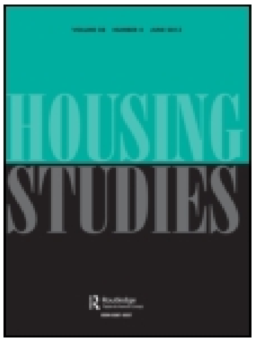

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Navigating Between Limits: The Future of Public Housing in Singapore

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ABSTRACT *The People's Action Party government of Singapore, which has been in power without discontinuity since 1959, is committed to a national housing program with universal provision of 99-year leasehold homeownership for all its citizens. Since 1961 to 2013, the Housing and Development Board, the public housing authority, has built more than one million high-rise housing units, accommodating approximately 90 per cent of the citizens and permanent residents, of which more than 85 per cent of the resident households are homeowners. This close to universal provision system has generated a set of perennial competing demands. Among them are (i) in view of the absence of a national pension scheme, the need to enable homeowners to monetize their public housing property to finance the retirement years, (ii) in order to facilitate retirement funding, public housing flats must be allowed to increase in asset values, to keep up with inflation and rising costs of living and (iii) new subsidized flats must be kept affordable for new entrants into the housing market. The management of these competing demands requires constant monitoring and intervention by the state in order to maintain a balance and sustainable system.*

KEY WORDS: Singapore public housing system, asset-base social security system, universal homeownership, affordability

The Housing and Development Board (HDB) was established in 1961, two years after Singapore was granted domestic self-government, to replace the colonial public housing authority, the Singapore Improvement Trust, which had been too lethargic in its building program to meet the housing demands of a growing population. Starting modestly with the construction of one-room rental flats, the HDB began to sell 99-year leasehold flats in high-rise housing blocks in 1964. In 1968, three years after political independence, citizens were allowed to make pre-retirement withdrawal from their tax-exempt, mandatory social security savings for retirement, the Central Provident Fund (CPF), to pay for the down-payment, monthly mortgage and other ancillary transaction costs of purchasing HDB flats. With the CPF system, a closed loop of financial transaction is instituted: a home-owner saves monthly with the CPF, which is deducted at income source, buys a flat from HDB which holds the mortgage, the CPF pays on his behalf the monthly mortgage directly to the

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HDB; no commercial financial institutions are involved in the transaction. As the monthly savings rate per capita kept rising, keeping pace with rapid national economic growth, generally the CPF savings of a household would be sufficient to pay the monthly mortgage without affecting its normal consumption. Home-ownership rates increased immediately. Not surprisingly, by the late 1980s more than 85 per cent of the 90 per cent of the population who live in HDB flats owned a 99-year lease on their residence.[1]

Economically, homeownership has contributed to the formation of a formal labor force necessary to a capitalist economy. Prior to the export-oriented industrialization in the early 1960s, Singapore had essentially a regional trading economy with very high rate of unemployment and an informal labor force which was used to the relatively relaxed pace of daily life that came with irregular employment and irregular income. As monthly mortgage could only be paid with regular monthly income, homeownership imposed a discipline on workers to stay in regular employment in the formal sector of the economy. This disciplining effect can also be associated with government efforts to 'tame' restive workers in radical unions with government-sponsored compliant trade unions with limited collective bargaining rights. Finally, housing subsidy indirectly subsidizes capital by lowering wages than would otherwise be in a fully privatized housing market. Lower wage cost in turn keeps Singapore globally competitive and attractive to foreign direct investments (FDI). Until today, the government has resisted calls for instituting a minimum wage. Monthly wage for unskilled, older workers can be as low as $750, in a country where the median monthly income per capita was $6000 in 2012, and a Gini coefficient of 0.47 (Department of Statistics 2012, pp. 28 and 12).

Politically, homeowners are inclined to be conservative and supportive of the status quo, in the interest of protecting their property value. The ruling government is well aware of this effect. At election time, it pressures public housing residents to vote for the ruling party, by threatening to withhold funds for upgrading the flats and the estate environment up to a level comparable with newer flats with improved amenities and services in new generations of estates (Chua, 2000), knowing that upgrading is essential to maintain the property value of the older estates. Overall, the very tangible rapid improvement of the citizen's material life across the board, significantly due to stable housing tenure, has greatly enhanced the political capital and political legitimacy of the People's Action Party (PAP) and its absolute hold on parliamentary power since 1959. Obviously, the political fortune of the PAP has become inextricably entwined with the public housing system it has established (Chua, 1997). It calls Singapore a 'home-owning democracy'.

