Housing in Taiwan: State Intervention in a Market Driven Housing System

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Abstract

Introduction

Taiwan offers an interestingly contrasting case in the housing systems in East Asia. Unlike other Asian Tigers whose state policy on housing, regardless how dissimilar they are, plays a dominating role over the force of the market. For instance, in Hong Kong and Singapore, the majority of households are housed in state-developed estates whereas in South Korea tight credit control imposes a strong regulatory force on both the production and consumption of housing. On the contrary, housing in Taiwan is largely market driven and unregulated. This is also in sharp contrast with the state’s high profiled presence in other social, economic and political arenas in Taiwan. However, despite the market being the dominate mediator of both the production and consumption of housing, the institutional framework of the housing market is still under-developed in some aspects. Rapid urbanisation and the demand for better housing have also driven up house price, especially in prime sites of metropolitan areas.

On the other hand, state provision of housing is under-counted if only housing for the needy is included as the state is also intensively involved in housing for other designated groups, for instance, families of the servicemen and civil servants. Thus, the role of the state in housing is not insignificant as have been perceived. People in Taiwan also indicate a strong desire for owner occupation. Hence it is not surprising to find housing policy in Taiwan skewed towards home ownership. Yet, such policy is also fragmented along organizational lines within the government bureaucracy. Not only that owner occupiers gain the most from state subsidies, distribution of such subsidies is also inequitable across the income spectrum and between occupational groups.

This paper aims to achieve two objectives. Firstly, it will describe systematically the historical development of state intervention on housing and the operations of the housing market in Taiwan in the context of the socio-economic development in the last few decades. Secondly, it attempts to highlight the problems in the housing system, particularly the institutional inadequacy of the market as well as the inequitable distribution of housing subsidy. This paper concludes by putting the Taiwan experience in the context of other similar systems in the Asian Tigers and examines possible reasons of the perceived low level of state intervention in housing in Taiwan. This would help to shed light on the thesis of an Asian Housing Model.

This paper is divided into seven sections. After the introduction is a description of the socio-economic context of housing and tenure development in Taiwan. A brief history of state intervention in housing is delineated in section three whilst section four will focus on the development and operations of the housing market. Section five examines the problems associated with the housing market and section six will discuss the inequitable distribution of housing subsidies. The paper will conclude in section seven in which the uniqueness of the housing policy in Taiwan will be examined in the light of its low level of state intervention in housing.
Housing Tenure and the Socio-economic Context

With a population of 22m and an area of 36,000 km², Taiwan is one of the most densely populated areas in East Asia. The capital city Taipei, which accommodates 3m inhabitants with a population density of 129 persons per square kilometer, is also as congested as other metropolitans in the region. Like most Newly Industrialised Countries (NIC), population growth and rapid urbanisation have been staggering. Population in Taiwan doubled from 11m in 1961 to 22.4m in 2001 (figure 1) and the number of households, which is more relevant on the demand on housing, has even trebled in the last three decade (Ministry of the Interior, 2000).

Figure 1 Population and Household Size 1971-1999


Economic growth in the last few decades was also spectacular with the GDP growing at an average of 7.8% in real terms from 1970 to 1999 and GDP per capita increased 5.8 times in real terms from NT$71,473 in 1971 to NT$415,320 in 1999 (at 1996 constant price) (figure 2). Taiwan economy was also vibrant enough in containing both unemployment and inflation. People out of job in the last two decades have been maintained from 1.2% in 1980 to 3% in 2000. Likewise, inflation stood at an average of 2% from 1981 to 2000 (Council for Economic Planning and Development, 2001).
Figure 2 Economic Growth

Sources: Council for Economic Planning and Development, ROC (2000) Table 3-4

In terms of physical provision of housing, Taiwan is also relatively advanced. For instance, there is a net surplus of over 1.2m dwellings in 2000 (Population Census, 2000) and the space consumption reached 39m$^2$ per person in 2000. In terms of living space per capita, Taiwan surpasses many advanced countries, for instance, UK, Singapore and Japan in late 1980s (Hsueh and Tsai, 1991, Population Census, 2000).

