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**Housing Market in Singapore under Changing Economic Conditions**

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***Abstract***

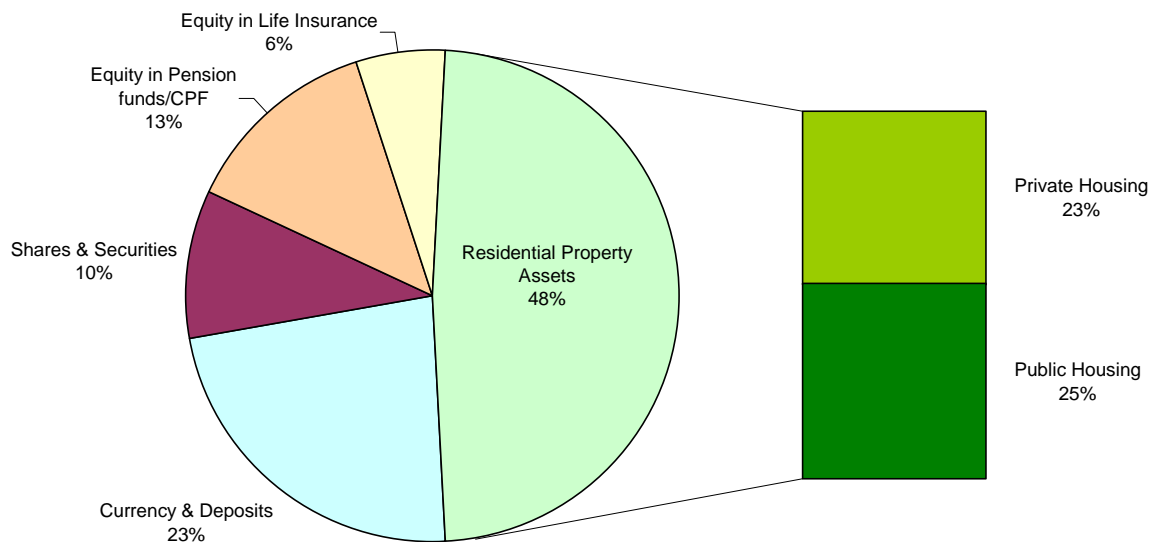
The Singapore residential property market has witnessed significant changes since the Asian financial crisis in 1997. Reflecting the changes in the economy, the market has endured ups and downs over the last six years but more importantly, some of these changes would have more permanent and longer term effects. This paper examines the main causes of these fundamental changes and how they would impact on the structure and performance of the public and private sector residential market in Singapore. Specifically, it highlights the impact of these changes on the housing market in terms of the affordability and related financing issues. The paper concludes with a glimpse of the future challenges to the housing market in Singapore.

*Key words: Public and private housing, economic changes, policy implications and impact*

## Introduction

In a country where there are more citizens who own their own homes than shares in a listed company, housing is undoubtedly an emotive and perennial hot topic in Singapore. Figure 1 shows the distribution of household wealth, with residential property assets comprising nearly half of the total household wealth (Department of Statistics, 2003). The desire to own property could be attributed to several factors. First, the success of the home ownership scheme launched by the government; second, the dual role of housing for shelter as well as for investment; and third, the Asian culture of passing on inheritances in the form of real and other assets to subsequent generations. Given this insatiable demand and a limited land area of about 650 sq km, it is no wonder that Singaporeans see housing as a top priority in their lives.

**Figure 1 Household Wealth (2001)**



Source: Singapore Department of Statistics

Part of this desire or chase was also fuelled by the sustained boom in the residential property market in the 1990s. When property prices were rising by 10% per month, many treated residential property not only as a basic need but more as a form of sure gain investment. However, the boom was brought to an abrupt end by the anti-speculative measures introduced in 1996 followed by the Asian financial crisis in 1997. Since then,

the housing market in Singapore, liked those of Hong Kong, Bangkok and Kuala Lumpur, had taken a dive and have yet to recover to the pre-1997 level.

Indeed, apart from the property market, the economy in Singapore has gone through tumultuous changes over the last few years. Just when the measures to counter the financial crisis were helping the economy to recover by 2000, subsequent world events and the declining US economy led to negative growth and rising unemployment. The economic situation further suffered with the onslaught of the SARS epidemic. The rising economic powers of China and India have also created stiff competition, particularly in the manufacturing sector. Most significantly, some of these economic changes as well as developments around the world, such as terrorism, would have fundamental and long term implications.

The objective of this paper is to examine the housing market in Singapore under changing economic conditions. The focus will be primarily on the period since the 1997 Asian financial crisis. The paper is structured as follows. A summary introduction on the housing market in Singapore is given in the following section. An examination of past policies and their impact on the housing market as well as recent policy changes as a result of changing economic climate is then provided. This is followed by an analytical discussion on the impact of these economic and policy changes on the housing market. The paper ends with a prognosis of some future trends in the housing market in Singapore.

### **Residential Property Market in Singapore**

The total housing stock in Singapore as at the third quarter of 2003 is given in Table 1. From the numbers, a few macro pictures can be drawn. First, the private/public housing ratio is about 20:80. Public housing refers to flats built by the Housing and Development Board (HDB), of which almost 94% have been sold to Singapore citizens (at subsidized prices) and permanent residents on 99-year leases (HDB, 2003). On the other hand,

private housing refers to houses and apartments developed by private sector developers on various types of land tenure from 99-year leasehold to freehold. The proportion of private sector housing units (currently almost 20%) has gone up in recent years and has also meant that the proportion of the population living in public housing has come down slightly from the 86% in 2000. In the long term, it is envisioned that the proportion of the population living in public and private housing should reach 70:30. This reflects the government's efforts to cater to the aspirations of Singaporeans to own private housing.

