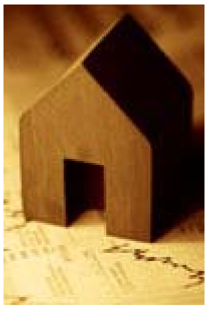
ASIA'S GLOBAL BUSINESS SCHOOL

NUS National University of Singapore | NUS BUSINESS SCHOOL

BUSINESS EDGE

Corporate Development & Communications Office

Main page | May 2008



Residential Affordability Index

IVAN PNG
Professor

For most people throughout the world, their largest economic asset is their home. Home-ownership looms large in the economic aspirations of Singaporeans. The 5Cs that famously encapsulate the Singapore dream are cash, credit card, car, condo, and club.

So, when housing prices increase, some smile while others groan. Those who already own property smile, while those hoping to buy a home groan. To ensure that all Singaporeans have incentive to work hard, they must be able to realize their aspirations. Housing prices must be reasonable.

What is the meaning of "reasonable"? The real issue is the *affordability* of private residential property. Very roughly, the issue is the level of real estate prices *relative* to personal income.

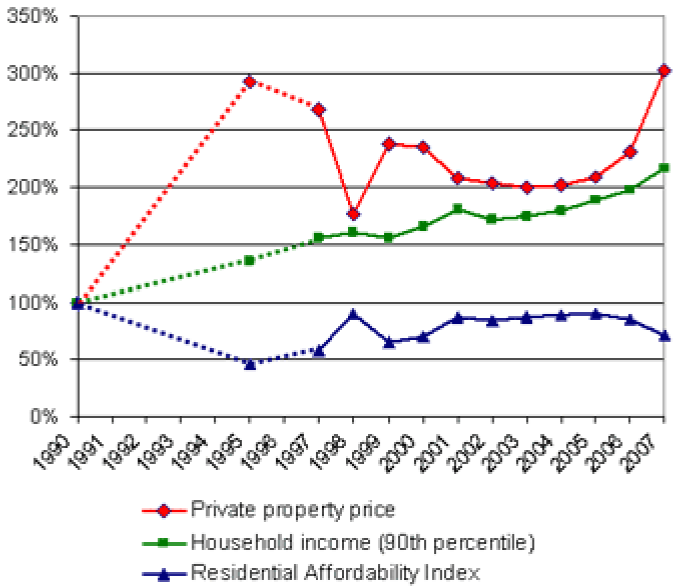
For instance, housing may be more expensive in Tokyo. But this is not an issue to the extent that Japanese incomes are higher. Likewise, housing may be cheaper in Bangkok, but it is still relatively costly because the average Thai family earns less than Singaporeans.

Last year, I developed the Residential Affordability Index to address precisely this issue. This Index tracks the price of private residential property relative to household incomes.

Only 15% of Singaporeans live in private housing, with the remaining 85% in HDB flats. Accordingly, it seems appropriate to use the 90th percentile as the measure of household income. (The 90th percentile measures the income of households who earn more than 89% of other households.)

In the accompanying chart, the blue series depicts the evolution of the Residential Affordability Index in 1990, 1995, and from 1997 onward. The red series depicts private residential property prices, while the green series depicts the 90th percentile of household income.

The Residential Affordability Index is the ratio of the 90th percentile of household income to private residential property prices. So, if household income rises by *more* than property prices, affordability would rise. Conversely, if household income rises by *less* than property prices, affordability would fall.



To gauge the predictive power of this Index, it helps to review our experience in the 1990s. Between 1990-95, private property prices almost tripled, while household income increased by merely 36%. As the chart shows, affordability plunged – to less than half of the level of 1990, the base year of the Index.

Clearly, under such conditions, the real estate boom was not sustainable. The market would be sustainable only if incomes were high enough for people to buy. Not surprisingly, the boom set the stage for a painful crash. The crash was triggered in part by draconian government measures to cool the property market.

By 1998, following the crash and with continued increases in household incomes, affordability had returned to almost the level of 1990. Real estate prices stopped falling. Then between 1998-99, prices inflated while incomes fell, causing affordability to fall. However, between 1999-2001, prices fell while incomes grew, so affordability improved.

What about the recent acceleration in real estate prices? Referring to the chart, from 2002-06, private property prices rose, but the price increases closely tracked the growth of household income. Hence, affordability was not much affected. In some sense, it was win-win for all.

However, last year, this happy trend of incomes growing in step with housing prices was broken. While property prices rose by a massive 31%, household income rose by only 10%. Consequently, affordability *fell* sharply, by 19%. Referring to the Figure, in 2007, the blue curve (representing the Residential Affordability Index) turned down sharply.

By the fourth quarter of 2007, affordability was almost 30% lower than in 1990, the base year of the Residential Affordability Index. While not good news, it was still a far cry from the crisis level in 1996, when affordability was almost 55% lower than in 1990.

However, further acceleration in property prices would cause affordability to fall. If the affordability continued to deteriorate, we might end up with a bubble like that of 1996, and the inevitable crash.

Fortunately, the signs are that, in the wake of the overall credit crunch in financial markets, the frenzy in Singapore real estate is cooling. The share prices of real estate developers are languishing near to their 52-week lows.

Commenting on the softening real estate market, Minister Mentor Lee Kuan Yew was prompted to remark: "It is a blessing. We were in danger of property prices going through the roof again, as in the middle 1990s."

 Dr Png is professor of information systems, business policy and economics at the National University of Singapore. The opinions expressed here are personal.