Table 3 Housing Conditions in Taiwan in a Comparative Perspective

<table>
<thead>
<tr>
<th></th>
<th>Year</th>
<th>Area per house (m$^2$)</th>
<th>Year</th>
<th>Person per house</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taiwan</td>
<td>1979</td>
<td>82</td>
<td>1979</td>
<td>4.71</td>
</tr>
<tr>
<td></td>
<td>1989</td>
<td>101</td>
<td>1989</td>
<td>4.07</td>
</tr>
<tr>
<td></td>
<td>1995</td>
<td>113.9</td>
<td>1995</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>132.2</td>
<td>2000</td>
<td>3.4</td>
</tr>
<tr>
<td>UK</td>
<td>--</td>
<td>--</td>
<td>1985</td>
<td>3</td>
</tr>
<tr>
<td>USA</td>
<td>--</td>
<td>--</td>
<td>1983</td>
<td>2.82</td>
</tr>
<tr>
<td></td>
<td>1987</td>
<td>153</td>
<td>1987</td>
<td>2.12</td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>--</td>
<td>2000</td>
<td>2.59</td>
</tr>
<tr>
<td>Japan</td>
<td>1978</td>
<td>80</td>
<td>1978</td>
<td>3.48</td>
</tr>
<tr>
<td></td>
<td>1988</td>
<td>90</td>
<td>1988</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td>1998</td>
<td>92.4</td>
<td>2000</td>
<td>2.67</td>
</tr>
<tr>
<td>Singapore</td>
<td>1975</td>
<td>48</td>
<td>1975</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>1985</td>
<td>73</td>
<td>1985</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>--</td>
<td>2000</td>
<td>4.2</td>
</tr>
</tbody>
</table>
Taiwan is a nation of home owners. In 1981, nearly three quarters (73%) of Taiwanese already own their homes in 1981. Such figure rose to 82% in 2000. Households who had to rent, either from a public or a private landlord, accounted only for 15% in 1981 and it dropped to 10% in 2000 (figure 3). Captured in a common saying that “one possesses wealth as one possesses land” (有土斯有財), it has been argued that real estate ownership, and home ownership as its contemporary symbolization, has long been a deep rooted belief of wealth accumulation and a predisposition of a decent living among Chinese (Chang, 1991b). Because of this, owner occupation becomes the “natural”, and largely unchallenged, objective in housing policy and in contrary to many western industrial countries, tenure has never been prominent in the political and policy agenda.

Figure 3 Tenure in Taiwan 1981 - 2000

Source: Directorate-General of Budget, Accounting and Statistics, Social Indicators of Taiwan Area (various years)

State Intervention in Housing

Direct state provision of housing in Taiwan started as early as 1949 when the Nationalist (KMT) government retreated from Mainland China to Taiwan and carried with them tens of thousands of government officials, veterans and their dependents. Housing shortage thus became acute and a small amount of dwellings were built as part of the state’s effort in relief and reconstruction (Chen Liang-Chun, 1991). An orchestrated effort on public housing development began when the Planning Committee for Public Housing was established in the
Provincial Government of Taiwan in 1959. Yet, progress of housing construction was slow and only 125,534 dwellings were constructed from 1959 to 1975, the majority of which were small and low quality (Mi, 1988).

Public housing development began to sprout when a new Public Housing Ordinance was enacted in 1975 and public housing construction was incorporated into the six-year economic development plan in the year that followed. Yet housing programme missed its target by half (Chen Liang-chun, 1991). Owing to difficulties in land acquisition, public housing developed then was either unpopular (because of being built on cheaper but remote sites) or expansive (because of high land price in prime areas). Over-supply of public housing also began to surface (Mi, 1988). In order to speed up public housing development and to boost sale, the Public Housing Ordinance was amended in 1985 to clear obstacles in land acquisition and to attract more private sector investment. However, subsequent housing market bust in mid-1990s seriously affected the sale of public housing. Direct provision of public housing was even called to a halt in 2000 and the Central Government decided to replace direct provision with mortgage interest subsidy.

Production of public housing is just minimal in Taiwan, less than 5% of total housing output from 1982 to 2000 were public housing (table 4). However, despite the “planned” nature of public sector housing, its output exhibits an unstable pattern – production contracted by 50% in 1983 but surged by 17 times 1990 over the preceding year. The lack of planning, uncoordinated policies and various administrative obstacles such as land acquisition, state budget constraint, etc are to be blamed for such fluctuations (Chen Li-Chun, 1991).

