Forecasting Hong Kong **Housing Prices**

What Really Matters?

January 2019

Introduction

Hong Kong's housing price trend is a constant discussion topic. Housing prices had been on rising streak for 28 months until August 2018 when there were signs of a correction.

In 2018, a series of events have changed the housing perspective. For example, since July, the widening interest rate gap between the Hong Kong Dollar and the US Dollar has drawn capital out of Hong Kong, causing concern about hot money exiting the housing market. In September, Hong Kong banks raised their interest rates for the first time in 12 years, prompted by US Fed's interest rate hikes.

With concern over housing prices in mind, popular opinion tends to seek answers by looking at interest rates, the supply pipeline, new government taxes, the movement of hot money, or various combinations of these. But we think given the relative simplicity of our economic system, there has to be a more straightforward indicator to forecast price trends.

In the following sections, we conduct a series of simple correlation analyses to see which factor impacts housing prices the most.

CORRELATION

1

Housing prices **vs.** **Liquidity in the banking system**

Does hot money flowing out from the city really have an impact on housing prices? Let's look at the historical movement of both luxury and mass residential market prices and the aggregate balance (which represents the level of interbank liquidity). As Chart 1 shows, while both luxury and mass market housing prices rose consistently over the years, the interbank liquidity level fluctuated between HK$10 billion before the Global Financial Crisis to over HK$100 billion thereafter. Although ample liquidity in Hong Kong's banking system has kept interest rates low over the past 10 years, neither inflow nor outflow of money has impacted the trajectory of housing prices.

CHART 1

Housing prices vs. Liquidity level
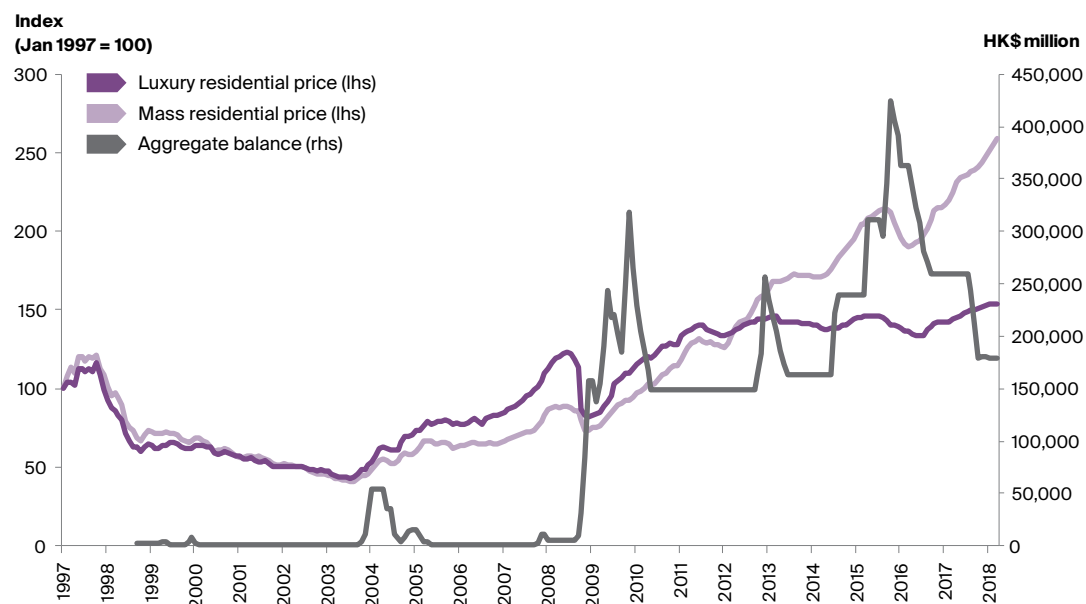
Note: The Aggregate Balance represents the level of interbank liquidity and is part of the Monetary Base. It is the sum of the balances in the clearing accounts maintained by the banks with the HKMA for settling interbank payments and payments between banks and the HKMA.
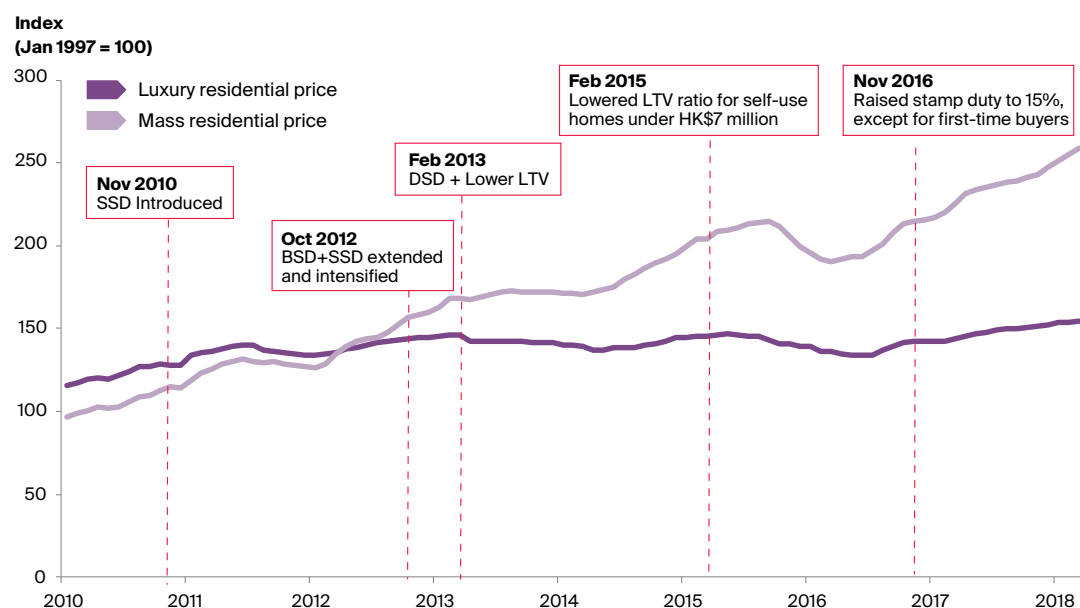
Sources: HKMA, Knight Frank Research

