The Influence of the COVID-19 on Hong Kong Housing Price

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Abstract. This article mainly discusses the impact of the epidemic on housing prices in Hong Kong. Today, COVID-19 is still a pandemic with a high impact on a global scale, affecting people's lives in many ways. Compared with before the epidemic, Hong Kong housing prices have a certain downward trend. The purpose of this study is to explore the proportion of the epidemic and the factors that are mainly affected by the epidemic. Through the correlation analysis and regression analysis of the house price index, the price index and the impact of real estate investment, it is found that the negative impact of the current epidemic on housing prices is relatively obvious, and its impact is gradually analyzed. Finally, it is concluded that the epidemic affects the supply and demand of real estate by affecting the number of people, and ultimately affects housing prices. However, because the government and real estate developers have introduced corresponding policies to deal with the epidemic, it is difficult for the future house price expectations to be significantly reduced.

Keywords: Epidemic; COVID-19; economic impact; Hong Kong housing prices.

1. Introduction

In early 2020, the outbreak of the novel coronavirus pneumonia was reminiscent of the impact of SARS in Hong Kong in 2003. At the time, residential prices in Hong Kong fell from a high in 1997 to a low in mid-2003. A cumulative decline of 66.2% for six consecutive years. There are concerns over whether Covid-19 will also cause property prices to plummet, with severe negative consequences for the wider economy and banking sector.

Hong Kong's economy is not only affected by external uncertainties brought about by the Sino-US trade dispute, but also by internal shocks caused by local social events and demonstrations. At present, the novel coronavirus pneumonia has seriously disrupted many economic activities such as cross-border movement of people. Due to the obvious reduction in traffic shifts, the long-term suspension of primary and secondary schools and universities, as well as the arrangement for employees of the government and large institutions to work from home, it is believed that the economic performance from the first quarter to the first quarter is more likely to continue to fall into negative growth in the first half of this year. There may be closures, or even layoffs, and unemployment will rise further. In this context, the enthusiasm of citizens to buy or invest in real estate will be affected. According to Zeng, chairman of Jones Lang LaSalle Hong Kong, the Hong Kong property market will be extremely inactive in January and February 2022. The real estate transaction volume is very small, and real estate developers choose to close the market [1].

However, Cai, a senior economic researcher in Hong Kong, believes that the current adjustment period, influencing factors, interest rate environment and supply and demand situation of Hong Kong's residential property market are different from those in 2003 [2]. According to Hong Kong real estate statistics, the Hong Kong property price index fell by 3.3% in the first quarter of this year, but as the epidemic stabilized, the property price index also rebounded [3]. Citizens tend to invest in real estate that preserves value compared to more volatile equity funds. At the same time, 36.2% of the respondents indicated that they are optimistic about Hong Kong property prices in the next 12 months, up 7.8% from the previous quarter [4]. Although 47.9% of respondents believe that Hong Kong bank loan interest rates will increase in the next 12 months, Mr. Wang, director of the real estate research department, said that Hong Kong bank balances are still abundant and interest rates are still hovering at a low level. As of April 22, the mortgage loan interest rate in Hong Kong was about 1.49%, lower than the average peak interest rate of 2.5%, which is conducive to the purchase of real estate by citizens and the trend of the Hong Kong property market [5]. Mr. Yu, former president of the Hong

Kong Institute of Surveyors, also said that even with the impact of the epidemic, the investment prospects of Hong Kong's current real estate market are still good, because the price may be relatively easier to accept than before the outbreak, and many powerful buyers will choose this property. Time to start, so the investment is still relatively feasible [6].

Overall, there is currently no housing oversupply in Hong Kong. In addition, in recent years, the population of Hong Kong has continued to grow, the average number of households has gradually decreased, and the number of people from home and abroad to study and work in Hong Kong has continued to increase. This also brings some support to the residential property market in Hong Kong.