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Private</th>
<th>Public</th>
<th>% Private</th>
<th>% Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982-89</td>
<td>836867</td>
<td>807404</td>
<td>29463</td>
<td>96.5%</td>
<td>3.5%</td>
</tr>
<tr>
<td>1990</td>
<td>67600</td>
<td>53417</td>
<td>14183</td>
<td>79.0%</td>
<td>21.0%</td>
</tr>
<tr>
<td>1991</td>
<td>72016</td>
<td>68410</td>
<td>3606</td>
<td>95.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>1992</td>
<td>102399</td>
<td>94190</td>
<td>8209</td>
<td>92.0%</td>
<td>8.0%</td>
</tr>
<tr>
<td>1993</td>
<td>143649</td>
<td>140655</td>
<td>2994</td>
<td>97.9%</td>
<td>2.1%</td>
</tr>
<tr>
<td>1994</td>
<td>197678</td>
<td>191503</td>
<td>6175</td>
<td>96.9%</td>
<td>3.1%</td>
</tr>
<tr>
<td>1995</td>
<td>194762</td>
<td>184037</td>
<td>10725</td>
<td>94.5%</td>
<td>5.5%</td>
</tr>
<tr>
<td>1996</td>
<td>152205</td>
<td>143245</td>
<td>8960</td>
<td>94.1%</td>
<td>5.9%</td>
</tr>
<tr>
<td>1997</td>
<td>113142</td>
<td>105597</td>
<td>7545</td>
<td>93.3%</td>
<td>6.7%</td>
</tr>
<tr>
<td>1998</td>
<td>97849</td>
<td>90195</td>
<td>7654</td>
<td>92.2%</td>
<td>7.8%</td>
</tr>
<tr>
<td>1999</td>
<td>85566</td>
<td>85233</td>
<td>333</td>
<td>99.6%</td>
<td>0.4%</td>
</tr>
<tr>
<td>2000</td>
<td>62273</td>
<td>62273</td>
<td>0</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>212600</td>
<td>2026159</td>
<td>99847</td>
<td>95.3%</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

Source: Construction and Planning Administration (various years)
Note: Housing units completed.

As housing policy in Taiwan heavily skews towards home ownership, it is not surprising to find that the overwhelming majority of public housing built in Taiwan is for sale. It is estimated that over half a million state developed dwellings were sold in the last 50 years.
Yet, state involvement in housing is seriously under-reported if only direct provision of public housing by municipal or county housing departments is counted. Other government departments have in fact contributed an even larger share of public sector housing. For instance, municipal social bureaus built and managed dwelling units for welfare recipients and the Labour Bureau developed dwelling units for workers in designated trades. By far, the most important contributor, which is often missing in official statistics, is the Ministry of Defense which build and subsidises housing for families of the armed forces (Chen Liang-Chun, 1991). Taken together such additional stock developed by other departments, it is estimates that from 1949 to 1989, 385,000 housing units were constructed (which include public subsidy for purchase or self-built) in the public sector and public sector housing thus constituted 7.4% of the households in 1989 and 8.5% of new construction since 1949 (Chen Liang-Chun, 1991). Amongst such housing development in the public sector, 135,000 units belong to the military establishment, which represents more than one third of public sector production.

Besides direct provision, subsidy is another intervention strategy which is gathering bigger momentum in the last few years. Mortgage interest subsidies for home purchase started in 1990 as an alternative to direct provision and targets at the same group of citizen (a similar supplementary scheme, Housing Subsidies for Young People was introduced in 2001). It eventually completely replaced direct provision in 2000. There are also other mortgage subsidy schemes for designated groups of households, for instance The Labour Commission runs a Housing for Workers Scheme and the Human Resources Bureau of the Executive Yuan maintained a loan scheme for employees in public organizations. Details of the various direct provision and loan schemes are listed in the appendix under two broad categories: housing for the low income and housing for designated groups.

Two other forms of state intervention on housing, which involve neither direct provision nor subsidy, are also in place. The first is the provision of additional credit for first time buyers beyond the ceiling they can otherwise obtain from commercial banks. Such loans are subject to funds availability and market interest rates are charged. The second form is tax advantages for home owners which include deduction of mortgage interest payment against the tax liability, exemption from tax on inputted rent, as well as preferential treatment on inheritance tax on residential properties.

The Housing Market

As state intervention is relatively low in Taiwan, private housing developers enjoy more freedom and face less competition from the state sector than their counterparts in other Asian Tigers. For instance, unlike in Hong Kong where state monopolises land supply and in Singapore where the powerful Land Acquisition Act enables the state in effectively controlling the supply of land, lands in Taiwan are privately owned. Likewise, contrary to private housing development in South Korea which is subject to tight credit control by the
state, private developers in Taiwan instead enjoy supplementary credit from the state in appropriate timing to bail them from market slump. In addition, a big public housing sector in Hong Kong (49%) and Singapore (90%) creates direct competition to private housing development whereas in Taiwan a meager 5% public housing stock imposes no threat. The state is even more prepared to relinquish the nearly immaterial influence, as witnessed by recent stoppage of public housing construction in 2000, in order to boost the housing market.

Chang (1991b) summarises the development of the private housing market in Taiwan in five stages. The first stage is the period of inactivity which refers to pre-1961 years when self-built activities for low-rise simple structured dwellings were the norm. The second stage (1961-1971) is the embryotic period when housing development began to institutionalise with the setting up of bigger housing development companies and low rise condominiums were constructed. The third stage (1971-1981) is the stage of unstable prosperity. On the one hand, a booming housing market with rapidly increasing house price was fuelled by continuous economic growth, global inflation and the oil crisis. The pre-sale system also began to become popular in 1973. Yet on the other hand, market busts were also created by political crisis and the economic turmoil that followed.

