and Natural Resources Bureau, 2024) was issued, which increased the actual acquisition rate of new houses and

optimized the conditions for purchasing houses, including no longer reviewing the qualification for purchasing houses in the city's housing transactions, canceling the notarized lottery system for selecting houses for commercial housing projects, and encouraging the conversion of idle commercial office and other non-residential stock houses into affordable rental housing. The decline in loan market quoted interest rates (LPR) and the adjustment of existing mortgage interest rates have steadily improved the real estate market. In October 2024, Chengdu Municipal Development and Reform Commission (Jiang, Lei, & Fan, 2024), Housing and Urban Rural Development Bureau, and other departments issued the Notice on the Implementation of the Settlement of Persons with Legal Property Rights, involving settlement, loans, provident fund, parking space destocking, etc., to further deepen the reform of the registered residence system, with the aim of promoting the steady and healthy development of the real estate market.

This article analyzes the characteristics of various aspects of the Chengdu real estate market in 2024, in order to sort out the overall development status of the Chengdu real estate market.

Research Content and Methods

This study will focus on the new house sales and second-hand house transactions in the Chengdu office building market, logistics market, and apartment residential market. Research data will be obtained through literature collection such as archives, industry interviews, and big data information gathering. A series of research tools will be used to analyze the content of the research object. Based on this, information visualization models will be used to present the industry status and trend predictions of different vertical markets.

Research Framework

This article first conducts a correlation analysis between the relevant policies and changes in housing prices in the national real estate market and Chengdu real estate market in 2024, exploring the macroeconomic regulation effect of policies on housing prices; then analyzes the Chengdu land market, second-hand housing market, affordable housing market, housing rental market, and commercial real estate market, and further analyzes the changes in investment forms; from a micro level research perspective, studies the above real estate market cases to evaluate the effectiveness of government precision supply policies.

This study will focus on the new house sales and second-hand house transactions in the Chengdu office market, logistics market, and apartment residential market. Research data will be obtained through literature collection such as archives, industry interviews, and big data information gathering. A series of research tools, including PEST (Political, Economic, Social, Technological) model, land market indicators, and venture capital DCF (Discounted Cash Flow) valuation, will be used to analyze the content of the research objects. Tableau and Python software will be used to visualize the data. Finally, through visual analysis and literature review, the hot topics in Chengdu's real estate market were analyzed, and policy recommendations were proposed to address the existing problems in the housing market.

Research Methods and Data Statistics

This article collects data on the Chengdu land market, second-hand housing market, affordable housing market, housing rental market, and commercial real estate market, and then uses Python and Octopus software for data crawling to obtain comprehensive information about Chengdu's real estate data, and finally, summarizes the market characteristics and public opinion evaluation of the vertical real estate market in Chengdu.

Land market. On January 29, 2025, Huajing Intelligence Network reported that according to data from the

Industry Research Institute, the number and area of land transfers in Chengdu in 2024 are the lowest in eight years. Specifically, there were 424 land transfers in Chengdu in 2024, and 564 transfers in 2023, a year-on-year decrease of 24.82%; the land transfer area was 14.4639 million square meters, a year-on-year decrease of 42.96% (Huajing Information Network, 2025), as shown in Figure 1.

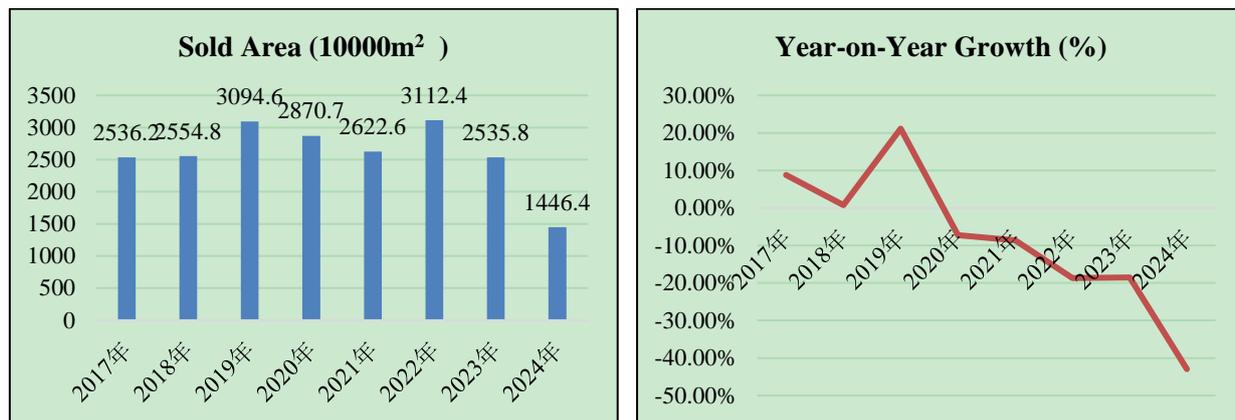


Figure 1. Statistics on the number of land transfers in Chengdu from February 2017 to February 24th (Data source: Guoxin Real Estate Information Network Huajing Industry Research Institute).