**Table 1: Housing Stock in Singapore as at 3<sup>rd</sup> Quarter 2003**

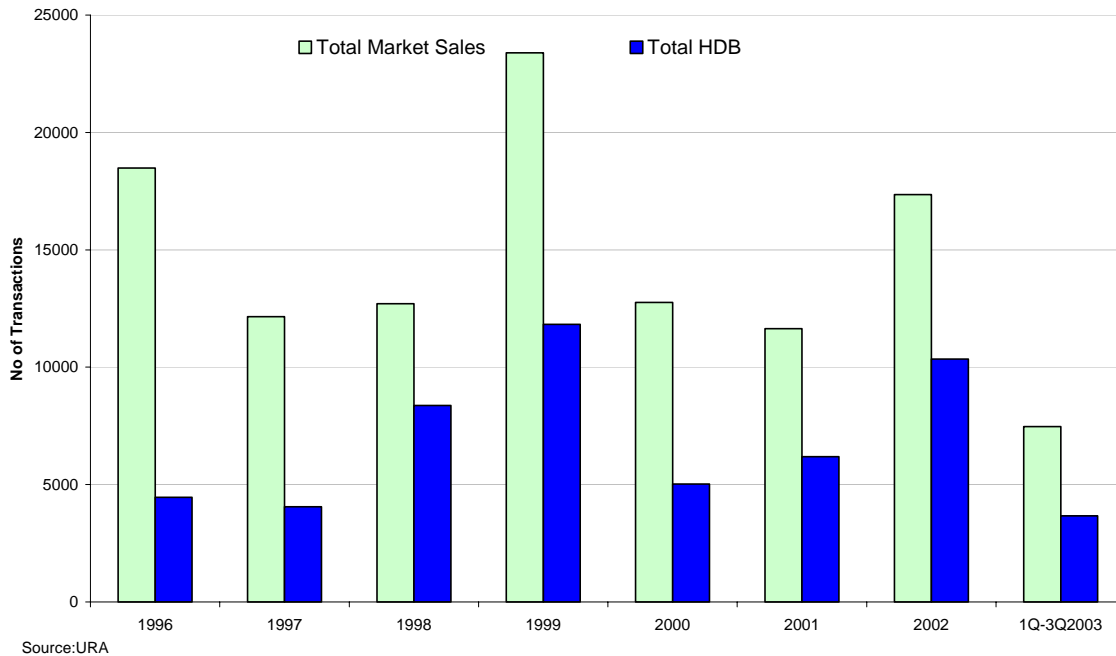
<b>Public Sector (HDB)</b>		<b>Private Sector</b>	
1-room	20,457	Detached Houses	9,901
2-room	30,567	Semi-det Houses	20,592
3-room	229,226	Terrace Houses	36,494
4-room	319,428	Apartments	57,831
5-room & above	269,096	Condominiums	85,005
Total	868,774	Total	209,823
Grand Total	1,078,597		

Source: URA, HDB

Second, the proportion of landed housing is only 6.2%, with the rest being high-rise. This is to be expected, given the small land area and the number of competing uses, high density and high rise living is the only solution. Third, the housing market in Singapore can be described as having a pyramid structure. At the base of the pyramid are the 1-4 room HDB flats, which form the bulk of the housing units. The bigger HDB flats and private apartments form the middle portion of the pyramid, with landed housing on the top. This structure reflects the continuum of the supply and demand chains within the housing market as well as the aspirations of homeowners to move up the pyramid. In the Sample Household Survey conducted by the HDB in 1998, the percentage of households who indicated their intention to upgrade had increased from 28.9% in 1987 to 36.7% in 1993 and 51.6% in 1998 (HDB, 2000a). With rising incomes and growing affluence,

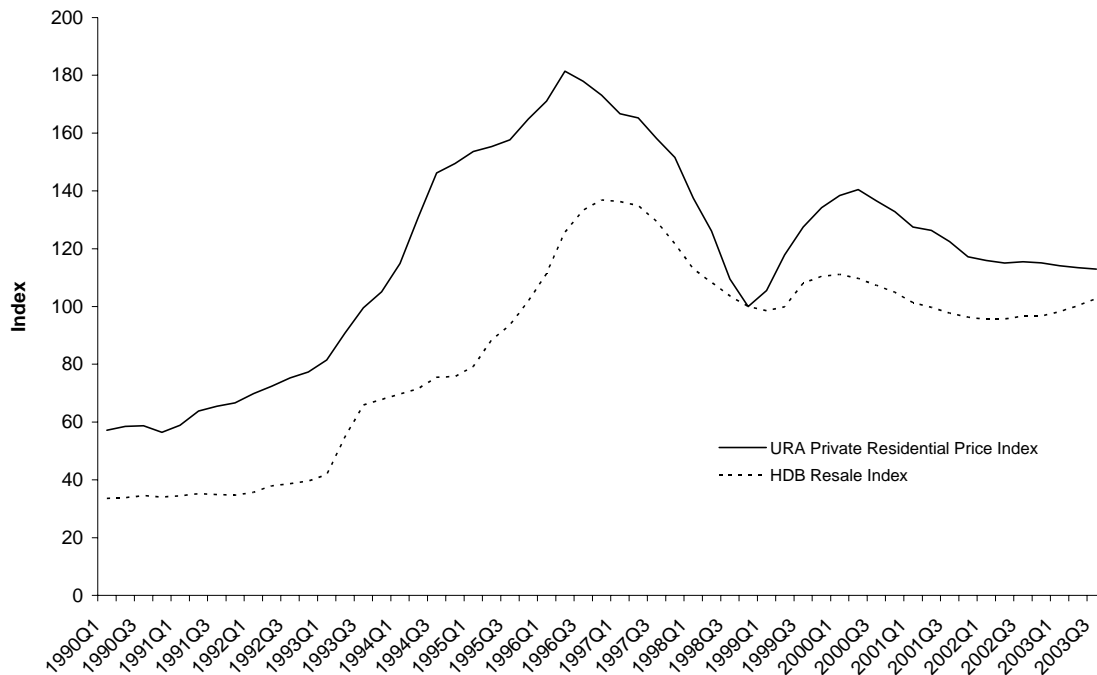
housing aspirations are pegged at higher levels. Indeed, a substantial portion of the private housing market new developments are been bought by HDB owners, as can be seen in Figure 2.

**Figure 2 The Feeder Market-HDB Households**



The upgrading from public to private housing also confirms the connectivity between the public and private sectors of the housing market. As can be seen in Figure 3, both the private and public house price indices have moved in tandem over the last twelve years. Between the public HDB flats and private housing, the continuum is further enhanced with the introduction of the Executive Condominium scheme in 1995. Executive condominiums resemble private housing in its form, except that they have some restrictions attached to the purchase, such as monthly household income and not being able to sell within five years of the purchase. The trade-off for such restrictions is the lower prices compared to the low-end private condominiums. The difference in prices when the first project was launched in 1996 was about 20 to 30%. However, since then, with the general decline in residential property prices, the gap has virtually disappeared.