Of course, along with political legitimacy gained, the government is also saddled with responsibility to protect the investment of more than 80 per cent owners of the close to one million public housing flats. The state is compelled first, to maintain but preferably enhance the market value of public housing flats for existing homeowners and, second, to continuously provide, within a 'reasonable' waiting time, affordable new flats to all first-time home buyers. The government and its housing agency are thus constantly, indeed permanently, engaged in acts of balancing competing demands systemically generated within a web of interlocking policies: keeping up with demand for new flats but ensuring no oversupply that might hurt market values of resale flats; enhancing property values of resale prices but watching closely inflation and bubble build-up; keeping new flats affordable to especially first-time home owners and low income families without it becoming a welfare entitlement and, increasingly concern with the risk of over investment in housing against adequacy of its retirement and other social security needs of the homeowners. This essay examines the changes in this set of housing policies in Singapore in the last decade as the state struggles to negotiate a balance to meet the demands that are systemically generated, perhaps ironically, by a successful universal public housing program.

Evolution of Asset-Base Social Security System

It seems now conventional to suggest that Singapore has an 'asset-based social security system', with public housing homeownership as its central asset (Chia, 2010a, 2010b; Ronald & Doling, 2010). In fact, the idea did not become an explicitly articulated policy until early 2000s; five decades after the public housing program had already been in place. The government's encouragement of homeownership has apparently resulted in over-investment in public housing ownership which has left retired homeowners 'asset rich but cash poor'. A 1995 National Survey of Senior Citizens found '48.8 per cent cited their own house as their most important asset' (Chia, 2010a, p. 107). Over the years, the monetary value of public housing flats has increased very significantly; nevertheless, retirees might have insufficient funds remaining in their CPF to finance their retiring years. It is in response to this problem that the idea of asset-based social security came to be a framework for implementation of social policy in contemporary Singapore. We must therefore disaggregate the process by which public housing flats accrue monetary values to their owners and the linkage between this accumulated wealth and social security.

As mentioned above, the public housing program evolved pragmatically from very modest beginnings. The initial mandate for the HDB was to fulfill a promise by the PAP government that it would immediately improve the living conditions of the overwhelming majority of the population who were living in highly congested urban shop-houses or in informal settlements of wooden houses with 'atap' (dried palm leaves) roof. Three years later, the government's decision to sell 99-year leases on public housing flats was motivated by two beliefs, one practical and the other political-ideological. Practically, it was observed that owners would be more inclined to maintain not only their flats but also the surroundings in order to protect their property, in contrast to the negligence of renters. Ideologically, then Prime Minister, Lee Kuan Yew, believed that homeownership would give citizens a tangible 'stake' in the nascent nation. In 1968 the government made the decision to allow pre-retirement withdrawal of the CPF for the purchase of public housing; homeownership rate took off.

Further encouragement to homeownership was given by permitting a sitting leaseholder, after five years of residence in the flat, to sell the lease on an open market instead of selling it back to the HDB, and repurchase a new subsidized flat from the HDB. This was based on the assumption that a household might want or need to upgrade to a larger flat as space demand increases with a growing family. A cycle of 'buy/sell/repurchase' was created within public housing homeownership. For the HDB, upgrading results in a filtering down of older and smaller flats to new families, lower income households or permanent residents. This reduces the need to build smaller flats that incur greater subsidies than larger flats. Upgrading became so prevalent that by mid-1980s, the HDB stopped building three-room flats, the smallest of the flats for sale. From the mid-1960s till the mid-1990s, all the rules of transactions in public housing might be said to be aimed at fulfilling the PAP government's social democratic promise to improve the living conditions of the citizens of the new island-nation through affordable housing.

However, the idea of public housing as asset and its materialization as profit was already embedded in the 'buy/sell/repurchase' cycle. Resale flats are generally in more advantages locations, such as closer to the city area, with amenities and services already in place. This is in contrast to the longer travel distances and lack of facilities associated with many of the new housing estates. In addition, buying a resale flat avoids the years of queuing for a new HDB flat. Consequently, resale flats fetch higher prices than new flats and find ready buyers. The incentive to sell/repurchase increases as the gap between the prices of the existing resale flat and new flat widens; 'the correlation between volume and the resale price–new price differential is 93%' (Edelstein & Lum, 2003, p. 348). This has created a very active 'resale' market; for example, more than 8000 units of resale flats were transacted in eight consecutive quarters till the end of 2009.[2] Of course those who do not sell their flats have also made gains as their flats have accordingly increased in property value.