The fourth stage is the market “dark age” when a market slump, between 1981 to 1986, was triggered by the 1980 Census which reported the existence of 0.45m vacant properties. However, there was also marked advancements in the market framework in this period when a national network of franchised real estate agents were established in 1985 and in the year that followed, legislation for licensed construction project managers was enacted. The government also allowed the construction industry, for the first time, to secure credit facilities from the banks. The year 1987 marks the beginning of the fifth stage of hyper price inflation in the housing market with house price doubled over two years from 1987 to 1989 in Taipei (price for pre-sale housing even increased three times)(Taiwan Real Estate Research Center, 2001). Price began to stabilise after mid 1990s but it still stood at a high level (figure 4).
Escalating house price has imposed a higher hurdle for first time home buyers. For instance, a manufacturing worker who earned the average salary of the trade would have to spend 23 years of the salary to buy an average sized pre-sale housing in 1987 before the latest market boom. At the peak of the boom in 1995, the same worker even have to spend 32 years of annual salary on the same dwelling. Although situation has improved a bit when price came down in recent years, yet an equivalence of 29 years’ earning is still required. Empirical data from social surveys also indicates a rising bill on housing outgoings when house price increases over the years. Households in Taiwan on an average spent NT$1,573 a month on mortgage repayment in 1972 but in 1989 when house price has increased substantially, the average mortgage repayment rose to NT$10,521 and further increases to NT$11817 in 1999 (Table 4).

Despite the increase of housing outgoings in absolute terms, yet relative to household income, it has instead fallen in recent years. Householders in 1972 has to devote one third (33%) of their income on mortgage repayment, such proportion deteriorated to 44% in 1975 and since then has gradually improved. Yet, even towards the end of the 1980s when house price experienced a big jump in a few years’ time, the impact on owner occupiers is not apparent. Mortgage repayment as a proportion of income only rose from 24% in 1986, before the market boom, to 27% in 1989. On the contrary, rent as a proportion of income remained stable throughout the 1980s at 12% to 15% (table 4). Unfortunately, official statistics in Taiwan stopped releasing disaggregate data of housing outgoings after 1989 and used instead the inputted rent payment for owner occupiers and it is difficult to assess the current burden of owner occupiers in the 1990s. (Table 4).

Table 4 Housing Outgoings and Affordability in Taiwan

<table>
<thead>
<tr>
<th></th>
<th>NT$ per Month</th>
<th>As a proportion of Income (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: Taiwan Real Estate Research Centre (2001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Disposable Income</td>
<td>Mortgage Repayment</td>
</tr>
<tr>
<td>------</td>
<td>-------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>1979</td>
<td>15701</td>
<td>3369</td>
</tr>
<tr>
<td>1980</td>
<td>19426</td>
<td>5081</td>
</tr>
<tr>
<td>1981</td>
<td>22203</td>
<td>5051</td>
</tr>
<tr>
<td>1982</td>
<td>22938</td>
<td>4615</td>
</tr>
<tr>
<td>1983</td>
<td>24657</td>
<td>5304</td>
</tr>
<tr>
<td>1984</td>
<td>26185</td>
<td>6072</td>
</tr>
<tr>
<td>1985</td>
<td>26708</td>
<td>6222</td>
</tr>
<tr>
<td>1986</td>
<td>28477</td>
<td>6892</td>
</tr>
<tr>
<td>1987</td>
<td>30541</td>
<td>8151</td>
</tr>
<tr>
<td>1988</td>
<td>34207</td>
<td>9174</td>
</tr>
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<td>1989</td>
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<td>6351</td>
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<td>7437</td>
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<tr>
<td>1992</td>
<td>-</td>
<td>8349</td>
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<td>1994</td>
<td>-</td>
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<td>1995</td>
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<td>10642</td>
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<td>1996</td>
<td>-</td>
<td>11212</td>
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<td>1997</td>
<td>-</td>
<td>11491</td>
</tr>
<tr>
<td>1998</td>
<td>-</td>
<td>11770</td>
</tr>
<tr>
<td>1999</td>
<td>-</td>
<td>11817</td>
</tr>
</tbody>
</table>


Note: Figures before 1990 refer to actual outgoings and figures after 1990 refer to actual and inputted rent plus repairs.