The overall scale of land transfer in Chengdu from 2017 to 2022 is in a high fluctuation stage, but it has significantly declined since 2023. In 2024, the transfer area will shrink significantly, and the intensity of land market supply will significantly decrease, as shown in Figure 2.



Figure 2. Statistics of land transfer area in Chengdu City from 2017 to 2024 (Data Source: Guoxin Real Estate Information Network Huajing Industry Research Institute).

Among them, 148 residential land were sold, with an area of 4.9115 million square meters, a year-on-year decrease of 20.99%; 113 commercial and office land parcels were sold, covering an area of 3.0385 million square meters, a year-on-year decrease of 2.69%; 156 industrial storage land parcels were sold, covering an area of 6.3223 million square meters, a year-on-year decrease of 58.66%. This trend is further illustrated in Figure 3.

According to the Zhongzhi Cloud Data Platform (China Index Academy, 2025), residential land has shown particularly outstanding performance, with an average transaction floor price of 8,482 yuan/square meter, a year-

on-year decrease of 17.57%, and a premium rate of 8.7%, a slight increase of 0.14% points compared to last year. The average floor price of commercial and office land transactions was 1,535 yuan/square meter, an increase of 11.47% year-on-year. In terms of regional performance, residential land in Jinjiang District leads the city with a floor price of 22,760 yuan/square meter, while the High Tech Zone follows closely with a floor price of 22,379 yuan/square meter. In the ranking of land acquisition by enterprises, Airport Xingcheng Group ranks first with a land acquisition area of 666,700 square meters, and Jianfa Real Estate has become the highest priced enterprise with a floor average price of 17,955 yuan/square meter.



Figure 3. Statistics of land area for three types of land transfer in Chengdu from 2017 to 2024.

First-hand housing market and second-hand housing market. Through data analysis², it can be seen that the prices of the first-hand housing market (new housing market) have shown a significant upward trend, especially in the two stages of 2017-2019 and 2022-2025, reflecting the active development and price pressure of the Chengdu real estate market during these periods. Prices tend to stabilize in 2024-2025, indicating that the market may enter a relatively stable period. The growth trend of the average price of new houses in Chengdu is shown in Figure 4.

² Data source: Anjuke network platform nearly 10 years of data, <https://mobile.anjuke.com/fangjia/chengdu/>.



Figure 4. Trend chart of average price growth of new houses in Chengdu from 2017 to 2025.

Second-hand housing market. According to Sina Finance Daily Economic News (Wang, 2024), the national second-hand housing market is showing an overall upward trend, with Chengdu performing outstandingly in the second-hand housing market. According to data from Chengdu Buyingtong, in December 2024, the transaction volume of second-hand houses in Chengdu reached 28,563 units, surpassing the 28,189 units in March 2023 and setting a new high in the monthly transaction volume of second-hand houses in Chengdu in the past five years. So far, the cumulative transaction volume of second-hand houses in Chengdu for the whole year of 2024 is about 22.231 million square meters, an increase of about 5.17% compared to 2023; the total number of sets is 231,376, an increase of about 4.75% compared to 2023, setting a record high in history.

Chengdu's second-hand housing market rose against the trend from 2017 to 2024 compared with first-hand housing transactions, as shown in Figure 4, and entered the adjustment period in 2025, as shown in Figure 5³. Sichuan Online (Fan, 2025) reported that in 2024, 99,677 first-hand houses were sold in Chengdu, with a turnover area of about 13.08 million square meters, down 31.7% from the same period last year; 231,376 second-hand houses were sold, with a turnover area of about 22.23 million square meters, up 4.7% year-on-year.

³ Chart data source: convergence data network, average transaction price of second-hand houses in Chengdu, refer to several sub web page data, for example: <https://fangjia.gotohui.com/years/300/2017/>. You can change the year data to view the data of different years from 2017 to 2025, quoted on November 26, 2025.