Figure 3 House Price Indices in Singapore



Source: HDR, IIRA

To further understand the housing market in Singapore, a brief background of both public and private housing is useful. The HDB was established in 1960 following the newly elected government in 1959, whose main concerns were housing, education and employment. The state of the nation then was such that permanent housing was simply beyond the reach of the majority and some form of low cost housing was urgently needed. In the preceding years, from 1927 to 1959, the Singapore Improvement Trust (SIT) set up by the British Government in Singapore to provide basic housing proved inadequate. To overcome the severe housing shortage, the HDB embarked upon an ambitious building programme to cater to large squatter communities living in slum conditions. Once the immediate need was fulfilled, the government's focus turned to tuning the housing policy as part of a general nation building programme. Home ownership was encouraged as this would give citizens a stake in the nation and therefore leads them to sink their roots and build their homes. Flats were sold to citizens at subsidized prices for a 99-year lease. By the 1970s, the problem of housing shortage was gradually reduced as HDB sped up on its delivery capacity. The 1980s witnessed a shift from basic shelter to the building of communities, with better facilities and amenities,

more variety in type and design and the establishment of new towns and housing estates. With more than 90% of HDB flat residents owning their own homes, the 1990s was a period of estate renewal, upgrading and the flourishing of the secondary market. In tandem with the economic boom, HDB flat owners were upgrading to bigger flats or to private housing.

Private housing on the other hand existed long before 1960. In the early years of independence, private housing comprised mainly landed properties and low rise apartments in established residential areas in the middle and eastern parts of Singapore. The concept of condominium housing was first introduced in the early 1970s. The introduction of the Land Titles (Strata) Act in 1968, facilitated the development and sale of housing units in multi-unit developments. The expansion of the private housing market was further fuelled from the 1970s when the government, through the URA, made available state land for sale on 99-year leaseholds. With limited land under private ownership, the Sale-of-Sites Programme under the Urban Redevelopment Authority (URA) has been instrumental in ensuring the supply of land for private housing.

### **Past Policy Changes and their Impact on Housing**

Government intervention in housing markets is inevitable; it only differs in the extent of intervention and influence. In a speech delivered at the International Housing Conference in 2000, organized in conjunction with the HDB's 40<sup>th</sup> anniversary, the Prime Minister of Singapore, Mr Goh Chok Tong, said: "Though shelter, or housing, is a basic human need, it is an expensive item to produce, especially in urban areas. For most households, housing is by far their largest expenditure, accounting for as much as a third or more of their income. And for those who own their home, it is usually their biggest asset. Thus, when the provision of housing is left purely to market forces, we can expect some segments of the population not to be adequately housed. This gives rise to many social and political problems. It affects the ability of the government to achieve desired economic and social goals. Most governments therefore intervene in the market to ensure

that their people can have decent housing.” In Singapore, given the small land area, the government needs to provide the strategic direction and manage the regulatory framework for the housing market. With the majority of the population living in HDB flats, public housing policy is also an important means by which the government hopes to influence social behaviour (Phang, 1992). The institution of racial quotas to maintain a balanced ethnic composition in HDB estates and the decentralization of estate management responsibilities to town councils are examples where housing policy has been used for non-economic objectives. Even in the private sector, where developers can dictate their own response to changing market conditions, the state, as the largest supplier of land in Singapore, still wields a strong influence through the government land sales programme.

Probably the most significant cornerstone of the housing policy in Singapore is the Home Ownership Scheme introduced by the HDB in 1964. Homeownership took off in 1968 after the government decided to allow purchasers to make use of their savings in the Central Provident Fund (CPF) to pay for the purchase of the HDB flat. The compulsory savings in the CPF ordinary account can be used for the 20% down payment as well as the monthly mortgage installments. With the use of the CPF savings, most families are able to pay for the flat they purchase from HDB, without suffering any reduction in their monthly disposable income. The CPF, constituted under the Central Provident Fund Act in 1955, therefore plays a fundamental role in the financing of housing as over the years, the scheme has evolved from a simple old age savings plan to a social security savings plan taking care of the members’ retirement, homeownership and healthcare needs. While old age security remains the primary objective of the Fund, this has been enlarged to include other aspects of social security as well. Each member has three accounts with the CPF, namely the Ordinary, Special and Medisave accounts. The special account can be used only for old age and special contingencies, while the ordinary account may be used for retirement, buying a home, paying for insurance coverage, education and investment. The medisave account may be used to pay hospital bills and medical insurance coverage. The rates of contribution by the employers and employees to the fund as well as the percentage of the contribution to be credited to each of the three accounts depend on the



age of the employee and his monthly wage. These rates have been adjusted over the years to tailor to economic changes.

HDB flats are also priced to ensure that they are affordable to the people. The development cost for public housing is carefully managed through optimization of land use, cost effective building design, and construction efficiency. The selling prices of HDB flats are further subsidized so that they are within the affordability of the majority of the population. In fact, the government has committed itself to ensuring that 90% of Singaporeans households can afford to own at least a 3-room flat (a two bedroom apartment of about 60 sq m) and 70% at least a 4-room flat (a three bedroom apartment of about 90 sq m) (Tay, 2000). Through cross subsidization between the various flat types, the smaller flats that cater to the lower income households are given a bigger subsidy than the larger ones. Even then, families are allowed to upgrade to a bigger flat, provided that they have met the conditions for selling the first unit as well as buying the second unit. As a result of such upgrading, the demand for new flats (from first time buyers and upgraders) increased substantially during the 1990s. New families and first time buyers were often confronted with a long queue. Unless their finances permit, buying a resale flat, i.e. from the secondary market, is usually much more costly than obtaining a new flat. To help such families who are so caught and to take the pressure off from public calls to build more and more flats, the HDB offers first time buyers of HDB resale flats a CPF housing grant. The scheme was first introduced in October 1994. The grant has been adjusted over the years to take into account changes in resale flat prices. Families buying their first HDB flat can choose to buy from the open market and are given a housing grant to facilitate their purchase (Khor and Tay, 1995).