This article mainly discusses the changes in housing prices in Hong Kong under the epidemic. First of all, as a classic city with more people and less land, Hong Kong has a population of 7 million, but only a few thousand new properties are put on sale every year. This particularity makes Hong Kong's average house price rank among the top in the world. Exploring the changes in housing prices in Hong Kong is more representative than exploring other cities, and its changes will also be more significant. Secondly, considering Hong Kong's special historical status and geographical location, it is also of great significance to explore Hong Kong's housing prices. As the most important city for Chinese and foreign capital exchanges, Hong Kong has also attracted investment from Chinese and Western companies. It's more valuable to study house price changes here than in other cities. At the same time, the results can also help us analyze the changes in the cost of ordinary residents moving to Hong Kong or the group opening a new factory or subsidiary at this time. Finally, due to the particularity of housing prices in Hong Kong, buying a house has also become an investment direction. Exploring changes in real estate helps assess the risk and practicality of an investment.

The main purpose of this article is to help investors make judgments by exploring the overall housing price trend in Hong Kong under the epidemic, and use this to predict the continuous changes in Hong Kong housing prices in the future. Today, the epidemic situation in Hong Kong is still changing. Exploring the impact of the Hong Kong epidemic on housing prices can help us predict the trend of housing prices under the next epidemic and measure the ability of the Hong Kong real estate industry to withstand abnormal situations. The government can also issue policies based on the relevant content to maintain the stability of the Hong Kong real estate market, and it will also help to conduct comparative analysis when encountering similar situations in the future, predict changes in advance, and make corresponding adjustments.

2. Methodology

The data of this experiment comes from the relevant data provided by the official website of the Hong Kong Special Administrative Region Government, the Hang Seng Index and the Hong Kong Real Estate Institute from 2017 to 2022.

Dependent variable: real estate index, the real estate index used in this paper comes from the relevant data of the Hong Kong Special Administrative Region government.

Independent variable: changes in the price level will affect the changes in real estate prices. This data adopts the CPI year-on-year growth index calculated by the official website of the Hong Kong Special Administrative Region Government. At the same time, the real estate fund index will also affect real estate prices, and the data is based on the data provided by the Hang Seng Index. At the same time, the Base interest rate is also an important factor affecting house prices. Finally, in order to explore the impact of the epidemic, the duration of the epidemic is also an important analytical factor

Table 1. Variable introduction

Variable name	Coefficients
Housing Price index	Price
Real Estate Investment	REI
Consumer Price Index (increase percentage)	CPI
Base Interest Rate	BIR
Time	T

On this basis, we can build relevant models:

Before the COVID-19:

During the COVID-19:

First, for the given data, we need to examine its correlation, and test the correlation coefficient of the three respectively, and the results are as follows:

Table 2. Correlation coefficient

Variable name	Coefficients
REI	0.694
CPI	0.699
BIR	0.031
T	0.493

Combining the correlation coefficient, we can find that housing prices and real estate investment have a strong correlation with the growth of CPI, a certain correlation with the duration of the epidemic, and a low correlation with the benchmark interest rate. Among the independent variables, real estate investment and CPI; benchmark interest rate and real estate investment have a strong correlation, and the correlation between other factors is weak. Therefore, when constructing the housing price model, the influence of BIR should be excluded because its correlation with the dependent variable is too low.

Then, with price as the dependent variable and other variables as independent variables, regression analysis was carried out by time before the outbreak and at both ends of the outbreak. The results are as follows:

Table 3. Regression statistics before COVID-19

Variable name	Coefficients	sd	t Stat	P-value
c	157.101	52.121	3.014	0.024
REI	0.003	0.008	0.362	0.029
CPI	3.077	7.536	0.408	0.097

Table 4. Regression statistics during COVID-19

Variable name	Coefficients	std	t Stat	P-value
c	188.216	16.648	11.306	0.003
REI	-0.002	0.003	-0.106	0.019
CPI	-0.027	0.923	-0.029	0.078
T	-0.092	0.162	0.567	0.191

According to the regression model results:

Therefore, the actual impact of the epidemic on housing prices is as follows:

3. Results and Discussion

Combined with the above model analysis, we finally found that the epidemic has a large negative impact on actual housing prices, and the actual impact of the epidemic on housing prices is inversely proportional to the CPI, real estate investment index, and the duration of the epidemic. According to background analysis, the social situation in Hong Kong before and after the outbreak of the epidemic did not differ significantly except for the protests. Therefore, after the outbreak of the epidemic in Hong Kong, the social situation that can dominate housing price changes is the epidemic and protests.