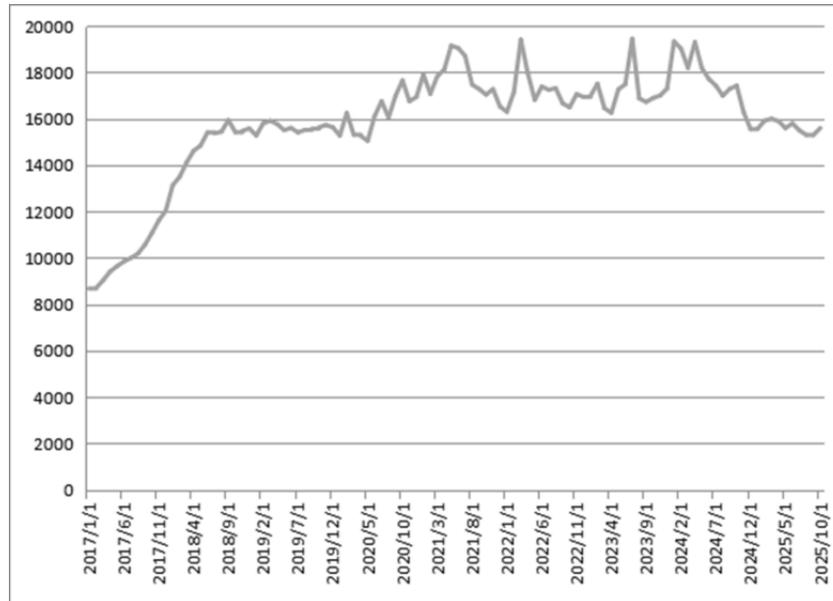


Figure 5. Trend Analysis of Second-Hand Housing Prices in Chengdu⁴.

Affordable housing market. In 2017, the general office of Chengdu Municipal People's Government issued three major documents: the five-year plan for the development of Chengdu real estate industry (2017-2021) (hereinafter referred to as the five-year plan), the five-year plan for the development of Chengdu housing rental market (2017-2021), and the five-year plan for housing security in Chengdu (2017-2021) (Lin, 2017). In 2024, Chengdu allocated more than 2,200 public rental housing units and granted rental subsidies to 14,000 households. There are more than 6,000 guaranteed rental houses.

Public Opinion Analysis of Chengdu Real Estate Market

According to the content of statistics and industry research, this section will analyze the real estate market in Chengdu.

Analysis of Chengdu real estate market in 2024. In 2024, Chengdu's real estate market is in the stage of deep structural adjustment and local repair under the support of policies. The overall characteristics are the contraction of land and new houses, the dominance of stock transactions, the strengthening of affordable housing, and the intensification of market differentiation. This situation is not a short-term effect, but is highly related to the transformation of the macroeconomy, population structure, and housing system.

The effects of policy regulation are as follows. Through the analysis of 2.2 part of the visual data, we can see that in 2024, the number and area of land transfer in Chengdu dropped to the lowest level in eight years, especially the sharp decline in industrial warehousing and residential land. These situations further show that local governments take the initiative to reduce the intensity of land supply and control the risk of new development. This trend conforms to the transition of the real estate market from the "incremental era" to the "stock era". The premium rate of residential land remains positive (8.7%), indicating that there is still structural demand for high-quality plots. The trend of the real estate market shows that the policy regulation has been further

⁴ Chart data source: convergence data network, average transaction price of second-hand houses in Chengdu, refer to several sub web page data, for example: <https://fangjia.gotohui.com/years/300/2017/>. You can change the year data to view the data of different years from 2017 to 2025, quoted on November 26, 2025.

refined, and the regulation of land transfer of different types of real estate has changed. At the same time, it shows that the effect of regulation is to stabilize housing, stabilize expectations, and prevent systemic risks. Judging from the overall situation of real estate in Chengdu in 2025, the government's regulatory policies have indeed controlled the decline in house prices. According to the Baicheng Price Index of China's real estate index system (Zhongzhi Research Institute, 2025), the average listing price of second-hand housing in Chengdu and Shenzhen rose in November and December 2024, rising by 0.1% and 0.05% respectively in December, and the increase narrowed. Compared with the overall price decline of second-hand housing in 100 major cities in China in 2024, the real estate regulation policy in Chengdu has achieved practical results.

PEST macro model analysis of Chengdu real estate market from 2019 to 2024.