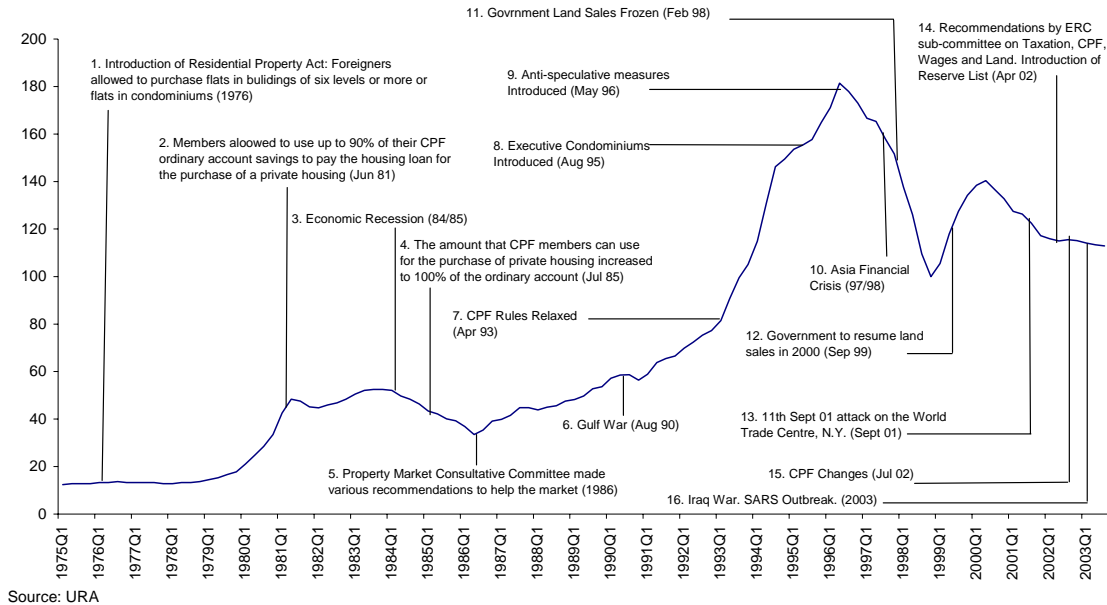
Besides the policies to encourage home ownership, HDB also provides housing loans at concessionary interest rates to the home buyers. Purchasers are able to make use of the low interest mortgage loan for the purchase of their first flat, either from HDB or from the open market. They may also make use of these loans for the purchase of a second HDB flat after they have sold their first flat and have satisfied the stipulated terms and conditions.

The combination of policies on subsidies, allocation, use of CPF and financing has shaped HDB housing for the last forty years. The high home ownership rate and the enhancement of asset values are directly attributable to the plethora of policies introduced over the years. Given the close connectivity between the public housing and private housing sectors, the implications of HDB policies have also been felt by the private housing sector. For example, the requirement of a valuation of a resale flat (HDB flats sold on the secondary market after satisfying the conditions of residency) in 1993 sparked a hefty increase in the transaction prices of HDB resale flats. This was because prior to the mandatory valuation, buyers of the resale flats were only able to borrow based on the then posted price of a similar size flat, which was much lower than the actual transacted price. With the new ruling, buyers could borrow based on 80% of the valuation or the transacted price, whichever is lower. This increase in the amount that could be borrowed translated into higher prices of HDB resale flats. With the substantial increase in both volumes of transactions as well as transacted prices, HDB owners were able to upgrade to private housing using the profits they gained. The upshot of this policy change is that private housing prices went up by about 40% per annum from 1993 to 1995.

Private housing is also similarly affected by policy changes, including the CPF. The implementation of the CPF Approved Residential Properties Scheme for private housing in 1981, for instance, helped to sustain the property boom started in the late 1970s. As part of the measures to help the country overcome the recession in 1985, the CPF rate was cut from 50% (both employer and employee) to 35% (10% from employer and 25% from employee). While this affected house buyers, the Property Market Consultative Committee recommended a number of measures to help revive the property market. On the other hand, the spate of anti-speculative measures introduced in May 1996 brought private property prices tumbling down almost overnight. These measures include the increase of the initial down payment from 10 to 20% (for which purchasers cannot use their CPF monies), capital gains from the sale of property within three years of purchase to be treated as income as well as the imposition of stamp duty on the seller (in addition to the buyer). The latter measure was subsequently repealed in November 1997 when the

property market declined. Figure 4 shows the major economic events and policy changes over the last 28 years juxtaposed on the URA's Residential Property Price Index.

**Figure 4 Major Economic Events and Policy Changes and the Singapore Private Residential Market**



### Economic and Policy Changes since 1997 and their Impact on Housing

So far, the policy changes discussed above had been set to achieve some intended goals, such as homeownership, reigniting the property market after the 1986 recession and stabilizing the booming housing market in 1996. Up to 1997, the Singapore economy was very much under its own control and development strategy. However, since the Asian financial crisis, the increasing pace of globalization and the ramifications of global events have led to changes which will have a fundamental impact on the economy.

The emergence of China and India, in particular, with their abundant natural resources and cheap labour, has intensified competition in the manufacturing and IT sectors, which has forced Singapore to review its own economic development strategy. Such global developments have led to structural changes in the economy and employment pattern. The Asian financial crisis in 1997 can therefore be described as a watershed in the

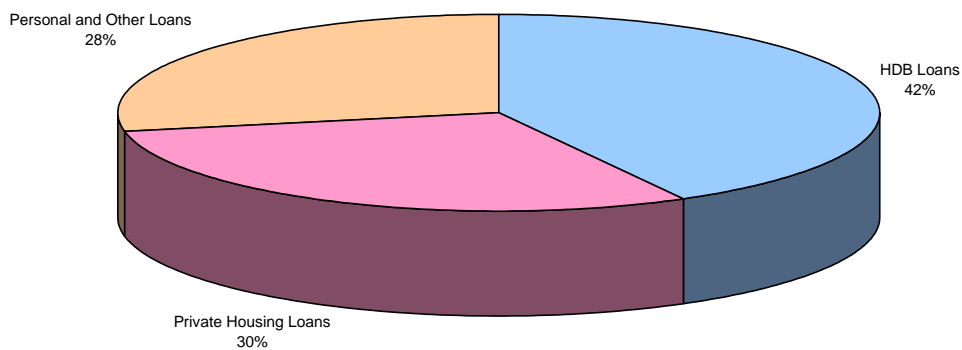
economic development of Singapore. Even without the emergence of China and India, as Singapore achieves a developed country status, it will have to compete at a different level. The emphasis is now on the knowledge economy, bringing with it a structural shift in employment, which has resulted in an unprecedented unemployment rate of more than 5% in the third quarter of 2003.