2

Housing prices VS. **Government policies**

To rein in the overheated property market, the Hong Kong Government has since 2010 introduced a series of cooling measures, such as a new stamp duty and tightening of requirements for mortgage approval. However, as shown in Chart 2, the effectiveness of these policies remains doubtful as they failed to stop the price momentum.

CHART 2

Housing prices vs. Government policies

Index (Jan 1997 = 100)

Luxury residential price
Mass residential price

Nov 2010
SSD Introduced

Oct 2012
BSD+SSD extended and intensified

Feb 2013
DSD + Lower LTV

Feb 2015
Lowered LTV ratio for self-use homes under HK$7 million

Nov 2016
Raised stamp duty to 15%, except for first-time buyers
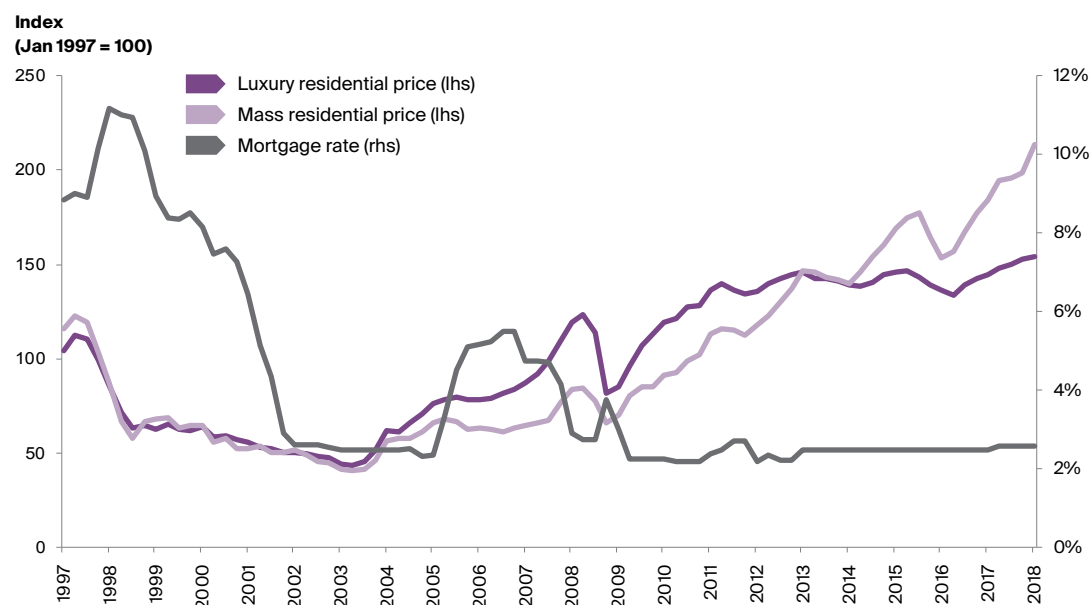
Source: Knight Frank Research