Nationally, the demand of regular monthly mortgage payment quickened and intensifies the proletarianization of Singaporeans in the industrial capitalist economy. Homeownership has educated the same Singaporeans into the bourgeoisie pecuniary interest and practices in property ownership. Conceptually, it has to be argued that affordable public housing was thus transformed by the resale mechanism into a valued asset, from consumption good to investment good, quite independently of how the initial purchase of the flat is financed and separate from the national social security system.

Empirically, however, ownership of public housing in Singapore was linked to the social security system from the outset because purchases are made through pre-retirement withdrawal from the CPF. The British colonial government did not establish a pension scheme in Singapore. In lieu, the first locally elected legislature instituted the CPF as a mandatory retirement savings fund. All wage earners must save a portion of the monthly wage with the CPF, with equal contributions from the employers. Beginning modestly with a 3 per cent contribution from both parties, the rate rose steadily to a peak of 25 per cent from each party in the early 1980s, keeping pace with the growing economy and rising income. The equal proportion rule was broken by the mid 1980s recession; employer's contribution was reduced as a means of cutting labor cost. Since then, contribution rates have fluctuated according to the general health of the national economy, with the employer's contribution progressively reduced for workers above 50 years of age to a marginal percentage for those above 60.[3] As the CPF is an individual's saving account, there is no collectivization and redistribution of national savings, regardless of whether one is able to fund one's own retirement years.

Pre-retirement withdrawal of the CPF has been highly instrumental in Singapore's national public housing program. Indeed, it is no exaggeration to say that every household tries to withdraw up to the maximum sum permitted out of its CPF account to pay for housing, not only to purchase the first flat but also to finance subsequent upgrading to a bigger flat. Two consequences followed: first is a tendency for over consumption of housing services and, second, due to maximizing pre-retirement withdrawal there is a depletion of CPF fund available for eventual retirement and old age (Asher, 1991). In the early 1980s, a comprehensive review of the CPF scheme by a team of economists from the National University of Singapore explicitly raised these related questions (Singapore Economic Review, 1986, pp. 51–55). However, the review team also considered the option of liquidating public housing ownership by an individual to fund retirement years. This raised three significant reservations. First, that public housing flats like all real estate are subjected to market fluctuations and this will affect the quantum of retirement funds at time of liquidation. Second, as the quality of buildings deteriorates over time there is a progressive decline in value; furthermore, as HDB flats are leasehold properties, the shortening lease also causes loss in value. Third, given the declining birthrate that was already observable in the late 1970s, due to the government's stringent 'stop at two' population policy, over the long term there might not be a ready market of new families to buy resale flats; indeed, at some point there might be a future situation of surplus flats.

Until the late 2000s, the government appeared to have managed the three issues raised by the economic review team. First, to prevent the declining values of old estates, it earmarked $15 billion for upgrading the quality of the housing units and the environment of older estates (Chua, 2003). Second, demand for resale flats has been kept high, as have their prices, by restrictively permitting immigrants who have acquired permanent resident status to purchase resale flats only. Finally, the HDB is not entirely without control over price fluctuations in the resale market. In the mid-1990s, it introduced a formula for pricing of new flats. They were to be sold at 20 per cent market discount from the prevailing resale price of equivalent flats. This formula arguably created a vicious cycle of price inflation in public housing flats. Rising resale prices causes prices for new flats to rise, which in turn caused resale prices to increase. Indeed, public housing homeowners generally believe that the value of their flats will always be supported by the government, as they understand the importance of public housing ownership to its legitimacy to rule. Empirically, after every short recession, including the 1997 Asian financial crisis, the peak values of resale flats reached have always exceeded the pre-recession peaks.

As to the issue of retirement adequacy, the government was at best quietly concerned. It did not begin to promote the idea of 'asset based social security' until the late 1990s, when income inequalities had widened significantly, reaching a Gini coefficient of 0.47 in 2010s. In this context, Prime Minister, Lee Hsien Loong observed: 'The house in Singapore is also a major way for us to level up the less successful and to give them a valuable asset and a retirement nest egg' (*Straits Times*, 21 October 2011). Increased income inequality and the advance of an aging society have increased the urgency of retirement funding, prompting the government to introduce a set of policies to alleviate the concern.