To remain competitive, one of the most significant measures announced in August 2003 is to cut the CPF rate of contribution, thereby bringing down the wage cost of employers. Although refinements and adjustments of the CPF in one direction or another are not new - for example the CPF contribution by the employer was reduced from 25 to 10% in 1985, which was then restored to 40% (20% from employer and employee) by 1994 and then reduced to 30% in 1999 (10% from employer and 20% from employee) - the latest changes to the CPF are the most drastic (The Business Times, 2003). While the government had promised to restore the CPF rate back to 40% when the cut was made in 1999, the latest adjustments are intended for the long term, taking into account the structural changes in the economy. These changes to the CPF include a reduction of 3% from 16% for employers, a long term target rate of 30-36% for workers aged 50 and below, reduction of the salary ceiling from \$6,000 to \$4,500 and an increase in the minimum sum to ensure that there will be money for retirement.

These changes will influence major saving and spending decisions as well as impact on homeownership, retirement incomes, personal investments, and above all, the economy's competitive position. In terms of the impact on homeownership, the immediate concerns centred on the impact on the property market and on the ability of homeowners to service their mortgages, especially given the high proportion of housing loans over household total liabilities as can be seen in Figure 5. However, according to the government's assessment, only a small proportion will not have enough cash or balances in their CPF ordinary account to make up the shortfall in mortgage repayment as a result of the 3% reduction. Before the cut, nearly 38% of the 577,000 CPF account holders (or 218,000) who use CPF for mortgage repayments do not have enough monthly contributions to cover their monthly mortgage repayments. After the cut, the number would increase by

76,000 to 294,000. Of these, the majority have sufficient balances in their CPF and therefore will be able to cover their shortfalls (Tan, 2003). As for those with a shortfall and are likely to have difficulties in servicing their loan repayment, both the HDB as well as private commercial banks have agreed to look into the restructuring of such cases by extending their loan period or through the offer of bridging loans. The special account may also be used to top up the shortfall in the monthly mortgage repayments where these payments are affected by the CPF changes.

Figure 5 Household Liabilities (end of 2000)



Source: Singapore Department of Statistics

Besides these measures, the government has also announced several HDB policy changes to help homeowners. One of these is the relaxation of rules on the subletting of the whole flat. From 1 October 2003, owners who have lived in their flat for at least 15 years can rent out the whole flat and for those who have lived for at least 10 years they are also allowed to rent out the whole flat if they do not have any outstanding loans from the HDB. In the past, the renting out of the whole flat was only allowed on a case-by-case basis and would only be approved if the owner and his family could not occupy the flat for a period of time for reasons such as overseas postings, alternate accommodation provided by employers, elderly persons requiring attention, etc. The relaxation of the

subletting rules will hopefully provide residents with a source of income. It will also enlarge the HDB rental market and offer an additional housing option to young couples and budding entrepreneurs, and others who are not ready or willing to commit to a flat purchase.

As a result of the economic downturn as well the cut in the employers' CPF contribution, the government has also decided to extend the public rental scheme to a wider group of households. The number of households at the margins who are either not ready to buy flats, or who need affordable rental housing on a temporary basis has increased with rising unemployment. To help this group, the household income ceiling for renting flats under the HDB Public Rental Scheme has been raised from \$800 to \$1,500 per month. Nevertheless, the government has also given the assurance to keep HDB flats affordable in that the HDB will price its flats so that 90% of Singaporean households can still afford at least a 3-room flat, even at the lower CPF contribution rates.

Prior to these policy changes on the CPF, one of the most significant changes impacting on housing in Singapore is the restructuring of the HDB announced in February 2003. Over the years, there had been significant changes to the role of HDB from providing low cost public housing to developing new towns and birthing communities. More recently, with the majority of Singaporeans already owning their flats, the *raison d'être* of HDB's existence has again been called for a thorough review. By early 2002 for instance, there were some 17,000 unsold flats in mature estates, compared to the 146,000 on the waiting list in 1997 (HDB, 2003). This led to the suspension of the registration of flats scheme and switched completely to a Build-to-Order (BTO) scheme in 2003. Under the BTO, piloted in 2001, flat buyers indicate their preference for flats at specific sites that the HDB has identified for development. The HDB will only start building these flats when there are a sufficient number of flats booked at the site. With fewer new flats to be built, HDB's focus has shifted to estate renewal and improving the quality of flats and the environment. From 1 July 2003, the HDB's former Building and Development Division would be set up as a corporation – HDB Corporation Pte Ltd. The new company will be responsible for the design and development of HDB flats, the implementation of the

