How Severe is the Housing Shortage in Hong Kong?

Y.C. Richard Wong

Introduction

Rising property prices in Hong Kong have been of great public concern throughout most of the 1990s. Speculators have been blamed for setting off periodic episodes of property price hikes. Public policy has until now been focused primarily on curbing speculative activities. This is most unfortunate, because curbing speculation will not hold down property prices in the face of sustained increases in housing demand. Luckily, the recently released consultative document on long-term housing review, entitled Homes for Hong Kong People: the Way Forward, has been able to address a broader range of housing issues.

My purpose here is to focus attention on the nature of the housing shortage in Hong Kong so as to understand the sustained escalation of property prices that has been taking place for almost a decade. Figure 1 shows that with the exception of the periods 1989-1990 and 1994-1995, real property prices have been rising steadily at an annual rate of 2.14 percent over the past 15 years. This is due to a slow increase in the available housing stock coupled with rapid growth in the demand for housing.

The factors that have contributed to demand growth are by now well known. They include rising incomes due to a sustained economic boom, which is in turn due in part to the successful opening of China; a population that is growing as a result of immigration; a shift in the population's age structure towards one in which age groups with a high demand for housing is growing; low nominal interest rates because of the linked exchange rate regime that ties the domestic interest rate to the U.S. rate; and a high rate of domestic inflation because of supply side constraints in a booming economy.

This sustained growth in housing demand has not only increased the demand for housing units, it has, more importantly, encouraged "trading up" activity. Better-quality housing has in general been in greater demand in recent years, quality being defined here in terms of larger units, better location, enhanced aesthetic and construction quality, and improved facilities and amenities. This change is borne out by the fact that property prices of better-quality housing units have risen far more than have those of other units, and the frequency at which these

units are being bought and sold is also proportionately much higher.

On the supply side, the total stock of housing units in Hong Kong has grown over time, but its growth rate fluctuates considerably in response to market conditions, and has tended to decline over time (see Table 1). The relative decline in the 1990s is anomalous given the very robust market conditions. This decline suggests that the shortage of land, the difficulties of redevelopment, and regulatory restrictions may be slowing the supply response.

On the demand side, although the number of households in Hong Kong is increasing, it is doing so at a lower rate. As a consequence, the number of households and the number of housing units have come close to achieving a balance throughout the 1990s. While this seems to suggest that every household can, by itself, now occupy a residential unit, it should not be taken to indicate that there is a balance in the supply of and demand for housing. If this were in fact the case, housing prices would not have continued to rise in the past decade.

Stock of Housing

The total number of units available is a poor measure of the total supply of housing in the market because it fails to take into account floor area, location, year of completion, and other quality attributes of housing. In order to accurately measure the total supply of housing in Hong Kong, one must first differentiate between public and private housing units. Public housing units can be further broadly classified into rental units and owner-occupied units.

The average sizes of rental units and owner-occupied units in the public sector differ greatly. Table 2 shows that between 1982 and 1996 the average size of rental units increased from 24.58 to 30.85 square meters, and for owner-occupied units it increased from 52.24 to 55.10 square meters. It is apparent that lumping together rental and owner-occupied units would not be an appropriate way to measure the total supply of public housing. Some method of standardizing different types of units is obviously necessary in order to obtain an accurate idea of how much housing is actually available.

There is also a great deal of difference between the average size of private residential units and that of public housing units. The average size of available private residential units has been remarkably stable over time, remaining at about 55 square meters (see Table 2). Although the average size of the private units completed each year has been rising, this increase has had little impact on the average size of the available housing units, overall.

To facilitate comparison between different types of public housing units on the one hand and private housing units on the other, it is useful to treat a private housing unit as a standard housing unit (with a mean size of approximately 55 square meters). A public owner-occupied unit is about the same size as a private housing unit and will therefore be treated as equal to a standard housing unit. A public rental unit is about 60 percent of the size of an average private housing unit and will be set equal to 0.6 times a standard housing unit.

Table 1 sets forth the total stock of public and private housing units in terms of actual numbers and standardized units. While the number of actual units is larger than is the number of standardized units, standardized units are actually growing at a faster rate, because of the shift in composition towards larger units. What is more important, however, is that the gap between households and the housing stock ceases to be balanced once we begin to base our concept of the housing stock on standard units rather than on actual units.

Indeed, according to my calculations, we have a hypothetical shortage of 273,000 standard units at the present time. This shortage manifests itself primarily in the fact that a large number of public housing units are too small to meet the housing aspirations of the tenants who occupy them, they are willing to stay there only because of the very cheap subsidized rent. It is important to take note of two relevant points. The firstpoint is that the units are standardized only in terms of size. Most public housing units are on average of relatively low quality. Furthermore, almost all public housing units are governed by tenancy agreements and terms of ownership that impose severe limits on tenant mobility and asset transferability, so that public and private units are far from being perfect substitutes. The second point is that the distribution of income among tenants in the public and private housing sectors are not terribly different. Therefore, the differential demand for housing among tenants in one of these two sectors versus the other will not be sufficient to alter our conclusion about the severity of the housing shortage.