Monetizing Public Housing Asset

Since a public housing flat is property, it can be liquidated into cash, simply sell the flat. Since the price of HDB resale flats has consistently gone up in the past 10 years (Table 1), capital gains will be made. This seems to be a simple option for aging individuals who can move in with their married children, a solution the government enthusiastically encourages. However, it appears too radical for most public housing homeowners. Three 'gentler' mechanisms have been introduced to enable the aged to 'age-in-place', i.e. without having to move out of their residences in retirement. First, a reverse mortgage scheme was introduced by a private bank and an insurance company, in which the leaseholder sells his/her flat to a bank or other financial institutions, for a lump sum which is converted into a monthly draw down until the length of the mortgage or death. This scheme, however, was unpopular and has been withdrawn. Second, there is a 'lease-buy-back' scheme introduced by the HDB. Upon retirement, a leaseholder can sell back all but 30 years of the remaining lease to the HDB for a monthly income, without having to vacate the flat. As the financial burden of this scheme is very high for the HDB, it is restricted to households with low income and those who live in the smallest of the sale flats. Third,

Table 1. Price range of new flats in Seng Kang new towns

Year	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	July 2011
Three-room	89 000–110 000	96 000–117 000	94 000–148 000	100 000–143 000	120 000–162 000	116 000–171 000	157 000–189 000
Four-room	129 000–202 000	132 000–205 000	132 000–210 000	145 000–243 000	190 000–275 000	203 000–271 000	246 000–337 000
Five-room	171 000–259 000	159 000–231 000	168 000–227 000	–	290 000–367 000	281 000–352 000	298 000–421 000

Source: HDB annual reports, various years. http://www.hdb.gov.sg/fi10/fi10320p.nsf/w/AboutUsAnnualReports?OpenDocument#

regulations are relaxed for homeowners to sublet the entire flat. For retirees, who have alternative housing, such as living with married children, this provides a life stream of income and also enables him/her to bequeath the flat to his children, which appears to remain an important value among Chinese parents. With all these alternative ways for retirees to monetize their public housing flat as asset, the issue of retirement funding for flat owners may be said to be solved for the immediate and future term. Problems remain, of course, for the aged who do not own public housing. Nevertheless, it would appear that an asset-based social security system with housing as the central asset is sufficiently resilient to manage the retirement needs of homeowners. Of greater difficulties to manage are the intertwined issues of adequate supply, sustained demand and the affordability of the public housing flats in changing social and economic conditions.

Excess Supply

Until the early 2000s, the HDB built ahead of actual demand, on the basis of an estimate, in order to maintain a relatively short waiting queue for would-be homeowners. Small surplus of flats at any one time was a common practice. However, in 2002, the HDB found itself laden with 17 500 completed unsold flats (Lim, 2002a), with no prospect of fast sale. Demand for new flats from both new homeowners and resale-upgraders, which until then stood at 15 000–20 000 a year, seemed to have evaporated completely. This was 'unprecedented in HDB's 42-year old history', when the problem had always that of 'supply of new flats could not keep up with the demand' (Lim, 2002b).

The sharp fall in demand was largely a consequence of prolonged economic recession. The 1997 Asian Financial Crisis recession was followed by the recession caused by 2002–2003 severe acute respiratory system epidemic, before full recovery from the first. This disrupted one basic and necessary condition for the smooth functioning of the system, namely, the consistent expansion of employment that enables the uptake of public housing flats. Recession translated into increased unemployment for workers and economic uncertainties for their households. A spiral of consequences in the housing market followed. New entrants to the housing market held off their purchases of flats, and among the new entrants who bought, the preference was to purchase a resale flat as the price difference between it and a new flat had narrowed. And homeowners who were looking to upgrade their accommodation by buying new and larger flats from the HDB deferred the upgrading on account of both domestic financial uncertainties and the drying up of buyers for their resale flat. The small volume of transactions that took place showed a preference for smaller three-room flats, with two-bedroom plus sitting room, which the HDB had stopped producing in 1985 (Kaur, 2004), in favor of the larger four- and five-room flats. The preference for smaller flats obviously reflected a conservative attitude toward an uncertain financial future in which the ability of meeting the monthly mortgage of larger accommodation was in doubt.

The cycle of buy/sell/repurchase of public housing flats slowed down, leaving the HDB with a large backlog of completed but unsold flats. Yet, the HDB was constrained in its ability to cut the prices of new flat prices to reduce its surplus holdings. Doing so would unavoidably bring down the prices of resale flats, hurting the assets of the existing homeowners. Indeed, the decline in resale prices was already creating 'negative equity' for existing homeowners who had brought their flats at the peak of the previous price cycle. The worst-case scenario would be a complete drying up of the resale market due HDB dumping new flats. This would potentially irreparably damage the asset-based social security system in which ownership of public housing is the central and critical asset.