1. Political: Policy environment—“Stabilizing the market, preventing risks, and protecting people's livelihood”:

In 2024, the real estate policy environment in Chengdu showed a significant structural shift, that is, from the previous regulation logic with “purchase restriction, loan restriction and demand suppression” as the core, to a systematic adjustment with the goal of “stabilizing the market, preventing risks, and protecting people's livelihood”. In terms of land market, in 2024, the number and area of land transfer in Chengdu dropped to the lowest level in nearly eight years, and residential, industrial warehousing and commercial land contracted in an all-round way, indicating that local governments control new development risks by actively reducing the intensity of land supply, and promote the transformation of the real estate market from “incremental expansion” to “stock optimization”. At the same time, the premium rate of residential land transactions is still maintained at a positive range of 8.7%, indicating that there is still structural demand for high-quality plots in the core area, and the land market has not failed in an all-round way, but reflects the obvious characteristics of “preferential land supply and precise regulation”.

At the level of housing financial policy, from 2019 to 2024, Chengdu's housing mortgage policy has undergone a fundamental change, from high threshold and strong restraint to comprehensive easing. The down payment ratio continued to decline and finally achieved the “first two sets of unification”. The policy evolution process is shown in Table 1. Especially after October 2024, the minimum down payment ratio of commercial loans in Chengdu has been reduced to 15%, and first-hand and second-hand housing are no longer differentiated, marking that the housing financial policy has officially entered a historic easing stage. This change is not a short-term stimulus, but an institutional arrangement adopted by the state and local governments to stabilize market expectations and prevent systemic risks in the context of the deep adjustment of real estate.

Table 1

Changes in Down Payment Ratio of Housing Commercial Loans in Chengdu From 2019 to 2024 (Chengdu Local Treasure, 2025)

Period	Down payment ratio of first-hand housing suite	Down payment ratio of second suite	Policy characteristics
2019-2022.05	≥30%	40%-70%	Purchase and loan restrictions go hand in hand, with a down payment of up to 70% for the second suite in the core area
2022.05-2023.08	≥20%	30%-40%	The policy began to loosen, and non-restricted areas and families with many children benefited (Sichuan Online, 2023)
2023.09-2024.05	≥20%	≥30%	Fully implement the principle of “recognizing houses but not loans” (Sichuan Provincial People's Government, 2023)
2024.10-	≥15%	≥15%	The first two sets are unified, and the down payment is reduced to the lowest level in history (Sichuan Provincial People's Government, 2023)

2. Economic: Economic environment “weak investment, financial Panasonic real estate reconstruction”:

From the perspective of macroeconomic background, the adjustment of Chengdu real estate market is highly consistent with the downward trend of national real estate investment. From 2019 to 2024, the national investment in real estate development fell from about 13.9 trillion yuan to 10,028 billion yuan in 2024, accounting for a sustained decline in GDP, reflecting the deep transformation of the real estate industry from high growth to a new development model (Table 2). In this context, the land transfer area of Chengdu has decreased by 42.96% year-on-year, the dependence of local finance on land transfer fees has been passively weakened, and real estate no longer plays the role of “main engine” of economic growth.

Table 2

Changes in Interest Rates of Commercial Housing Loans in Chengdu From 2019 to 2024 (First-Hand Housing Set) (Chengdu Branch of the People's Bank of China, n.d.)

Stage	Interest rate level	Policy characteristics
2019-2021	Around LPR + 80BP, 5.6%-5.9%	High interest rates curb speculative demand
2022-2023	LPR - 20BP, 4.1%-4.3%	Enter the down channel
2024	LPR - 60BP, 3.1%-3.25%	Hit a record low, significantly reducing the pressure on monthly supply

At the same time, the interest rate of provident fund loans has been lowered many times to further reduce the financing cost of rigid demand and improved home buyers (Table 3). To a certain extent, the continuous easing of the financial environment has hedged the downward pressure of real estate investment and new housing transactions, enabling the Chengdu real estate market to maintain trading activity under the background of “weak investment”, especially in the continuous volume of the second-hand housing market.