Households and Housing Stock

It is instructive to examine the historical record of the match between the number of households and the housing stock. Since the last market crash in 1981, the gap between the number of households in Hong Kong and the number of actual housing units, both private and public, decreased steadily until 1994; however the gap widened in 1995 as a result of the increased number of immigrants returning to the city. Yet the real price of housing has been on an upward trend since 1984. This indicates that the gap between the number of households and the number of actual housing units in the stock is not a good indicator of whether or not there is a housing shortage. In particular, it is not a good predictor of price movements. Even if there were more housing units than households, prices would not necessarily stabilize. The reasons for this are as follows:

- 1. Existing house-holds will split into more households as young people marry and live apart from their parents.
- 2. In a housing market, under normal circumstances, there should be a certain percent of vacancy in the housing stock to accommodate changes in tenancy, renovation, etc.
- 3. Households may occupy more than one housing unit. Some high-income households may own a second unit as a vacation home.
- 4. Households living in public housing may also occupy more than one housing unit for a different reason. The Housing Authority estimated that about 13 percent of public rental housing tenants, or about 74,000 households, own private domestic properties. The flats they own account for as many as 11 percent of all private housing units. Among the private housing units owned by public housing tenants, 84 percent are owner occupied, with the remaining 16 percent being rented out. Therefore, what happens in most cases is that some registered members of the households who are supposedly living in public rental housing are in fact residing in private flats they own. They could be the sons, daughters, or parents of the heads of these households. In extreme cases, all members of the household will reside in their own private flats, leaving the public rental units vacant. This trend of private home ownership by public rental housing tenants appears to be on the rise. A random sampling of 2000 transactions in the period between October 1992 and March 1993 provided by the Rating and Evaluating Department shows that as many as 24 percent of private housing units were purchased by public rental housing tenants. This phenomenon suggests that there is considerable absenteeism in public rental housing. A survey taken by the Housing Department in August 1992 showed that as many as 18 percent of public rental tenant households had some registered members not currently living in the flat. Therefore the de facto household size is likely to be considerably smaller than is the authorized household size. Alternatively, it means that the actual number of households in Hong Kong could be considerably larger than the number reported in the statistics. Hence, when the statistics show a surplus of housing units over the number of households, there could in actual fact be a shortage.
- 5. Finally, even if the properly measured number of households matches the number of housing units, there will still be pressure for prices to increase, because real income growth will allow households to trade up-market by selling the existing units they occupy and buying larger and higher-quality units. This will push prices up at the middle to the upper end of the market, while prices at the lower end of the market will stagnate or even fall. However, the private housing market will adjust, for units that are not in large demand will be demolished and redeveloped into larger units that are in higher demand. The average unit size and the quality of the housing stock will increase over time, and housing prices will grow higher.

The above discussion suggests that the standardized housing stock, in which public housing units are converted into equivalent private housing units on the basis of area, is a better measure of available housing than is the actual housing stock. Between 1982 and 1996 there has been a substantial shortage of housing measured in standardized units when we compare the number of households with the standardized housing stock.

Y.C. Richard Wong is Director of the Hong Kong Centre for Economic Research and the professor of School of Economics and Finance in the University of Hong Kong.

Table 1: Number of Households and Housing Stock: 1978-1996 (thousands)

	Number		Н	lousing Stoc	Households minus			
	of	Private	Public Housing		Total		Housing Stock.	
Year	Households	Housing	Renter	Owner	Actual	Standard	Actual	Standard
				Occupied				
1982	1319	522	505	26	1053	851	266	468
1983	1350	542	533	36	1111	897	239	453
1984	1405	563	554	48	1165	943	240	462
1985	1435	592	572	67	1231	1002	204	432
1986	1488	625	579	81	1285	1053	203	435
1987	1515	658	596	86	1340	1101	175	413
1988	1544	692	621	98	1411	1162	133	381
1989	1553	726	651	118	1495	1234	59	319
1990	1574	753	667	130	1550	1283	24	291
1991	1622	781	681	143	1605	1333	17	289
1992	1663	805	672	166	1643	1374	20	289
1993	1706	833	677	186	1696	1425	10	281
1994	1763	866	684	204	1754	1480	9	283
1995	1815	886	691	222	1799	1523	16	292
1996	1840	903	708	239	1850	1567	-10	273

Note: Figures for 1996 are estimated.

Table 2: Residential Housing: Average Size (m2)

	Private		Public		
		Annual		Owner	
Year	Stock	Supply	Rental	Occupied	
1982		56.68	24.58	52.24	
1983	55.65	60.64	24.93	53.82	
1984	55.19	43.37	24.48	52.21	
1985	54.58	43.68	24.53	51.77	
1986	54.32	50.42	27.52	51.45	
1987	54.23	53.85	25.38	51.93	
1988	54.44	58.36	25.81	51.96	
1989	54.73	61.09	27.73	52.16	
1990	54.78	57.41	28.27	52.39	
1991	54.85	59.90	28.22	52.84	
1992	54.79	53.75	28.53	53.21	
1993	54.73	54.18	29.20	53.72	
1994	54.57	56.11	29.86	54.11	
1995	55.74	63.20	30.03	54.80	
1996	55.94	65.40	30.85	55.10	

Figure: 1