Ironically, as then Minister of State for National Development correctly pointed out, the ready availability of new flats and the depressed prices of resale flats constituted 'a time of "good news" for people who need a roof over their heads' (quoted in Lim, 2002a). The prevailing condition gave would-be homeowners more choices and shortening of waiting time for their chosen flats. Interestingly, there were demands coming from those who were for different reasons ineligible to purchase new flats. These included owners of private properties who had sold their homes due to retrenchment, households whose monthly income exceeded the income eligibility limit (then, $8000), unmarried mothers and singles below the eligibility age. These excluded groups were clamoring for the government to relax the eligibility criteria in the face of supply surplus. Fearing that once removed, it would be difficult, if not impossible, to re-impose the restrictions, the government did not succumb to the call for changes in eligibility criteria.

The HDB, knowing that it is not powerless in moving the completed flats and certain that the surplus flats were a temporary phenomenon, decided to absorb the holding costs of the surplus flats and made changes to its supply strategy. It radically reduced new housing production. Construction of the largest, the five-room, flat was suspended, as by early 2004 10 000 such flats remained unsold (Kaur, 2004).[4] On the other hand, responding to demand it resumed construction of three-room flats, after close to two decades of stopping production. This was likely to remain a long-term necessity as, like all developed economies, the low income groups for whom these smaller more substantially subsidized flats are reserved—households with monthly income below $3000—has been either stagnant or in real decline for two decades and unlikely to improve much in the near future (Table 2). More fundamentally, the HDB switched from building in advance of demand to

Table 2. Average monthly household income from work including employer CPF contribution among resident employed households by type of dwelling, 2000–2012.

Year	HDB one- and two-room ($)	HDB three-room ($)	HDB four-room ($)	HDB five-room and executive flat ($)	Condominiums and other apartments ($)	Landed properties ($)
2000	1919	3701	4675	6900	12 271	15 273
2001	1714	3887	4942	7342	13 444	15 266
2002	1742	3546	4695	7182	12 325	14 688
2003	1592	3581	4655	7013	12 182	14 712
2004	1649	3479	4592	6767	12 149	15 791
2005	1686	3650	4872	7295	12 711	15 561
2006	1667	3639	4981	7384	13 011	16 640
2007	1558	3957	5395	7923	14 494	18 786
2008	1783	4541	6069	9022	16 086	20 388
2009	1788	4516	6135	8811	15 730	19 566
2010	1879	4800	6483	9186	16 315	20 931
2011	2105	5202	7220	10 160	18 025	24 039
2012	2233	5512	7626	10 735	19 026	25 419

Note: Resident employed households refer to households headed by Singapore Citizens or permanent residents and with at least one working person.
Source: Department of Statistics Singapore (2012, p. 32).

build-to-order, adopting the private sector practice in which construction only begins when at least 70 per cent of the flats are presold, thus erasing the possibility of oversupply.

As expected, with the supply cut-off, the surplus was mopped up by late 2005. Prices of resale flats began to rise again and supply of new flats were not forthcoming. Prices began to take off and climbed steeply from 2007 until 2011, achieving peak values that surpassed previous peaks. By 2010, the public housing system began to face a different systemically generated problem of hyper inflation, making housing increasingly unaffordable to lower middle class and working class households, calling into question the government's promise of affordability to all citizens.

Excess of Demand

In the midst of global recession in 2008, FDI were flowing into Singapore because of its very stable domestic social, political and economic condition. To capitalize on these flows, the government has had to import labor at a rapid rate to fill the employment gap created by the investments. From 2006 to 2008, the total FDI in Singapore grew from $370 to $496 billion.[5] Correspondingly, the foreign migrant population in Singapore increased from 9.7 to 19 per cent, ranging from CEOs of multinationals to unskilled workers and domestic helpers.[6] The population increased from below 4 million in 2005 to approximately 5.18 million in 2011, with the heaviest inflow in the last three of the seven years. An estimate of 3.8 million is Singapore residents, thus making one in four persons on the island a foreigner.[7] The government defended its aggressive immigration policy because 'for every one foreign worker employed by IM Flash [wafer lab owner] Singapore, 1.5 local jobs were created' (PM Lee Hsien Loong quoted in Chua, 2011b). Minister of Finance, Tharman Shanmugaratnam, stated that the increased foreign supply contributed in turn to attracting more inflow of foreign investments, leading to higher economic growth and raised the wages of lower income workers by 16 per cent between 2006 and 2008 (Chan, 2010). Faced with a declining population, both in terms of aging and low birthrates, Singaporeans generally accept that new immigrants are necessary to maintain and grow Singapore's economy. However, the speed and number of immigrant inflows proved to be contentious issues as they affect the financial futures of the local-born Singaporeans.