Table 3

Chengdu Housing Provident Fund Loan Interest Rate From 2019 to 2024 (More Than Five Years)⁵

Period	First-hand housing set	Second-hand housing set
2019-2022.09	3.25%	3.575%
2022.10-2024.05	3.10%	3.575%
After 2024.05	2.85%	3.325%

3. Social (social and demographic factors): Residents buy houses more rationally under the background of continuous population inflow:

From the perspective of society and population, the deep adjustment of Chengdu's real estate market is not caused by the growth of inflow population. Data show that the permanent population of Chengdu has increased from 16.581 million in 2019 to 21.474 million in 2024, and the population scale has continued to expand, indicating that Chengdu still has significant advantages in industrial opportunities, employment attractiveness, and comprehensive cost of living. This background of sustained net population inflows provides long-term support for housing demand. But at the same time, residents' purchase behavior and social expectations have changed significantly. From 2019 to 2024, Chengdu's real estate market has completed the structural transformation from “new housing led” to “second-hand housing led”. In 2024, the turnover of second-hand houses reached 231376 units, accounting for more than 70% of the total turnover, while the turnover of new houses decreased by 31.7% year-on-year. In the environment of low down payment and low interest rate,

⁵ Data source: China government affairs network <http://zw.china.com.cn/> Xinhua, Chengdu local treasure, etc.

residents did not return to the new housing market on a large scale, but chose more second-hand housing with lower total price and more controllable risk, reflecting the obvious weakening of the social expectation of “buying a house is investing”, and residential attributes and risk control have gradually become the dominant logic of house purchase decision-making.

4. Technical (technology and information environment): Financial and data transparency accelerates market differentiation:

At the level of technology and information environment, the information transparency and policy transmission efficiency of the real estate market have been significantly improved. On the one hand, policy information such as mortgage interest rate, down payment ratio, and stock mortgage adjustment has been rapidly disseminated through digital channels. Since October 2024, the stock mortgage interest rate has been lowered to LPR - 30 BP, effectively alleviating the problem of “interest rate gap between new and old mortgages” (Xinhua, 2024); on the other hand, the rapid visualization of real estate transaction data, price changes, and public opinion information has significantly accelerated the pace of market expectation adjustment. As a result, core areas and high-quality assets are easier to obtain financial support and market attention, while the liquidity of location edge and homogeneous projects continues to decline, and the Chengdu real estate market shows more obvious structural differentiation under the background of financial easing.

Supply and demand: Population migration model analysis.

1. Population size and migration outcome variables (dependent variables):

In the population migration model, the size of the permanent population and its changes are the core outcome variables to reflect the comprehensive attractiveness of cities to migrants.

Table 4

Changes in the Size of Permanent Population in Chengdu (2019-2024)⁶

Year	Permanent population (*10,000)	Annual change (*10,000)	Change characteristics
The end of 2019	1,658.1	+25.1	Stable net inflow
The end of 2020	2,093.7	+435.6	Centralized correction of the seventh census
The end of 2021	2,119.2	+25.5	Stable net inflow
The end of 2022	2,126.8	+7.6	Slowing growth
The end of 2023	2,140.3	+13.5	Moderate recovery
The end of 2024	2,147.4	+7.1	Normalization of low growth

It should be pointed out that the population jump in 2020 is mainly due to the adjustment of the statistical caliber of the Census (the Seventh National Population Census (National Bureau of Statistics, 2021)). However, the continuous positive growth from 2021 to 2024 shows that Chengdu maintains the characteristics of long-term net population inflow into the city. This result provides a basic fact for the analysis of the follow-up migration mechanism.

2. Economic and housing cost variables (core explanatory variables):

Population migration decision-making is highly dependent on the relative balance of employment, income, and house purchase costs, among which the real estate market and financial conditions are the key mediating variables (see Table 5 for the changes in residential turnover and structure in Chengdu from 2019 to 2024).

⁶ Data source: Surging News (https://www.thepaper.cn/newsDetail_forward_26758711?utm_source=chatgpt.com), Sina Finance (https://finance.sina.com.cn/jjxw/2024-03-19/doc-inanvcia9704153.shtml?utm_source=chatgpt.com).

Table 5

Changes in Residential Transaction Structure in Chengdu (2019-2024)

Year	New house turnover (*10,000)	Second-hand house turnover (*10,000)	Structural characteristics
2019	20.3	11.5	Newfangled
2020	20.9	12.0	Structural stability
2021	19.5	11.5	Adjustment initial
2022	14.3	15.1	Second-hand housing exceeds new housing for the first time
2023	14.6	22.1	Stock-led
2024	10.0	23.1	Second-hand housing accounts for more than 70%

In the population migration model, this structural change means that new inflows no longer rely on the supply of new housing. Cities complete the “digestion” of migrant population through stock housing. The restriction of real estate on population migration has changed from “whether there is a house” to “whether it is affordable”. Under the background of the overall downturn of the real estate market (Zhang, 2025), the sustained net inflow of permanent population in Chengdu has not been transformed into the driving force for the sustained rise of house prices, but it has formed a stable support for housing demand, thus cushioning the downward pressure of the real estate market to a certain extent and avoiding the cliff like decline in house prices.