3

Housing prices VS. **Mortgage rates**

Housing prices and mortgage rates are conventionally believed to move in opposite directions. But does the historical data support this? Chart 3 shows that although housing prices has risen to a record height, mortgage rate movement have been flat. however, housing prices did plunge in 1997-1998 when mortgage rates were high. It is understandable that low mortgage rates reduce borrowing costs and drive demand for home ownership, in turn affect housing prices. But this correlation is far from clear cut. As it is not easy to accurately forecast mortgage rates movement it is not the straightforward gauge of housing prices that we are looking for.

CHART 3

Housing prices vs. Mortgage rates

Index (Jan 1997 = 100)

Legend:
- Luxury residential price (lhs)
- Mass residential price (lhs)
- Mortgage rate (rhs)

Source: Knight Frank Research

Housing prices **vs.** **Housing supply**

The historical data shows that housing prices and supply have a negative correlation (when one variable decreases, the other increases). For example, the average new housing supply in 2007-2016 was just 10,900 units per annum, far less than the average supply of 24,800 units in the previous decade. Meanwhile, there were on average 18,000 additional households entering the private residential market every year. The insufficient supply has pushed up housing prices to record levels. This suggests that housing supply is one of the determinants of housing prices. But the growth pattern of housing supply appears to be slightly more haphazard than price growth (Chart 4), making it not an easy indicator to assist our forecasts.

CHART 4

Housing prices vs. Housing supply
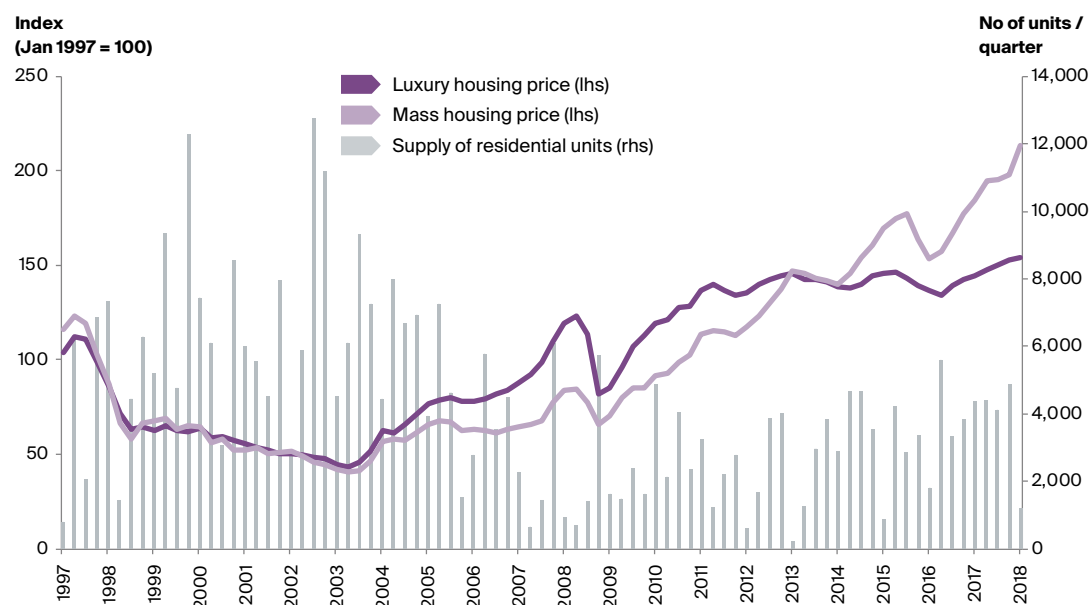
Sources: Transport and Housing Bureau, Knight Frank Research