The massive inflow of immigrants inevitably stresses all public services, from school enrollment to transport, healthcare facilities and, of course, housing. There was an immediate severe shortage of housing. By the end of 2011, there were close to a million public housing units with an average household size of 3.5. Using this as base, there were 1.6 million additional people to be housed. The shortage is partially reflected and accommodated in an increase of household size to 4.4 by mid 2013 (*Straits Times*, 11 May 2013). Demand for public housing among citizens became acute by the end of the 2000s. Unfortunately, this was met with a shortage of supply due to the years of under production since 2002, when the HDB cleared an oversupply of more the 17 000 flats.

Among the new arrivals, new citizens and permanent residents are entitled to purchase resale HDB flats, increasing competition and pushing up resale prices. The competition was exacerbated by the, mentioned above, relaxation of sublet regulations. As a result of the relaxation, more than 40 000 units of public housing flats, and an approximately equal number of individual rooms, were sublet by end of 2012. These sublets were necessary to house the internationally mobile, young professionals who are employed on local terms, without the perks of high-end, private condominiums enjoyed by expatriate employees of multinational companies. The subletting of entire flat takes them out of the resale market, causing a shrinking of supply and correspondingly raising prices of resale flats. This affects their affordability to potential Singaporean buyers, evident in the pricing index of the resale market, which saw a steady increase between 2006 and the second quarter of 2011(see Table 1).

Prices for new flats also rose in tandem due to the 20 per cent market discount pricing formula. According to the HDB, in 2006, a new four-room flat located in new towns like Seng Kang would cost approximately between \$132 000 to \$210 000. In the third quarter of 2011, a new four-room flat in the same location would cost between \$246 000 and \$337 000. This was an average 70 per cent increase in prices, over the course of five years, against an average annual inflation rate of no more than 4 per cent during the same period. The issue of affordability was captured in one very rough and ready estimate by an ordinary citizen, 'In 1981, I earned \$800 plus as a fresh graduate. At that time, one of my colleagues bought a five-room HDB flat for \$35 000. Now, a graduates' pay has risen about four times but HDB flat prices have risen more than 11 times' (Lee, C., 2011). The mismatch of housing price increase relative to income increase has caused widespread anxiety among the citizens, especially those who currently do not own a flat and for future generations.

Dissatisfaction with the government translated into disaffection of local-born against the immigrants, generating xenophobic excesses, especially on the Internet, among Singaporeans. This is unfortunate because as a settler nation of descendants of immigrants, Singaporeans have always been comfortable with living with immigrants. In recent years, they were obviously overwhelmed by the massive arrival of new immigrants that severely disrupted their daily lives. Consequently, there has been increasing demand for the government to act decisively to bring down the immigration numbers. Opposition political parties have called for changes to the 'market discount' pricing mechanism to bring down prices of new flats. For example, this could involve the pricing the new flats at 'cost plus' level, i.e. construction cost plus other costs incurred[8] or pricing the new flats against median income of the population.[9] However, as in early 2000, the government is constrained in bringing down prices of new flats as it will cause the prices of exiting flats to fall in tandem, causing unhappiness among the existing homeowners, the majority of the population. The political cost would be too high. Instead, it has tried to maintain affordability by providing very substantial 'additional housing grants' (up to \$40 000 for the lowest income households with monthly income below \$1500) to first time homeowners to offset the rising costs and by recalibrating and extending the mortgage period from what used to be 20–25 years to 30 years. Considering the fact that homeowners generally buy their flats in their mid 30s, the 30 year mortgage will take them until the current statutory retirement age of 62 to pay it off; homeownership is indeed for life!

The minor changes did not pacify the electorate. Housing affordability became a critical issue in the April 2011 general election. Anger with immigration policy and affordability of housing was most emphatically expressed on the election-day. On 7 May, the electorate delivered its message. The PAP received 60 per cent of the popular votes cast and lost seven seats, the lowest it has received and the greatest it has lost, since 1959. Among the defeated was a slate of five candidates in a 'greater representative constituency', including two cabinet ministers, one minister of state, an incumbent member of parliament and a first-time candidate, headed by one of the brightest and most popular cabinet ministers, George Yeo. (A greater representative constituency is made up of three to five constituencies. Each contesting party must field a slate of candidates for all the constituencies. The team that wins the largest aggregate votes in all the constituencies wins all the seats.) For a party that is in the habit of winning around 75 per cent of the popular vote cast and losing no more than two seats in every general election since 1968, this election result was a political 'crisis'.