There are several reasons why the increase in house price did not impose a bigger burden on housing outgoings of owner occupiers. First, the increase in house price only has an immediate negative effect on the hurdle of first time buyers and current home owners who bought at a much cheaper price were largely unaffected. Income rise and inflation would instead reduce the relative burden of mortgage repayment of the latter group. Second, home buyers in Taiwan borrow relatively less and pay a rather high percentage of down payment, on an average around 46% from 1972 to 1989 (Lim and Chang, 1992). It thus helps to even-out the impact of house price rise on mortgage repayment. Whilst a high proportion of downpayment may attribute to savings accumulated by home buyers or help from relatives, the existence of a parallel informal financial sector may also act as an important source of finance (Chang, 1991b). Alternatively, up-graders were able to finance a higher proportion of down-payment out of the windfall profit they made in the previous housing market boom years.
The apparent marginal deterioration in housing affordability of owner occupiers may also be a result of the desire in improving the living environment. In fact, households in Taiwan are consuming bigger and better housing; average housing space consumed in 1981 was 89m² per household and this had increased to 132 m² in 2000 (Directorate-General of Budget, Accounting and Statistics, 2000a). Thus, even if house price and quality of housing remain stable, the consumption of an additional 48% space would cost considerably more for the households.

**Problems in the Housing Market**

Notwithstanding the market being the major arena housing consumption in Taiwan, infrastructure in the housing market is less than mature. Three issues in the housing market are particularly problematic: low degree of institutionalization in the housing market, the presale system that fuel speculations and the inadequacy in the housing finance system.

Firstly, standards of housing construction regulation in Taiwan are not stern enough (Chang, 1991b) and complaints on quality of construction are not uncommon. Incomplete institutionalization of the system and fragmented market information also hamper market efficiency and set hurdles in rectifying market anomalies. For instance, the use of housing intermediaries as an agent of circulation is still not a norm in Taiwan whereas many transactions are still done in an informal or semi-formal manner. Such practice is prone to disputes and weakens market transparency. Likewise, registration of transaction price is not a statutory requirement and information on the final transaction price of presale housing is kept as commercial secret, information on price is thus fragmented and the asymmetry of information provision seems to favour big market players (Chang, 1999). Although initiatives in fostering a better planned and integrated information system on housing have been started (Chang, 1999), such effort has to be stepped up to counteract institutional barriers and conflicts generated by fractional interests. Thus, further regulation in the market has to be institutionalized and the provision of market information also need to be improved.

Secondly, notwithstanding the fact that housing is already over-supply in Taiwan, the pre-sale system, a feature which is more likely to be associated with chronic problems of under-supply, is still popular in Taiwan. The pre-sale system functions like a double-bladed sward in the housing system. On the other hand, it reduces the hurdle of new entry of suppliers and thus enhances competition. Small builders are then able to acquire cheaper development capital from pre-sale receipts and compete with bigger, well-financed developers. Yet, the presence of a large number of small builders also risks the disruption of market order. Experience elsewhere shows that when small time speculative builders are the major players in housing development, large fluctuation in housing supply appears to be inevitable (Ball et al, 1988). This also matches the empirical observations in the trend of price movement in Taiwan.

In addition, pre-sale housing also associates with complaints from home buyers in which poor quality of construction is the topmost issue (Li, 1998). An under-regulated market, for instance imprecisely specified contractual obligations as well as the inability to enforce such obligations, is the most to blame. On the other hand, when the initial capital requirement is relatively lower and transaction before completion of the property is not prohibited in a pre-sale system, it would fuel speculation in housing consumption. It is estimated that the
majority of home buyers in the peak of the housing boom in early 1990s were speculators seeking for quick profit (Li, 1998). Such fabricated demand pushed up house price further in an already heated market and disrupts its healthy functioning. In addition, the pre-sale system is also prone to tax eviction and other illegal activities in cutting the corners of regulation (Mi, 1988).

Thirdly, the housing finance in Taiwan also needs substantial enhancement. The degree of institutionalisation in housing finance is relatively low and black market financiers still play a significant supplementary role in the provision of mortgage funds (Chang, 1991b). It is estimated that in 1989 home buyers on an average only borrowed 51% of the value of the property from the formal financial sector and the average repayment length was 15 years (Lin and Chang, 1992). Likewise, contribution from underground finance to the construction industry was also estimated to be around the region of 50% in the mid 1980s (National Chung Hsing University (1987) cited in Lin and Chang, 1992). Although the liberation of the financial market, which allows new commercial banks to be set up, has reduced very substantially the role of the black market, its influence in housing finance has not been completely driven out. At the same time, the short length of mortgage loans also indicates a conservative attitude of the financiers and imposes additional liquidity problem for first time buyers. Further liberalization of the housing finance market as well as increased diversification of financial products are called for in promoting a more efficient housing finance market (Chang, 1992).