Figure 1 below shows the change curve of Hong Kong's first-hand housing and second-hand housing indices:

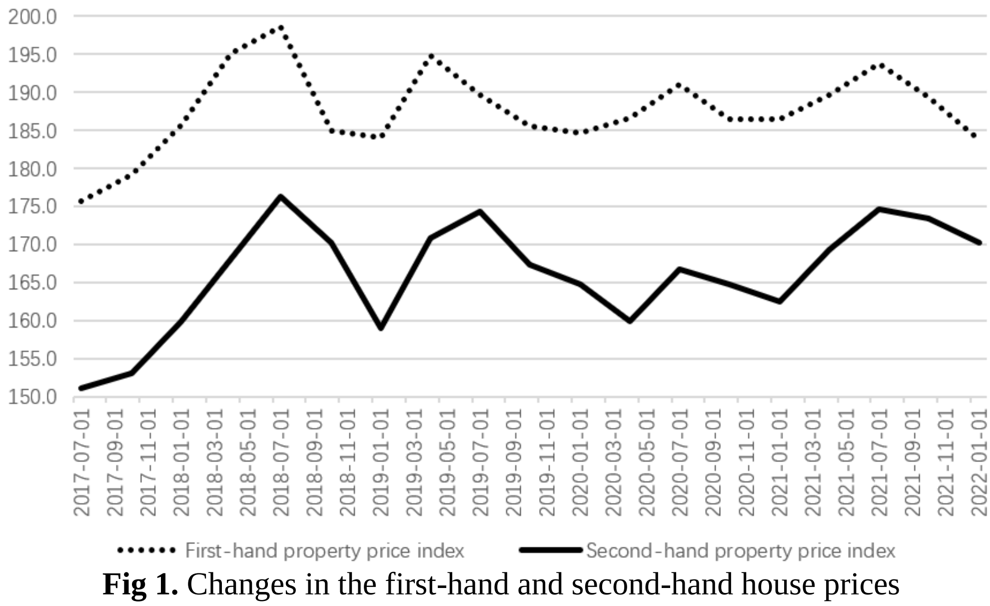

Fig 1. Changes in the first-hand and second-hand house prices

In fact, the protests in Hong Kong occurred in May 2019, so we found that during the time of the protests, Hong Kong's housing prices were in a normal state of volatility. Even at the beginning of the protests, housing prices in Hong Kong increased instead of falling. So, in fact, the protests have less impact on Hong Kong housing prices. After the outbreak of the epidemic, with the implementation of the policy of restricting gatherings, the protests in Hong Kong have been significantly reduced, and the corresponding social impact cannot be produced. Therefore, the impact of the protests on the overall housing prices in Hong Kong can be ignored. At the same time, based on the previous trend analysis, the time when the housing price index fell more obviously corresponds to the third wave (July 2020) and the fourth wave (August 2021) of the Hong Kong epidemic.

Combined with the comprehensive verification of the model, the outbreak of the epidemic has had a negative impact on Hong Kong housing prices.

Nowadays, with the development of the epidemic, more and more people choose to seek refuge in mainland China. In the past two years, Shenzhen Bay Port has been the only land port between Shenzhen and Hong Kong that has opened passenger inspection services and has become the "artery" for the flow of people between Shenzhen and Hong Kong. According to the data obtained by the 21st Century Business Herald reporter from the official website of the Hong Kong Immigration Department, on February 8, the number of people who left Hong Kong (entered Shenzhen) through the Shenzhen Bay Port was 2,170, an increase of about 1,572 people on February 7. 600 people. [7]. With this trend, the actual population of Hong Kong is decreasing. According to relevant government data, after the outbreak of the epidemic, the total population of Hong Kong decreased by an average of 7W per year (about 1% of the total population). Along with the shrinking population, the housing demand in Hong Kong also declined, which ultimately led to a decline in the Hong Kong house price index.