3. Financial condition variables: Impact of mortgage policy on migration threshold:

Housing financial conditions (down payment ratio and interest rate changes) are usually regarded as institutional friction variables in migration models, and their changes directly affect whether the population “stays”, as shown in Table 6.

Table 6

Evolution of Housing Mortgage Policy in Chengdu (2019-2024)

Period (Year)	Minimum down payment ratio	Mainstream interest rate of commercial loans	Policy meaning
2019-2021	First-hand housing set $\geq 30\%$	5.6%-6.1%	High barriers to immigration
2022-2023	First-hand housing set $\geq 20\%$	4.1%-4.3%	Start slow release
2024	Both of First and Second $\geq 15\%$	3.1%-3.3%	The cost of migration has dropped significantly

In the process of changes in financial variables, the simultaneous reduction of down payment and interest rate means that the success rate of “settlement” of migrant population is improved, and the reverse migration caused by housing pressure is reduced. This explains why second-hand housing transactions and population size can still maintain steady growth in the case of declining NEW housing transactions.

4. Investment and supply side variables: Constraints on the pace of migration:

Real estate development investment reflects the expectation of urban future housing supply, and is also the “long-term capacity variable” in the migration model, as in Table 7.

Real estate development investment and housing supply indicators mainly restrict the pace of migration by affecting the speed and upper limit of the scale of new population that cities can carry. Combined with the statistical data (Data source: Chengdu Municipal Bureau of Statistics, 2019-2024) disclosed in Chengdu in recent years, it can be observed from three aspects: investment intensity, land supply, and housing construction rhythm.

Table 7

Changes in National Real Estate Development Investment (Reference Variables)

Year	Investment (trillion yuan)	Industry stage
2019	13.9	High level operation
2020	14.1	Peak value
2021	14.8	Turning point
2022	13.9	Down
2023	12.0	Deep adjustment
2024	10.0	New normal

Table 8

Changes in Key Indicators on the Supply Side of Real Estate in Chengdu (Trend Summary)

Index	2019-2021 characteristics	2022-2024 characteristics	Meaning of change
Real estate development investments	High level operation and upward fluctuation	Significant decline and sustained contraction	Expected decline in housing expansion in the future
Residential land transfer area	Stay high	Sharp decline (about 21% year-on-year in 2024)	Potential housing supply front end tightening
Total land transfer area in the city	High volatility	To an 8-year low in 2024	The pace of urban space expansion slows down
New construction of commercial housing	Relatively abundant	Significant contraction (national and local synchronization)	Supply starts to slow down in the next 1-3 years
Housing construction model	Incremental expansion	Stock digestion	Changes in population carrying methods

Note. There is a significant time series correlation between the new construction of commercial housing and investment and land supply, and its contraction does not affect the current residence, but affects the medium-term supply capacity.

The continuous contraction of real estate development investment and new construction area determines whether the city can continue to carry the new population at the existing rhythm. Existing data show that from 2019 to 2024, the scale of permanent population in Chengdu continued to grow, but the front-end indicators of real estate development investment and housing supply (land transfer, new construction) declined significantly. The stock of new and second-hand housing markets provides a market for new people to buy houses. From the perspective of migration model, housing supply is not an immediate constraint variable, but a lagging constraint variable: When investment and new construction decline, the current population migration will not be immediately blocked; however, if this state continues, it will have an impact in one to three years through the following mechanisms: The scale of new housing delivery will be reduced; intensified competition in the rental and sales market; the pressure of rising housing costs has increased; the “speed” of population migration has slowed passively.

Case Studies

Second-Hand Housing Transactions Hit a Record High in 2024: The Real Estate Market Transformed From “Incremental Dominance” to “Stock Dominance”

In 2024, the transaction scale of second-hand housing in Chengdu reached a record high, the market structure changed significantly, and second-hand housing became the absolutely dominant transaction type for the first time in the whole year.

