

Residential Affordability Index™

Roughly 50% of the Hong Kong population live in public rental flats or subsidized housing. Hence, the remaining 50% are potential buyers of private residential property for personal use. Public and subsidized housing are intended for lower income people. Accordingly, it is reasonable to assume that the potential buyers of private housing are the top half of the population in terms of income.

Therefore, as the representative household income, I use the income of the 75th percentile of households by income. One-quarter of all households would have higher income, while three-quarters would have lower income. This 75th percentile should represent the typical buyer of private residential property.

The Rating and Valuation Department classifies private residential property into five grades – from grade A, the smallest (below 39.9 square metres), to grade E, the largest (more than 160 square metres). The most popular type is grade B, which accounts for about 50% of all residential units. Grade B is also the median grade, i.e., half of all units are in this grade or smaller, and half are in this grade or larger.

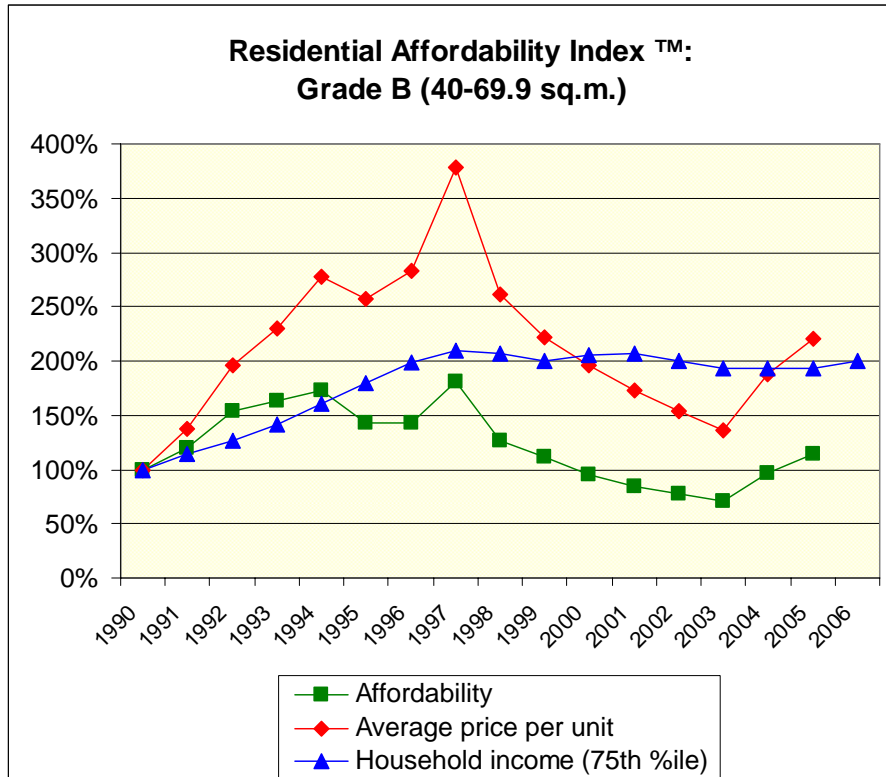
Accordingly, I construct the representative price of private residential property from the prices of grade B properties, weighted by the proportions of such properties in Hong Kong Island, Kowloon, and the New Territories. I perform this calculation from 1990-2006.

To calculate the affordability of private residential property for each year, I divide the representative property price by the representative household income. I do not adjust either the representative property price or the representative household income for inflation. Any adjustment must be made for both the numerator and denominator of the calculation, and so roughly cancel out.

Finally, I converted the affordability series into the Residential Affordability Index (trademark application pending) by dividing by the 1990 affordability. Thus, the Index equals 100 in the year 1990.

In the figure, the blue series represents the 75th percentile of household income, the red series represents the representative price of grade B properties, and the green series represents the Residential Affordability Index.

The Affordability Index is also useful in measuring the sustainability of real estate prices. Referring to the figure, beginning in 1990, the price of property increased at a faster rate than household incomes, and so, affordability declined. The price increases were not sustainable, and, predictably, the real estate prices fell drastically. By 2000, affordability had returned to its 1990 level.



As real estate prices continued to fall and household incomes remained flat, affordability continued to improve, reaching its highest level in 2003. Since 2003, real estate prices have risen sharply, while household incomes remained flat. As a result, affordability fell, but, even so, had not dropped by much relative to the 1990 level of affordability.