An inadequate market mechanism and asymmetric provision of market information has created seemingly paradoxical phenomenon. Despite the fact that housing in Taiwan is over-supplied, house price continued to surge in a substantially long period. This is in sharp contrary with theoretical prediction that an over-supply of housing would suppress house price so as to stimulate demand to clear the over-supplied stock. Yet from mid 1980s to the late 1990s, a comparatively high level of vacancy was witnessed (within the range of 15% to 19% )(Taiwan Real Estate Research Centre, 2001), but house price still increased at an annual average of 1.2% in the same period. Hua (2000) prostitutes that it is the high rate of owner occupation that is attributed to such economically irrational behaviour. He examines the relation between house price, vacancy rate and the rate of owner occupation and argues that rate of owner occupation is no longer an outcome of market choice but “an important factor in shaping market decision” (Hua, 2000, p49). Despite theory prediction of an inverse relationship between vacancy rate and house price, “an over-zealous consumption preference towards owner occupation has, to a certain extent, deviates from the norms of economic dispositions” (Hua, 2000, p49). Hence, an overwhelming desire for owner occupation, fuelled by cultural predisposition, structural defects in the rental market as well as bias in housing policy towards owner occupation, has displaced tenure choice beyond economic rationality. Such force is big enough, in the late 1980s and early 1990s, to counteract the pressure of over-supply and its subsequent unfavourable effect on house price and instead drove house price in the reverse direction.

It has been verified empirically that the high rate of home ownership has become an independently perpetuating force in driving up both house and vacancy rate (Hua, 2000). Such interaction between home ownership rate, vacancy rate and house price also prevents the housing market in Taiwan from a land-sliding price fall in the recent financial crisis, which is in sharp contrast to what turned up in Tokyo and Hong Kong in respectively the early and late 1990s (Hua, 2000). Yet, a high level of owner occupation, 85% in late 1990s,
would eventually set a limit to its further development and consequently weakens the ability in counteracting the pressure of the increased vacant stock. This explains the slow downward adjustment of house price in the latter half of the 1990s when the growth of home ownership slowed down.

Inequitable Distribution of Housing Subsidies

State housing subsidies are inequitably distributed. Given the uncontested premises in supporting owner occupation as the fundamental policy objective, state housing programmes have largely been skewed towards assisted home purchase. Such tenure biased policy initially focused on the direct provision of for-sale housing and later a shift towards subsidy in cash to home buyers. It also apparently contravenes the principle of vertical equity as it excludes households who are too poor to afford home ownership whilst benefiting those who are rich enough to afford the down payment required and the regular mortgage repayment (Chen and Chang, 1993).

Such inequitable distribution of benefit was further intensified in the housing boom period. On the one hand, better off home buyers who had bought cheaper accommodations from the state were able to claim wind fall capital gain from value appreciation of their properties in the market boom. Yet on the other hand, poorer households who were forced to stay in the private rental sector because of the under-provision of state rental housing, would find their rent being pushed up by the booming market. In addition, housing for civil servants also creates problem of vertical equity whereas the level of subsidy is linked to the ranking in the state hierarchy. Hence, higher subsidy would go to state employees who are on a high rank and on a higher income (Chen and Chang, 1993).

Horizontal equity is also violated as existing policy allows differential retainment of subsidy between purchasers and renters in public housing sector. A household who choose to purchase a for-sale public housing unit is able to acquire freehold of the property and enjoy the full benefit of the subsidy. Profit generated from asset appreciation can be retained upon resale and the household would be eligible for public housing again after five years. On the contrary, if the household opts for public rental housing, the rental right is not guaranteed. In areas of higher demand (for instance Taipei), rental contracts are renewed on a two years basis and there is a ceiling of three consecutive contracts for such renters (Taipei Public Housing Department, 2000). Thus, renters are only able to enjoy less benefit from state subsidy than their counterparts who have opted for housing for sale.

Another source of horizontal inequity arises from the costing policy of public housing. Public Housing legislations require public housing for sale be priced below market price and at the same time the no-profit rule should apply. This would preclude the possibility of cross subsidy as an individual project is not allowed to generate “profit” to compensate for other loss-making developments. As one important component of the cost is land acquisition which can vary substantially both spatially and temporally. Under such accounting rules, it is possible that public housing projects in the same region can command a big difference in sale price depending on the timing of land acquisition (Chen Li-chun, 1991).

Finally, efficiency of targeting is another contentious issue. As the responsibility of implementing various state housing programmes rests with different departments, there is a
general lack of co-ordination among such programmes. For instance, beneficiary targets for housing for the workers in fact overlaps with the target for interest subsidy to first time buyers (Chen Li-Chun, 1991). Likewise, the recently introduced housing subsidy for young people also shares similar targets with public housing programmes. Perhaps one apparent loss of targeting efficiency is the subsidy to lower-middle-income households who are not eligible for public rental housing but find themselves difficult in shouldering the mortgage burden. They are excluded from public rental housing and have to opt for the home purchase option of public housing (for-sale housing or interest subsidy for home purchase). Yet these households are worse off in terms of living environment improvement as they have to trade off housing quality for a lesser burden of housing cost as the periodically repayment of mortgage is always pricier than rent. It also exposes such households to higher financial risk of an unstable housing market and the liability of a big mortgage (Chen Li-Chun, 1991).