Table 9

Changes in Transaction Structure of New and Second-Hand Houses in Chengdu From 2019 to 2024 (Refer to Table 5)

Year	Number of new housing transactions (*10,000)	Number of second-hand housing transactions (*10,000)	Proportion of second-hand housing
2019	20.3	11.52	36%
2020	20.9	12.0	36%
2021	19.5	11.5	37%
2022	14.3	15.1	51%
2023	14.6	22.1	60%
2024	99,677	231,376	70%+

In 2024, the total number of real estate transactions in Chengdu was about 331,000 units, of which second-hand housing transactions accounted for more than 70%, indicating that the real estate market in Chengdu has shifted from new housing to stock housing circulation.

Case Study on the Change of Stock Housing Market in Chenghua District, Chengdu

Chenghua District of Chengdu, located in the east of the central urban area of Chengdu, is one of the traditional main urban areas of Chengdu, with early development time, large scale of residential stock, and high proportion of old residential areas; rail transit and urban road network are perfect, and the cost of commuting is low; the supply of new commercial housing is limited, and housing transactions have been dominated by the second-hand housing market for a long time (Chengdu Chenghua District Housing Construction and Transportation Bureau, 2024).

The Turnover of Second-Hand Houses in Chenghua District Is in the Forefront of all Districts in Chengdu

In 2024, the second-hand housing market in Chengdu was active as a whole, with a turnover of the Top 20 Li, and Chenghua District had the largest number of residential areas on the list, totaling six (Choose a House, 2025), which has become one of the most representative main urban areas in Chengdu's second-hand housing market. Selecting the second-hand housing market in Chenghua District as a case will help to verify the aforementioned "buffer effect of stock housing on the rhythm of population migration". In 2024, 331,053 residential units and 231,376 second-hand housing units were traded in Chengdu, accounting for 69.9% of the second-hand housing transactions (Sina Finance, 2025). Compared with previous years, the turnover of new houses has declined significantly, while Chenghua District ranks in the forefront of the monthly turnover of second-hand houses in various districts of Chengdu for many months (Data source: Savills, 2024).

Table 10

Housing Market Structure and Chenghua District Status in Chengdu in 2024

Index	Citywide	Chenghua District performance
Number of second-hand housing transactions	231,376 sets	Ranked first in the city in many months
Proportion of second-hand housing transactions	More than 70%	Significantly higher than new homes
New home trends	Significant decline	Limited supply of new homes

Price and Household Structure: "Affordability Advantage" of Stock Housing

From the perspective of transaction structure, the second-hand housing market in Chenghua District shows

obvious characteristics of “rigid demand improvement”. Specifically, the main transaction area is concentrated in 60-90 square meters. The main total price segment is concentrated in the middle and low total price range. Most of the houses traded are residential areas that have been built for many years and have mature supporting facilities, with the attributes of “buy and live” existing houses.⁷ The market effect brought about by the above attributes is to adapt to small families and first-time real estate, reduce the threshold for entering the market, and reduce the risks of instant living of stock housing, false high house prices, and hidden dangers of housing, which provides a cost controllable and deterministic living choice for new employment, urban internal floating population, and improved families.

Mechanism Analysis: How to Buffer the Rhythm of Migration of Stock Housing in the Main Urban Area

In the population migration model, population flow is determined by wages and quality of life, and housing (rent) is an equilibrium constraint (Roback, 1982), housing supply constraints affect the speed of employment and population absorption in cities (Saks, 2008), housing supply constraints limit the number of people entering productive cities (Hsieh & Moretti, 2019), high housing costs discourage migration intensity (rather than willingness) (Ganong & Shoag, 2017). The performance of the second-hand housing market in Chenghua District in 2024 clearly reflects this mechanism. In the context of the slowdown of new development, the stock of housing has improved the carrying efficiency through high-frequency circulation; second-hand housing transactions bypass the uncertainty of new housing construction cycle and delivery, and reduce migration friction; the perfect public services and transportation conditions in the main urban area make the permanent population purchase housing more inclined to the stock housing of “near employment and low risk”. Therefore, the second-hand housing market in Chenghua District essentially plays the role of “buffer of population migration rhythm”, so that Chengdu can still maintain the continuity of population migration and housing adjustment in the stage of real estate investment and land supply contraction.

Discussion and Policy Recommendations

Main Findings and Discussion

Based on multi source data statistics, PEST macro analysis, population migration model, and case study of second-hand housing market in Chenghua District, this paper analyzes the operating characteristics and internal mechanism of Chengdu real estate market in 2024, and draws the following conclusions.