Some suggest a sudden influx of units, from say distressed Mainland buyers could sway the price trajectory. But the weak correlation between price and supply shown above seems to refute that. In reality, the accumulative shortage of supply still overwhelms behaviour of a particular buyer group, albeit a sizeable group. Recently there have been a few reported distressed sale of luxury units from Mainland buyers, however the likelihood of thousands of Mainlanders dumping their units in a short period of time is still low.
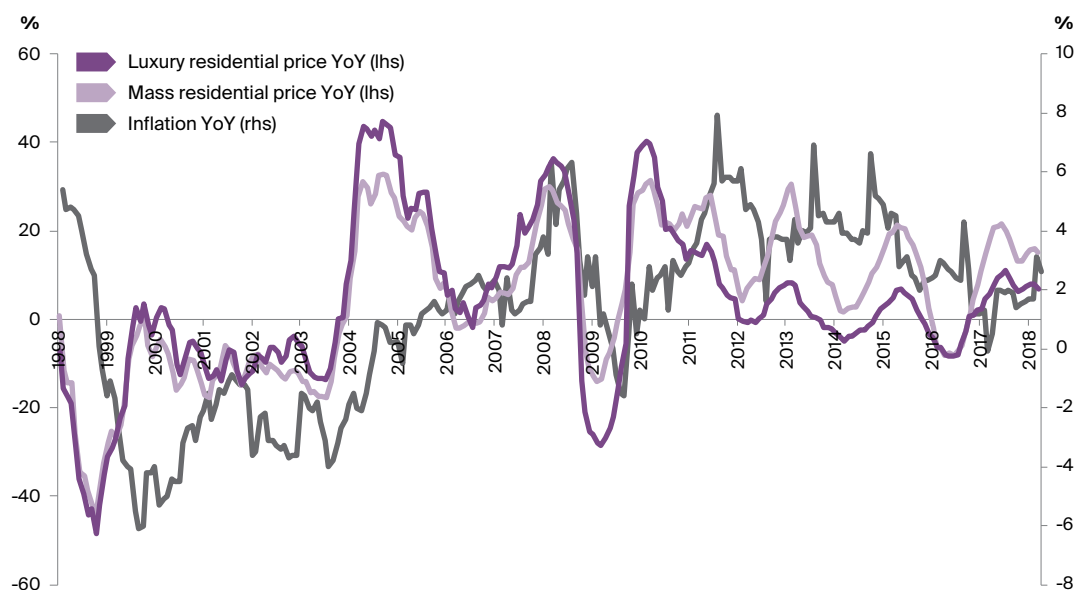
CORRELATION

5

Housing prices VS. **Inflation**

Housing prices is often associated with Inflation. As shown in Chart 5, there is a certain correlation between the two, as housing prices contribute to inflation. However, it is not necessarily the case when we try to forecast house prices from inflation as it is also influenced by many other economic factors such as oil prices, food prices and so on. Again, it would prove difficult as we look for a simple forecasting tool.

CHART 5
Housing prices vs. Inflation

Sources: Census and Statistics Department, Knight Frank Research

CORRELATION

6

Housing prices **vs.** **GDP**

We often hear people citing the economy as their motive to enter or leave the housing market. This is because housing prices and GDP growth move along very similar paths (Chart 6). In years of poor economic performance, such as 1998 and 2008, housing prices dropped sharply. In the 10 years after the Global Financial Crisis, both GDP and housing prices were trending upwards. This correlation can be explained by the robust economic conditions such as the healthy labour market and stable growth of household income, which in turn supports home purchase affordability. GDP is, therefore, a good pointer for house price movements.