Concluding Remarks

Four features of housing system in Taiwan we have described so far can be identified. First, the Taiwan housing system is market dominated and the state just plays an insignificant role. At the same time, state subsidies are inequitably distributed. Second, despite little state intervention, the market has been largely successful to solve the housing problems and the people in Taiwan are well housed. Third, Taiwan is a nation of home owners and home ownership, not just being the desired tenure, is also a cultural symbol of wealth. Fourth, there is a paradox that there is a long term upward trend in house price amidst a sustained over-production in the residential sector.

Two questions also beg our attention when the Taiwan housing system is analysed from a comparative perspective: a) Why state intervention in Taiwan is so minimal compared with a much stronger state presence in the housing arena in other Asian Tigers; b) if Taiwan is so different, does it fit in the Little Tiger Regime advocated by Doling (1999). Although our discussion in this paper is not sophisticated enough to be conclusive on such issues, it nevertheless helps to offer insight on further research.

Doling (1999), in framing his “Little Tiger” housing policy regime, identifies “some strong common threads waving through the development of housing policy in the Little Tigers” (p247). In the area of housing development, not only did the state realized housing as a productive sector and took a pro-active role in the provision of housing, it is highly involved “in organizing the factors of production [of housing]” (p247) to ensure the development target can be materialised. In the arena of housing construction, the state instead relied on the private sector and intervened to encourage the construction sector to be more capital intensive and productive. In the consumption side, housing in the Little Tigers remains a commodity of private consumption commensurate with the ability to pay, even in countries where the public sector is big.

Whereas the development of Taiwan is concern, the construction and consumption arenas are definitely market dominated. Yet whether the state plays a significant role in housing development is not so apparent. Looking retrospectively, state involvement in housing started as early as 1949 and an organized large scale effort in public housing provision also took shape when the Planning Committee of Public Housing was form in 1959. Taiwan was in fact not lagging behind in public housing development compared with Hong Kong and Singapore.
which started their public housing programmes in respectively 1954 and 1964. Taiwan also realized the significance of housing to the national economic development and housing construction targets were incorporated into the six-year Economic Plan in 1976.

What makes Taiwan lagged behind subsequently in public housing provision relative to Hong Kong and Taiwan was its failure in delivering the development target. For instance, production of public housing fell behind the planned targets from 1959 to 1975 and the target for the six-year Economic Development Plan missed the housing production target even by half of what it was originally planned (Chen Liang-Chun, 1991). This perhaps reflects the capacity of the state in successfully organizing the factors of housing production. Three factors may account for this failure.

First, land is privately owned in Taiwan and land ownership as a constitutional right has a special political symbol in Taiwan. As an important political instrument for social stability, the redistribution of agricultural land was emphasized when the Nationalist (KMT) government regained control of Taiwan after 50 years of Japanese occupation. It is thus politically sensitive to acquire private land by administrative means for public use. Thus land for public housing development has to be bought from the market and this proved to be costly. Likewise, neither was housing development on public land straightforward as bureaucracy barrier and sectorial interest had made land transferal between government departments complicated, especially when the power imbalance between central ministries which held much public lands in metropolitan areas and local housing departments which were responsible for land acquisition is concern.

Second, the control of capital for public housing development is crucial to the successful implementation of public housing programme. For instance, the Central Provident fund acted as a cheap and secure source of public housing finance in Singapore whereas in Hong Kong, public housing facilitated the clearance of Crown land which could be transferred for commercial development in return for a high land premium for the state. Yet, Taiwan possesses neither of such mechanism and this stripped Taiwan an important secure of capital for public housing programme. It was even worse given the competing demand for capital for other public service, particular infrastructure projects which were perceived to be more significant for national economic development.

Third, market failure - the inability of the market to solve housing problem in a socially acceptable way is one of the triggering factor for state intervention. Yet, in Taiwan, it was the informal sector which filled the gap in an inadequate market provision. Self-built activity has been the main source of housing provision in rural areas and an important supplement in some metropolitan areas (which in practice was the home buyers who directly hired private builders to build)(Tseng, 1991). The informal sector was also an important source of housing finance before the 1980s (Chang, 1992). Likewise, contribution from the families and relatives helps many households to satisfy their housing demand. For instance, 18% of households lived in houses owned by their parents or in-laws in 1996 (Chiu, 1996). The existence of a strong informal housing system may perhaps explain why state intervention in housing in Taiwan is weak yet at the same time the degree of institutionalization in the housing market is not as mature as one would expect.