Chengdu's real estate market has completed the structural transformation from “Incremental Dominance” to “Stock Dominance”. From the perspective of transaction structure, the turnover of second-hand houses reached 231,376 units in 2024, accounting for more than 70% of the annual residential transactions, while the turnover of new houses decreased by 31.7% year-on-year, and second-hand houses dominated. This phenomenon is in line with the situation that second-hand housing has gradually become the dominant type of transaction from 2019 to 2024, that is to say, this change is not a short-term fluctuation, but the result of structural changes in the real estate market formed under the joint action of land supply contraction, real estate development investment downturn, and housing financial policy adjustment. The main trading function of the real estate market has shifted from “new supply release” to “stock housing transfer”.

The impact of real estate supply side variables on population migration is more reflected in the restriction of migration rhythm. The permanent population of Chengdu maintained a sustained net inflow from

⁷ Data source: Fangtianxia statistics, <https://m.fang.com/fangjia/cd/esfDealList.html>.

2019 to 2024. At the same time, the supply front indicators such as real estate development investment, residential land transfer, and new construction area have shrunk significantly, and the future housing expansion capacity of the city is weakening. The analysis of this paper shows that housing supply does not directly determine whether the population flows in, but restricts the speed and stability of population migration by affecting housing affordability and housing placement efficiency.

Housing financial policy plays a “buffer” role in the real estate market. From 2019 to 2024, Chengdu's housing mortgage policy experienced a transformation from a high threshold to a loose policy, with the down payment ratio continuing to decline, the loan interest rate declining significantly, and finally achieving the unification of the first-hand and second-hand housing loan interest rates. However, this policy evolution has not promoted the rapid recovery of the new housing market, but has significantly improved the liquidity of the second-hand housing market and reduced the threshold for residents to buy houses and settle down. In the context of the downward trend of the real estate market, the financial easing policy has avoided the obstruction of market liquidity and formed an important support for the rhythm of population migration.

The case of second-hand housing market in Chenghua District verifies the “Bearing and Buffer” function of stock housing in the main urban area. As a typical main urban area of Chengdu, Chenghua District maintained a high degree of activity in second-hand housing transactions in 2024. Its housing structure, which is dominated by small and medium-sized households, low and medium-sized total prices, and mature communities, provides an “affordable, affordable and low-risk” housing choice for the newly employed population and the floating population in the city. Case analysis shows that in the contraction stage of new housing supply, the stock of housing in the main urban area improves the carrying efficiency through high-frequency circulation, thus supporting the continuity of Chengdu's overall population migration and housing adjustment at the micro level.

Policy Reflections

Based on the above analysis, this paper believes that Chengdu's real estate policy and urban governance should pay more attention to the following aspects.

Shift from “Stabilizing House Prices” to “Stabilizing the Housing System”. In the case of stock housing transactions dominating the real estate market, the core goal of real estate policy is not to stimulate price increases, but to ensure housing liquidity and affordability. At the same time, by maintaining the normal operation of the second-hand housing market and reducing transaction costs, it is conducive to ensuring the settlement conditions in the process of population inflow.

Strengthen the in-depth management of stock housing in the main urban areas. From the perspective of real estate transactions, the stock of housing in the main urban areas has become an important basis for the urban population. At present, continued investment is needed in the transformation of old residential areas, public service replenishment, transportation optimization, and other aspects to improve the living quality and efficiency of stock housing, rather than relying solely on new development.

Prudently grasp the rhythm of land and investment contraction and prevent the dominance of medium-term supply constraints. The active contraction of land transfer and real estate investment helps to prevent short-term risks, but if it is low for a long time, it may form a hard constraint on housing supply capacity and population carrying capacity in the medium term. Policy making needs to maintain a dynamic balance between “risk reduction” and “capacity preservation”.

Conclusion. Generally speaking, the real estate market in Chengdu in 2024 is characterized by stock housing

transactions, structural differentiation of new housing and stock housing transactions and relaxed financial loan policies. The function of the real estate market is shifting from investment expansion tools to an important part of the urban residential bearing system. Under the background of sustained net population inflow and contraction of real estate supply, the second-hand housing market, especially the stock housing in the main urban area, has played a key role in stabilizing the rhythm of population migration and urban operation. The analysis of this paper provides data support and theoretical explanation for understanding the periodic characteristics of Chengdu's real estate market and its relationship with population migration, and also provides a reference for similar cities to formulate policies in the period of deep real estate adjustment.

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