CHART 6

Housing prices vs. GDP

Sources: Census and Statistics Department, Knight Frank Research

7
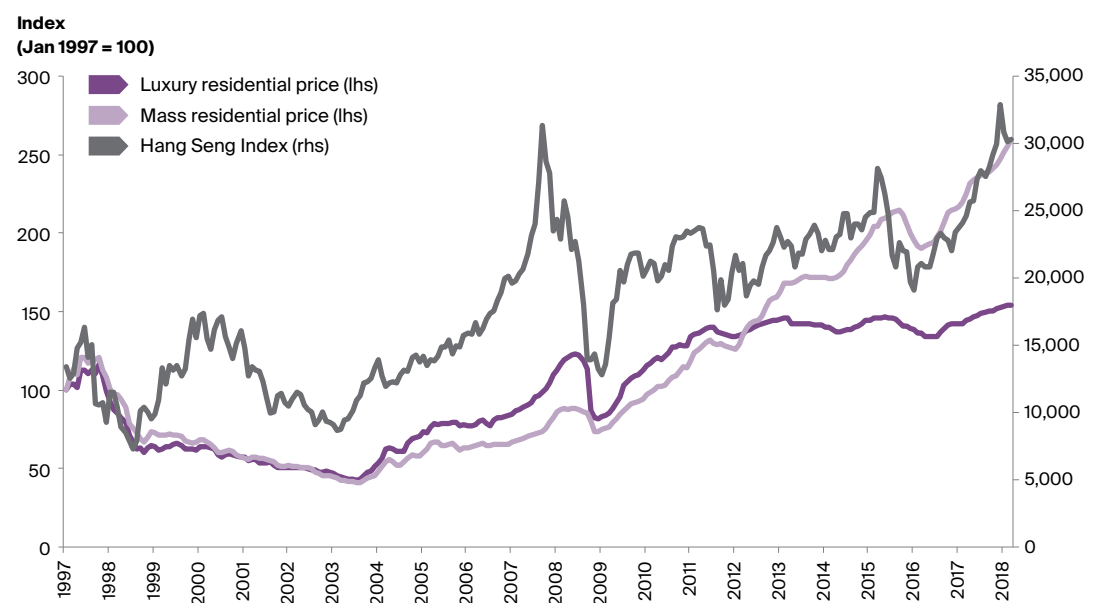
Housing prices vs. The Hang Seng Index

But not everyone is familiar with the interaction of variables that contribute to GDP. Luckily, the relatively simple structure of Hong Kong's economy means that the local stock market index, the Hang Seng Index (HSI) is closely associated with the local economy, which in turn, provides us with a good indicator for housing price forecast.

As the historical data series in Chart 7 shows, housing prices are highly correlated with the HSI, with a typical lag of around three to six months based on our correlation coefficient analysis. For example, the stock market crashes in 1997, 2008 and 2015 were all followed by a delayed price decline in the housing market. In contrast, housing prices increased consistently following the periods when the stock market rallied.

What this means is that even the most casual observer can now predict the general movement of Hong Kong's housing price in the next three to six months by looking at the HSI movement today.

CHART 7

Housing prices vs. The Hang Seng Index

**Index
(Jan 1997 = 100)**

Luxury residential price (lhs)
Mass residential price (lhs)
Hang Seng Index (rhs)

Sources: Yahoo Finance, Knight Frank Research

Conclusion

Our analysis shows that, while factors like the interest rates and housing supply do impact house prices in Hong Kong, the GDP typified by the Hang Seng Index is a much more straightforward indicator for pulse check Hong Kong housing prices (table 1).

TABLE 1

Factors	Closeness to house price movement (scored 1-5, 5 the closest)	
Money supply	🏠	1
Government policies	🏠	1
Interest rate	🏠🏠	2
Housing supply	🏠🏠	2
Inflation	🏠🏠🏠	3
GDP	🏠🏠🏠🏠🏠	5
Hang Seng Index	🏠🏠🏠🏠🏠	5

After a long period of bull market up until the first quarter of this year, the local stock market has embarked on a path of steady decline. Yet, the local housing market has just started to show signs of weakness. If our hypothesis of the time lag is indicative, then the extent of correction in the HSI signals a notable house price decline in the first quarter to first half of 2019.

Admittedly a more comprehensive multi-variable analysis and testing is needed to substantiate our view that HSI moves ahead of housing prices by three to six months, as well as forecasting the true extent of the price movements. But by observing HSI we now have improved our confidence in projecting our views on the market, even when they might be at odds with the prevailing market commentaries.

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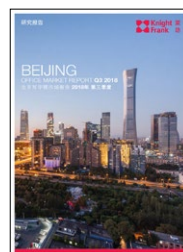## RECENT MARKET-LEADING RESEARCH PUBLICATIONS

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