The election result is now considered a watershed by Singaporeans. It prompted the government to undertake immediately a series of more substantive changes in immigration and housing policies, among others. The annual growth of immigrant arrivals has been radically reduced from a high of 19 per cent in 2008 to 4.1 per cent in 2010.[10] In housing, the most immediate and obvious effect was to increase the supply of housing units; the HDB reverted to construction in anticipation of demand, alongside the build-to-order scheme. New homeownership rules for permanent residents have been imposed; to be eligible for public housing, permanent residents are required to dispose of any properties they might hold outside the country, including those in their countries of origin. This is an extremely harsh rule that borders on irrationality but it certainly reduces housing demand.[11] To reduce speculation, the down payment for second and third property purchases has been increased from 10 to 30 per cent, reducing radically the mortgage loans for such purchases. First-time buyers are counseled publicly to delay their purchase with the government promising to increase the supply of flats and also, to release more land for condominium construction by private developers; both aim at bringing down prices. Other minor measures include the requirement that existing homeowners must first sell their flat before being eligible to apply for a new flat. This will place the family in accommodation limbo while waiting with great uncertainty when it will be allocated the new flat. All the measures to 'cool' the market have as one of the consequences the discouraging of existing homeowners from upgrading their accommodation. Consequently, the supply of resale flats runs short and resale prices continue to creep up because demands for resale flats coming from, among others, new permanent residents and new citizens continue unabated (*Straits Times*, 28 October 2011). Then, in 2011, the Minister of National Development quietly delinked the selling prices of built-to-order flats from the resale market, announcing it only after the regulation had been in place for several months. Finally, after many rounds of 'cooling' regulations, increases in the prices of public housing have finally slowed down in mid 2013.

Managing the Future

Housing as asset for retirement, fluctuations of supply and demand, and the impact of both on affordability of homeownership may be said to be 'normal' and permanent problems of any housing economy. The difference in the Singapore case is that rather than the market, it is the government as the monopoly provider which has actively encouraged investment in public housing homeownership and it is the government which is expected to solve these problems. Singapore citizens have come to see public housing ownership as a rightful entitlement, in spite of the government's insistence that it is a 'privilege', of citizenship. Regardless of rhetoric, the ruling government's legitimacy to rule has become highly dependent on its ability to deliver affordable housing, as the 2011 general election demonstrated. The intertwined issues of supply, demand and affordability are contingent upon changing economic conditions that are difficult to anticipate accurately in advance.

To take a favorite metaphor of the government, the management of these problems is a marathon race without end. Looking toward the immediate to mid-term future, however, it is possible to sketch out the social and economic environment and glimpse some of the problems that may arise.

The demographic trend is clear. The total fertility rate has been below replacement level of 2.1 since 1977 and the marriage rate has also been declining. Like most East Asian societies, Singapore is also entering the aging society. Without intervention, demand for housing will be progressively lowered and eventually result in a surplus. To illustrate: assuming two one-child families, both homeowners. When the two children marry, they buy their own flat. The flats left behind by the passing of both sets of parents, would be surplus. Alternatively, if the married children move in with one of the in-laws, no new flat would be necessary as one would still be surplus. The HDB had been cognizant and concerned about a possible surplus since early 1990s, when it initiated a slow down in construction and yet more than 17 000 that were left unsold in the early 2000s. Reduction of construction would have persisted had it not been for the massive influx of immigrants in the second half of the 2000s to make up for the shortfall of local born population, to maintain the economy. This deferred but not erased the long-term possibility of a public housing surplus because the future immigration rate will slow down considerably due to the limitation of land and popular political resistance against excessively dense living condition on the island-nation.

The conjoined influx of migrants and the scarcity of supply of housing have created a housing shortage and rapidly rising housing prices, affecting affordability to new entrants to the housing market. While the scarcity of supply can be alleviated by the rapid expansion of construction, as the HDB is currently doing, unabated price increases threaten the government's promise of affordability of public housing to 90 per cent of the population, the fulfillment of which is critical to the ruling party's hold on parliamentary power. The affordability issue is exacerbated by the maturing of Singapore into a first world economy. Until recently, the government has been dependent on high-economic growth to trickle down to lift the lower income strata. However, annual rates of economic growth regularly reaching double digit are now a thing of the past. The future is one of slow annual growth of 3–5 per cent or less, especially with restraint on the importation of migrant labor to avoid further erosion of popular political support (Leong, 2011). Also, like all developed capitalist economies, the general trend has been a stagnation of middle class incomes and a decline in real incomes in the lowest strata. Although in Singapore there has been modest growth across middle and lower income strata in the last five years, the rates of increase could not keep up with those of the high-income strata, resulting in increasing income inequality. More importantly, the low rate of increase in income for at least 60 per cent of the population has been unable to keep up with the inflationary rise of new and resale public housing prices.