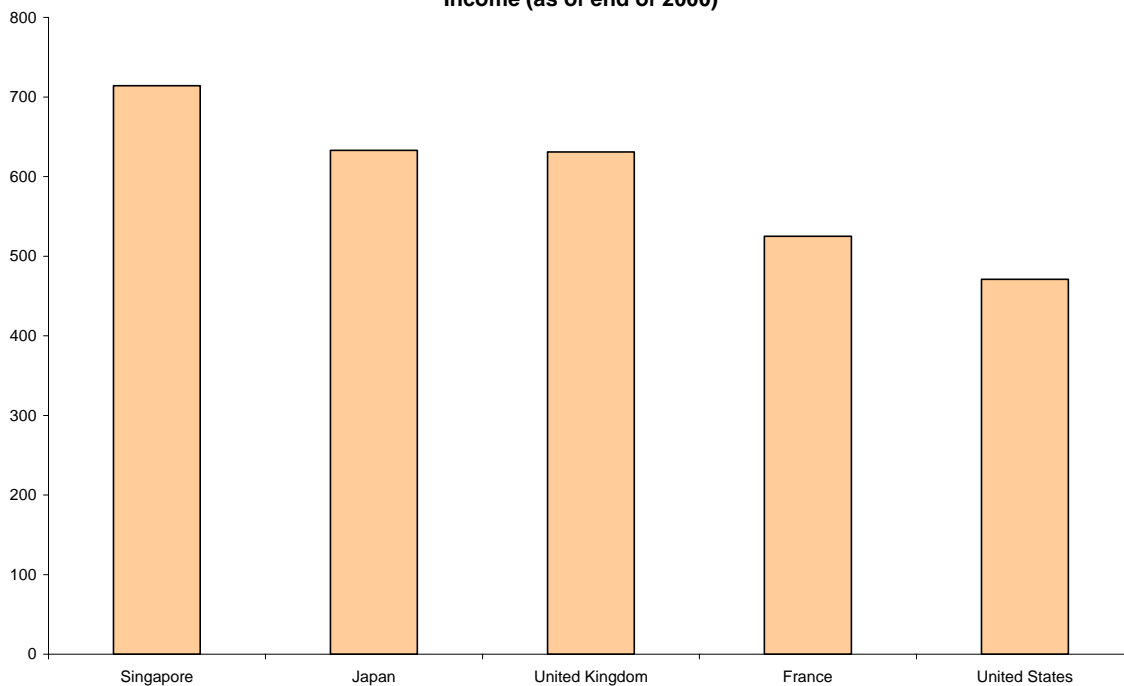
upgrading programmes, township development, procurement, project management, etc., as well as venturing into overseas housing development. This would mean that there will be greater private sector involvement in public housing provision. While HDB projects will continue to be assigned to HDB Corp for the first three years of its setting up, 10% of the projects will be outsourced to the private sector in the fourth year, 30% in the fifth year and 50% in the sixth year. Thereafter, the pace of outsourcing will be reviewed. Similarly, HDB Corp will be allowed to compete for non-HDB jobs from year five. As for the remaining divisions, the HDB would continue to be the public housing authority, selling HDB flats, formulating and administering public housing policy, lease and tenancy matters, etc.

In tandem with the review of the HDB's role in the housing market, a new set of housing financing rules was announced by the Ministry of National Development. This was also in response to the Economic Review Committee's subcommittee's report on Policies related to Taxation, CPF, Wages and Land (Economic Review Committee, 2003). While the HDB will continue to provide concessionary interest rate loans for eligible HDB flat buyers, it will cease to provide market rate loans from 1 January 2003. These loans will now be provided by commercial banks and existing HDB market rate mortgagors may choose to transfer their remaining mortgages to the banks. The categories of HDB dweller on market rate loans include those who also own private property, Singapore Permanent Residents, households with monthly income exceeding \$8,000 (income ceiling for the purchase of a new HDB flat), buyers who have already enjoyed two HDB concessionary loans and second time HDB buyers who have enjoyed one concessionary loan and are buying a similar-sized or smaller HDB flat. These changes reflect a gradual shift from the promotion of universal homeownership to a more liberalized public housing market.

Another significant policy change affecting both public and private housing is the reversal of the charge position for mortgage loans on private properties and HDB flats bought with commercial loans between the CPF Board and financial institutions. Banks will now be ranked ahead of the CPF Board when the mortgagee defaults, although the

CPF Board and the banks will rank *pari passu* for any interest due. The charge position will now be ranked as follows: first, outstanding property loan from bank; second, CPF savings withdrawn for the purchase of the property; and third, interest on the property loan and CPF savings (ranked equally). Given that the lending bank can now have first charge on the sales proceeds ahead of the CPF, the 20% cash down payment rule implemented in 1996 as part of the anti-speculative measures is now reduced to 10% with the other 10% from CPF. In addition, from 1 Sep 2002 (for private properties) and Jan 1 2003 (for HDB flats bought with commercial loans), the CPF withdrawal limit is now set at 150 percent of valuation (or the purchase price, whichever is the lower), and this valuation limit will progressively reduced to 120 percent over five years. These changes reflect the government's recognition of shorter property cycles in the future as well as the need to protect buyers from losing all their money in their CPF accounts, thus addressing the "asset rich, cash poor" syndrome that has developed over the years (Tay and Yang, 2002). Figure 6 shows the comparative ratio of household net wealth to personal disposable income of five countries, with Singapore being the highest.

**Figure 6 Comparison of Ratio of Household Net Wealth to Personal Disposable Income (as of end of 2000)**



Source: Singapore Department of Statistics



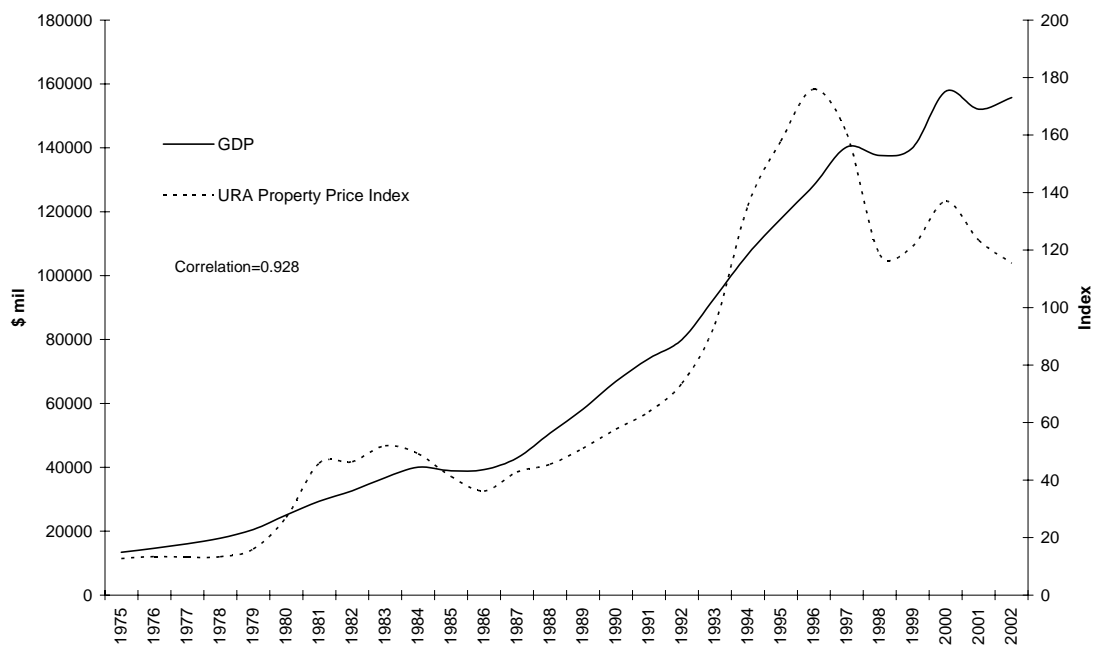
Two other policy changes since 1997 that have a direct impact on the private housing market are the URA's Reserve List System and the amendments to the Land Titles (Strata) Act. The URA's Reserve List system was introduced in June 2001 as a response to curb the supply of both commercial and residential properties. With the economic downturn since 2001, the annual land sales programme was suspended. However, sites are put on a reserved list and if any developer would like to offer a bid higher than or equal to the reserve price, the parcel will go for public tender. This allows the market to match supply with demand and give developers the flexibility to initiate new projects. It also ensures that there will be adequate supply to prevent the market from overheating in the event of a surge in demand.