Housing in Taiwan thus appears to be unique in the Little Tiger Regime. It is conceptually interesting as it may offer the clues on which the model of Little Tiger Housing Regime can
be further examined. This paper has attempted to deliver empirical evidence and an initial exploration in explaining the absence of strong state intervention in the Taiwan housing system. Yet, more sophisticated data and indepth analysis are still needed to uncover the underlying socio-economic forces that shaped the development of housing in Taiwan and to advance our understanding on the Little Tiger Regime model.

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### Appendix  Schemes of State Intervention in Housing

#### For Low-income Households:

<table>
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<tr>
<th>Scheme (Responsible authorities)</th>
<th>Eligibility</th>
<th>Details</th>
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| Public Housing for Sale (Public Housing Departments) | - No ownership of housing units.  
- Holders of local resident registration for more than six months.  
- Lower income household (standard set by Executive Yuan – below median household income) | Modes of Subsidy:  
- Reduced interest mortgage  
- Exemption on transaction tax  
Output:  
- Up to 2000, 279539 units were built. |
| Public Rental Housing (Public Housing Departments) | - No ownership of housing units.  
- Holders of local resident registration for more than six months.  
- Lower income household (standard set by Executive Yuan – below median household income) | Modes of Subsidy:  
- Rents are set at a low price (8% annual return on provision cost.  
- Rents include management.  
Output:  
- In 1991, there were a total of 2651 rental units.  
- In 1999, 2830 units in Taipei. |
| Low cost housing (Social Bureau) | - Households without working ability, which required public assistance.  
- Low income households (below lowest quintile of income distribution). | Modes of Subsidy:  
- Low rent (Rent depends on the financial circumstance of households).  
Output:  
- In 1991, 2438 rental units (78% was in Taipei)  
- In 1991 total stock in Taipei 2088 |
| Mortgage interest subsidy for Home Purchase (Public Housing Departments) | Eligibility:  
- Same as that for Public housing for Sale Scheme.  
Modes of Subsidy:  
- Subsidized interest rate  
- Limit on the maximum floor area that can be purchased | Output:  
| Housing Subsidy for Young People (Respective municipal and county governments) | Eligibility:  
- Aged 20 to 40  
Income level same as that for Public rental housing. | Modes of Subsidy:  
- Subsidized interest rate  
Output:  
### II. For Designated Groups:

| Housing for Workers (Labour Bureau) | Eligibility:  
|-------------------------------------|---------------------------------------------------------------|
|                                     | • Workers in designated industries.  
|                                     | • No ownership of housing units in areas of work place.  
|                                     | • History of industrial insurance contribution.  
| Modes of Subsidy:                   | • Mortgage interest subsidy.  
|                                     | Output:  
|                                     | • Up to 2001, 187548 loans were provided.  

| Housing for Civic Servants (Human Resources Bureau) | Eligibility:  
|----------------------------------------------------|---------------------------------------------------------------|
|                                                    | • Employees of the central governments and public schools for at least one year.  
| Modes of Subsidy:                                  | • Subsidised interest loans.(varied with rank).  
| Output:                                            | • Up to 2000, 88385 loans and housing units were provided.  

| Housing for Dependants of Servicemen (Ministry of Defense) | Eligibility:  
|------------------------------------------------------------|---------------------------------------------------------------|
|                                                           | • Servicemen's families who own no private properties.  
| Modes of Subsidy:                                          | • Subsidies for sitting tenants in former Estates for Dependents.  
|                                                           | • Mortgage interest subsidy scheme to purchase private homes.  
| Output:                                                    | • Up to 2000, 55, 153 loans were rendered.  

| Loans to Indigenous People (Committee for Indigenous People) | Eligibility:  
|-------------------------------------------------------------|---------------------------------------------------------------|
|                                                             | • Indigenous people who are married and have received no state subsidies  
| Modes of Subsidy:                                           | • Subsidized loans.  
|                                                             | Output:  
|                                                             | • 2780 loans up to 1999  

Source: Classification of subsidy categories adopted from Chen Li-chun. (1991), Information on low cost housing supplied by the Social Bureau, information and updated statistics on public housing and mortgage interest subsidy in Taiwan from Construction and Planning Statistical Yearbook of Taiwan and Fuchien Area ROC 2001, information and updated statistics on public housing in Taipei from Taipei Housing Department (2001), Information on Housing for workers from Labour Commission (2000), Information on Loans to Civil Servants from Civil Service Bureau (2000), Information on Housing for Servicemen and Loans to indigenous People from information supplied by the Urban and Housing Administration, Council of Economic Planning and Development.