As mentioned above, the government has increased subsidies and extended the length of mortgage for first-time homeowners. It has also delinked the new build-to-order flats from the 20 per cent resale market discount peg; how the new build-to-order flats are priced is unclear but they are lower than prices of equivalent resale flats. These measures will not radically reduce house prices, which will still continue to trend upwards. Indeed, the Minister of National Development had to backtrack from a statement that he would like to bring new flats prices down to four times the annual income of the homeowner from their current five-and-a-half times, an effective 30 per cent reduction (*Straits Times*, 17 March

2013). Doing so would be effectively a radical write-down of values of all real estate properties in the country and the economic and political fallout would be too much to bear for the government. Going forward, systemic ways of recalibrating the pricing of new subsidized flats for first-time homeowners, without simultaneously radically affecting the values of existing public housing flats, will have to be found. Several suggestions have been made including introducing the option for a 60-year lease. Assuming a homeowner buys a flat at age 30, the 60-year lease would be sufficient for a life time. Proportionately, the price of a 60-year lease would be slightly more than two-thirds of the 99-year lease. This strategy would bring down the buy-in cost for those who opt for it. It would not disrupt the values of existing 99-year leasehold flats, which remains an option for those who prefer it. The government is aware of this suggestion but has been so far resistant to the idea for reasons of its own. There is no doubt that it is working on some possible solutions.

Conclusion

Singapore's national public housing program is one of the few success stories in universal provision of housing around the world. Parts of the program have been adopted by other nations. For example, the provident fund system has been adopted in a limited manner by China, and the urban planning strategies have been packaged and exported by Singapore architectural and planning consultancies to other developing countries throughout the world (Chua, 2011a). Success has been inextricably tied to sustained economic growth which persistently drives up house prices, making public housing ownership a long-term investment good which can be monetized to support retirement, constituting an asset-based social security system in lieu of a nationalized pension scheme. To support the property values of the homeowners, prices of new subsidized flats have been pegged to the values of the resale values of existing flats. This has created a vicious cycle of price inflation with the prices of both categories of flats rising in tandem. Obviously, the need to enhance the asset value of homeowners over the long term has severely constrained the government's ability to ensure affordability of housing to every citizen. The government's dilemma is exacerbated by the economic condition in which income levels for the majority of the population, from the middle to the lower strata, are unlikely to improve significantly in the future to keep up with the inflationary increases in public housing prices. The affordability of public housing to new would-be homeowners is a problem that is already with the Singapore government and a systemic solution is not yet in sight, let alone found.

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Notes

[1] An individual's CPF is unevenly apportioned into three different accounts: ordinary, medical and special accounts. Only the ordinary account, which constitutes the largest portion, can be used for housing. Housing consumption is about 60 per cent of annual pre-retirement withdrawal from CPF.

[2] http://www.asiaone.com/Business/My+Money/Property/Story/A1Story20110304-266515.html (accessed 13 October 2011).

[3] For details of the CPF system, see Low & Aw (1997). The rate of employer's contribution to older employees is currently under review as the compulsory retirement age is increased from 55 to 62 and beyond.

[4] In the HDB room typology, kitchen is standard provision and therefore not included in the room-type. A three-room flat is one with sitting room and two bedrooms, a four-room flat has sitting room and three bedrooms and a five-room flat has sitting room, dinning room and three bedrooms.

[5] From Singapore Statistics 'Foreign Direct Investments in Singapore by Country/Region, 2005–2009'. http://www.singstat.gov.sg/stats/themes/economy/biz/foreigninvestment.pdf (accessed 3 November 2011).

[6] Monthly Digest of Statistics Singapore October 2011, p. 16. http://www.singstat.gov.sg/pubn/reference/mdsoct11.pdf (accessed 31 October 2011).

[7] Population data extracted from Singapore Statistics official website. http://www.singstat.gov.sg/stats/latestdata.html#12 (accessed 31 October 2011).

[8] http://www.scribd.com/doc/53562332/National-Solidarity-Party-Manifesto-2011 (accessed 28 October 2011).

[9] The Workers Party Manifesto 2011, pp. 38–39. http://www.scribd.com/doc/52644250/Workers-Party-Manifesto-2011 (accessed 28 October 2011).

[10] Refer to endnote 2.

[11] Several colleagues at the university were caught with this new rule and have decided not to purchase a public housing flat and chose to pay high rents for accommodation.

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