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ASK: NUS ECONOMISTS

Inflated housing prices should ease

By Tilak Abeysinghe for the straits times

Are residential properties in Singapore overpriced? If so, by how much?



As housing supply rises and the immigrant population falls, house price inflation can be expected to decline to an affordable trend rate. -- ST PHOTO: CAROLINE CHIA

MY FORMER student, Miss Gu Jiaying, and I spent some time working out answers to these questions, looking at private and Housing Board (HDB) residential property prices.

The trend line in the chart gives the general direction of price movements over a period of time. As can be seen in the graph, our research found actual housing prices have outpaced and stayed mostly above the price trend since mid-2006.

The actual median price of both private and HDB units has risen by about 11 per cent a year since that time, higher than the trend price increase of about 8 per cent a year.

Based on the lifetime income of households, we found that affordable increases in house prices would have been about 4 per cent a year.

Although house prices can develop into bubbles, separating bubble and non-bubble components of prices is a challenging task. The key question is how to estimate these price levels. We need a reference price level that represents the underlying trend.

Such a price level can be determined by some fundamental variables like demand and supply. We need to also talk about a price level that is affordable.

Demand and supply imbalances in a market like housing drive prices up or down. The challenge is differentiating short-run price movements from long-run price trends.

When house prices are rising fast, buyers may rush to buy fearing further increases in price, which drives prices further up.

When house prices are falling, buyers may delay the purchase of a house with the hope that prices fall further, which will accentuate the price fall. We have to remove such price gyrations from house prices when estimating the price trend set by some fundamental variables.

On the demand side, these fundamental variables are per capita disposable income, per capita financial wealth, population size and a measure known as the user cost of housing.

The major component of financial wealth that matters most for housing demand is Central Provident Fund balances.

The cost of housing for a typical Singaporean depends on factors such as mortgage lending rates, the property tax rate and expected appreciation of house prices. Because of data issues, the accumulated investment in new housing construction was used to measure the supply of housing.

The two charts show the actual median prices and the trend prices determined by the above fundamentals. By using a statistical simulation method, we obtained the trend price regardless of the simulation's starting point.

What these charts show is that actual prices have remained mostly above the trend line, except for those periods when substantial price corrections occurred.

Although recent prices have eased, our estimates indicate that a private unit with a price tag of \$1.28 million in the first quarter of this year was at least \$136,000 above the trend line, while an HDB resale unit with a price tag of \$458,000 was at least \$76,000 above the trend line.

But even the trend price we see in the chart may not necessarily be an affordable price if the house price costs a large fraction (more than 30 per cent, for example) of lifetime income. The large gap between actual and affordable prices is driven by a build-up of mortgage loans. Between 2000 and 2006 when house prices were moderating, the value of mortgage loans per residential unit increased by 1 per cent a year on average.

But between 2006 and 2010, when house prices started to escalate again, mortgage loans per residential unit grew by 7 per cent a year on average.

Curbing population growth will allow housing price inflation to slow down. This means a substantial reduction of foreign workers (both high- and low- skilled) in Singapore.

However, in a separate study, we found that a drastic curb on foreign workers would drive up business costs, raise the unemployment rate and lower economic growth. This will erode housing affordability despite falling house prices, putting us back to square one.

As housing supply improves over the next few years and the immigrant population declines, we can expect house price inflation to fall to an affordable trend rate like 4 per cent.

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