Somewhat contrary to the objective of the Reserve List System, the amendment to the Land Titles (Strata) Act has the effect of creating more supply of private residential lands. The amendment in 1999 is to facilitate the en bloc sale of sub-optimally used land in old private housing estates. A trend which started in around 1994, en bloc or collective sale refers to the banding of owners of units in old housing estates which have outlived their economic use to sell their properties to one single buyer. The chief motivating force for this phenomenon has been the changing planning requirements imposed by the URA. With the relaxation of planning parameters, such as an increase in the permissible plot ratio, many old apartment blocks which sit on large parcels of land have become prime targets for collective sale. From the owner's perspective, collectively selling out will enable him to realize the full potential from the site in that he would stand to gain much more than what he could obtain if he were to sell his unit individually. Before the amendment to the Act, there were a few cases where a minority number of owners held back the collective sale process. The new rule provides that so long as there is a minimum of 80% majority consent by share value (for properties ten years or older), the en bloc sale can proceed (90% for properties less than 10 years old). While public opinion is divided on this change – some decried the loss of property rights in legislative sanction for what was considered to be an act of greed, others spoke against “the tyranny of the minority” – it nevertheless had the effect of facilitating more collective sales and hence increasing the supply of new residential lands.

In terms of the impact of all these economic and policy changes on the housing market, it is perhaps too early to assess, given that some of these changes, such as the reduction in CPF rates and the restructuring of HDB, are intended for the long term. While the current outlook remains uncertain, a few trends seem to have emerged. First, the economic downturn and the high unemployment rate have resulted in an increase of the demand of rental HDB flats from 3,793 in 2001 to 4,318 in 2003. This may lead to a rising trend towards greater acceptance of rental accommodation instead of homeownership. The current soft rental market has also helped to provide greater diversity in rental housing.

Similarly, although there are no available statistics, anecdotal evidence claims that demand for 3-room resale flats has increased, reflecting a down grading trend (Tan and Tan, 2003). This will not be surprising given the current economic hard time. Second, the economic and property cycles seem to get shorter with greater uncertainty brought about by global events. With increasing globalization, the effects of events such as 911 and SARS are far reaching and pervasive. These have led to greater uncertainty and more abrupt shocks to economies.

**Figure 7 GDP and URA Price Index**



Source: Singapore Department of Statistics, URA

And third, despite the significance of policy changes, the housing market, like other economic goods, is ultimately influenced by the state of the economy. Figure 7 shows the parallel movements of the GDP and the URA Property Price index over the twenty seven years from 1975 to 2002. Except for the effects of the anti-speculation measures introduced in 1996 to dampen the property market resulting in a sharp correction, the movement of the property price index follows closely to the GDP.