This also explains why the impact of the epidemic is inversely proportional to the investment of real estate developers, because with the decline of the population, the demand for housing in Hong Kong is also declining. According to the principle of supply and demand curve in economics, in the case of saturated demand, the increase in supply will not cause the price to continue to increase. The increase in investment by real estate developers is reflected in the increase in housing construction, which means that the supply is constantly rising. With the current demand reaching saturation and the market oversupply, even more investment will not allow real estate prices to increase.

In general, however, the Hong Kong government, financial companies and real estate developers will not sit idly by and watch house prices continue to fall, and the real estate industry will be hit. The government has introduced policies to balance this, such as increasing credit spreads and lowering lending rates. For example, in March 2020, the Hong Kong government announced that the lending rate would drop to 0.86%, and in 2021, the Hong Kong government’s benchmark interest rate will further drop to 0.5%. Under such hedging measures, the downward trend of house prices will be alleviated or even changed. Real estate developers also offer other corresponding preferential conditions or reduce property costs to attract consumers to buy. This will lead to increased consumer demand, which in turn will lead to increased demand and higher house prices, which is also the same as previously analyzed by financial analysts. Finally, in terms of land supply, Hong Kong has always adopted an auction method, with the highest bidder winning. Although the Hong Kong government has promulgated the relevant "Lantau of Tomorrow" vision, the actual implementation is not optimistic. Even Greenpeace has pointed out three major fallacies. At the same time, according to the development plan provided by the Hong Kong Planning Department, the area of residential land in Hong Kong only accounts for 5%, and now the residential development in Hong Kong has reached about 7%. The land area will not be much. Therefore, in this case, the demand for auctioned land is further expanded, which also leads to intensified competition among real estate developers, and further increases in the cost of building houses, which in turn leads to rising housing prices. Under the constraints of these factors, the downward trend of housing prices in Hong Kong will ease, or even rise instead of falling. It is difficult to clearly reflect the intuitive impact of the epidemic on housing prices.

Comprehensive analysis of the above aspects, although the emergence and outbreak of the epidemic will affect short-term interest rates, credit spreads and personal savings interest rates to a certain extent, these factors are still mainly regulated by the banking industry, the government and the market. less affected by the epidemic. Obviously, the part that the epidemic can actually affect is mainly the population of Hong Kong. Due to the outbreak of the epidemic, Hong Kong residents chose to move abroad to ensure their own safety, so the overall housing demand in Hong Kong decreased, which eventually led to lower housing prices.

But in general, the analysis in this paper has certain limitations. According to the content analyzed above, the current adjustments made by the Hong Kong government and the real estate sector during the epidemic will affect the trend of Hong Kong housing prices to a large extent. And in the case of further intensified competition for land, although the epidemic will have a certain degree of impact on housing prices, it is difficult for actual housing prices to drop significantly. At the same time, it is difficult to quantify the impact of these policies on housing prices, which is not conducive to our analysis of future housing price trends.

4. Conclusion

This paper collects and analyzes a large amount of data provided by Hong Kong government departments, CEIC and Hang Seng Index, compares and analyzes the changes in the housing price index and population trends before and after the epidemic, and conducts a linear regression analysis on the Hong Kong housing price index. In the analysis, we control for or exclude the influence of other variables, such as the influence of the Hong Kong protests, and other factors influenced by government regulation. Finally, the study concluded that the epidemic was significantly negatively correlated with the housing price index. At the same time, the epidemic has led to an exodus of Hong Kong's population, resulting in insufficient demand and a drop in housing prices. Therefore, under the circumstance that the current epidemic has not been eliminated, Hong Kong housing prices will still have a strong negative impact.

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