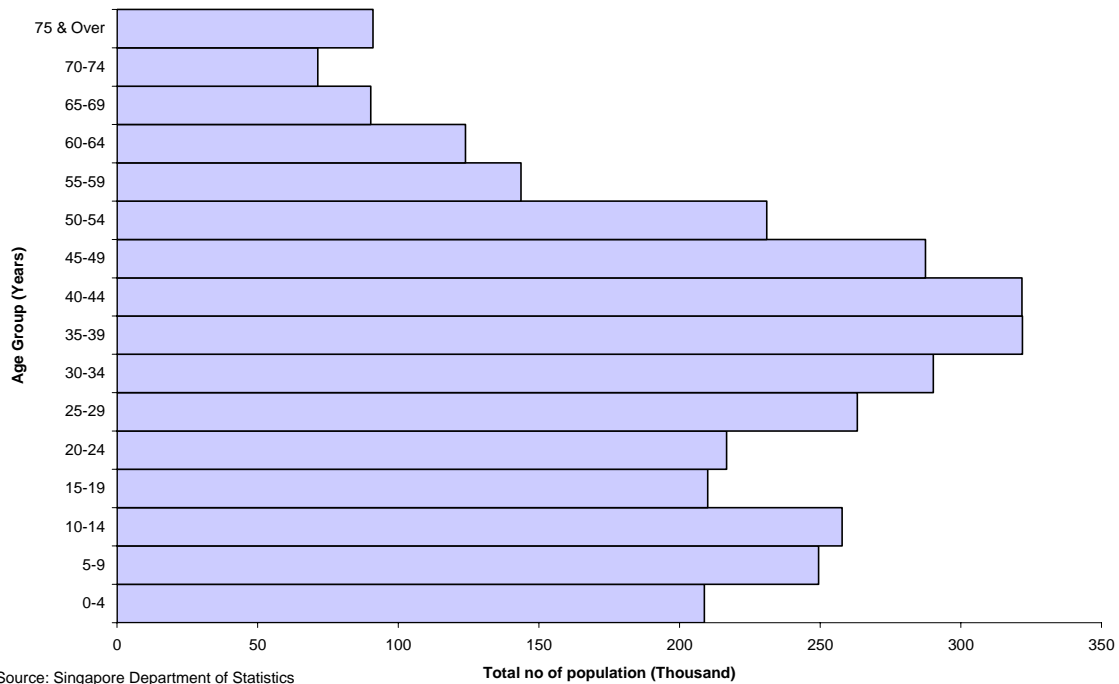
### **Future Challenges**

A major challenge that housing authorities worldwide will increasingly face is the housing of an ageing population. In Singapore, the number of senior citizens aged 65 and above will increase three-fold from 226,000 in 2000 to 796,000 by year 2030. In terms of the total population, the proportion of the aged will rise from 7.1% to 18.9% over the same period (HDB, 2000b). These demographic trends will have a major impact on the care and support for the elderly residents. The challenge is to build an environment where young and old alike can enjoy a fulfilling life together. The HDB has started building studio apartments for the elderly, locating them in mature towns that have easy access to transport and public amenities. However, the sale of these studio apartments is currently subject to several conditions such as monthly household income and only existing HDB lessees are eligible. While these may satisfy some of the elderly citizens in future, there still remains a sizeable group from the baby boomers which will demand for a greater variety of elderly housing.

Indeed, the demographic profile of the Singapore residents in Figure 8 shows the dominance of the baby boomers (age 30 to 49). This group has wielded the greatest influence over the Singapore economy in the last twenty years and will continue to do so for the next twenty. As the future elderly, they are likely to be healthier, wealthier and more independent. Their needs and preferred living arrangements, especially those who do not qualify for the HDB's studio apartments for the elderly, would need to be addressed (Wong and Chin, 2000). Private sector housing developers as well as the

government will therefore do well to understand their needs and preferences of the types of accommodation in their twilight years.

**Figure 8 Demographic Profile of Singapore Residents 2003**



The new challenge for the restructured HDB will not be simply to provide basic housing. It will need to fulfill lifestyle aspirations, and to cater to a wider and more diverse group of residents. The public flats have to be updated with better designs and features to cater to an increasingly demanding population (HDB, 2003). This includes preferences for location, ambience and facilities within an estate. To help achieve this, the Economic Review Committee has recommended the use of a reverse tender mechanism in public housing development (Economic Review Committee, 2003). This will allow the private sector to perform part of the public housing value chain without compromising social objectives. In the reverse tender mechanism, the government specifies the maximum selling price for a flat, as well as some basic parameters governing the features of the flat. The private sector contractors/developers bid for the right to build and sell the flats at no more than the pre-determined price. As the land and the flats are owned by the successful

contractor/developer in the interim before they are sold, it is the private sector that bears the market risk, not the government. This approach increases the competitive space for the private sector, injects more market flexibility and responsiveness in setting public housing supply and increases the variety of design of HDB flats.

Besides allowing for greater private sector participation in public housing, the challenge facing HDB is the continual drive to satisfy the housing needs of the future generations, in terms of the planning, design and construction of the apartments (Tan, 2000). In this respect, it has taken the lead in the construction of even taller buildings as well as injecting new and innovative designs in public housing. The first 40-storey apartments will be completed in 2004 in Toa Payoh, the first new town in Singapore, while 48-storey public housing is being built at Duxton Plain, an old estate within the city centre. The latter project was launched as an international architectural design competition with the winning design featuring seven 48-storey apartment blocks with “sky parks” on the 26<sup>th</sup> storey and a roof level link of the seven blocks. Such unique and innovative designs will also be featured in Punggol 21, a coastal housing estate in the north-eastern part of Singapore. These have set a new benchmark for public housing to cater for the taste of the future. As for the older estates, the HDB will continue to focus on estate renewal, which started in the early 1990s with the Main Upgrading Programme (MUP). Besides the MUP, the estate renewal strategy encompasses the Selective Enbloc Redevelopment Scheme (SERS), Interim Upgrading Programme (IUP), Lift Upgrading Programme (LUP) and Hawker Centres Upgrading Programme (HUP) (Toh, 2002). Except for SERS, which involves the redevelopment of old estates, the rest of the upgrading programmes are carried out to existing precincts without uprooting the residents.

Lastly, the deregulation and liberalization of financial services that has taken place in Singapore in the last few years will have an impact on home financing. Already, the overall liberalization of home financing has led to a wider range of home loans serving differentiated needs which will give buyers greater choice and flexibility. Developments in the financial markets have also witnessed the launch of three Real Estate Investment Trusts (REITS) in the last two years. This will have a significant impact on developers

and property companies in their financing arrangements which may filter down to home buyers. It has also opened up new investment avenues for the small retail investors.

## **Conclusion**

This paper has traced the economic and policy changes and their impact on the housing market in Singapore over the last 40 odd years. In particular, the changes which have occurred since 1997 have been examined in some detail, given that these are likely to have a long term impact on the housing market. A few key changes are worth reiterating. First, the fundamental changes to the economic structure and employment pattern as a result of globalization and competition. These have resulted in changes to the wage structure, in particular, the CPF rates of contribution, which will impact on housing affordability. Although the government has emphasized on its commitment to ensure that the large majority of Singaporeans will still be able to afford public housing, households will need to be more prudent in their plans and aspirations to upgrade.

The second major shift is the shorter economic and property cycles as a result of greater uncertainties brought about by events which have a global impact. This implies that the housing market is unlikely to enjoy the sustained boom experienced in the mid-1990s in the future. Investment in residential properties will also likely be affected with the changes to the CPF withdrawal limit, restricting purchasers to 120% of the valuation or purchase price from the current 150%. This reduction in the withdrawal limit is aimed at protecting buyers from losing all their money in their CPF accounts while at the same time addressing the “asset rich, cash poor” syndrome that has developed over the years.

The third significant change that is likely to set a trend in the future is the gradual de-emphasizing of homeownership. With the increase in mobility, future generations will see renting as a more flexible option than buying. Besides, in the context of a wider range of investments, other forms of indirect investments in real estate may become more attractive than residential properties.

Lastly, the most significant recent change in the housing scene in Singapore is undoubtedly the restructuring of the HDB. To quote the Chairman of the HDB, Mr Ngiam Tong Dow: "Each stage of public housing has challenged HDB to meet the exception needs of its time. As the main public housing provider, it has performed multiple roles and tasks to house the majority of Singaporeans in quality homes. In the process, it has reinvented itself many times over." (HDB, 2003) The evolving role of the HDB is testimony to the ever changing economic conditions.

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