A Conceptual Model for improving housing affordability in Sydney

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ABSTRACT:

Housing at an affordable price is a dream for many low to moderate income families as the standard variable mortgage rates on mortgage loans have been pushed to above 9 percent (February 2008) - the highest since late 1996 - and the Reserve Bank of Australia is expected to increase the cash rate again in the near future. The higher the mortgage rates the more difficult it is for low to moderate income families to gain access to home ownership, or even to keep their current homes. There are many suggested solutions to improve housing affordability for low to moderate income families, such as land planning and government assistance. This paper, however, introduces an alternative model improving housing affordability, i.e., the government, private firms (developers/investors) and the low to moderate income families working together in a model that will help these families to improve their ability to rent or access home ownership. The study is organised in the following sequence: Firstly, a review of the literature on housing affordability to compare benefits and disadvantages of policies; secondly, a proposal for a conceptual model describing the roles of each party and demonstrating how, working together, they can achieve a solution. Finally benefits and risks of the participants are analysed leading to a conclusion.

Keywords: Housing Affordability, Conceptual Model, House Price, Homeownership

INTRODUCTION

The recent affordability report by HIA (2007) shows that the HIA-Commonwealth Bank Housing Affordability Index again fell to under 100 for first home buyers. In Sydney, house prices are among the highest in the world. The median house price reached AU$560,132 and median unit price AU$406,045 in June 2007 (Matthews, 2007). According to HIA (2007), "Housing affordability" refers to the extent to which *the purchasing of a house is within the means of an average household at a given point in time.* Housing affordability is a critical issue in Australia, especially in the capital cities of Sydney, Melbourne, Brisbane, Adelaide and Perth, where housing prices continue to increase together with increasing mortgage rates. There were three interest rate increases in 2007 and the standard variable mortgage rate on some loans have been pushed up to above 9 percent (February 2008), coupled with an ongoing increase of house prices and shortage of housing stock. The affordability has fallen since mid-1997 to a level comparable to that reached in 1989, even though interest rates in 2008 are very much lower than they were in mid-1989 when they peaked at 17% (ABS, various issues). The average household in Australia is straining under severe mortgage stress, with 37.4 percent of household income taken up in payments

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on the average household mortgage, or 24.8 percent of the income going towards rent, according to the latest statistics from the Real Estate Institute of Australia. With 35 percent of household now having a mortgage compared to 27 percent a decade ago, the number of NSW mortgage holders with repayments overdue more than 90 days raised by twice the national average (Reserve Bank, 2007). The New City (2007) estimated that house prices have risen 75 percent faster than wages over the past two decades; and the proportion of owner-occupiers in the 25 to 35 age group dropped by 10 percentage points in the last 20 years.

Figure 1 indicates that the obvious cause of deterioration in housing affordability is the massive increase in dwelling prices. Over the past 10 years the median dwelling price has almost doubled across Australia. Significantly, over the same period affordability has almost halved (HIA, 2007). Household income has grown steadily and interest rates edged higher since 2002.

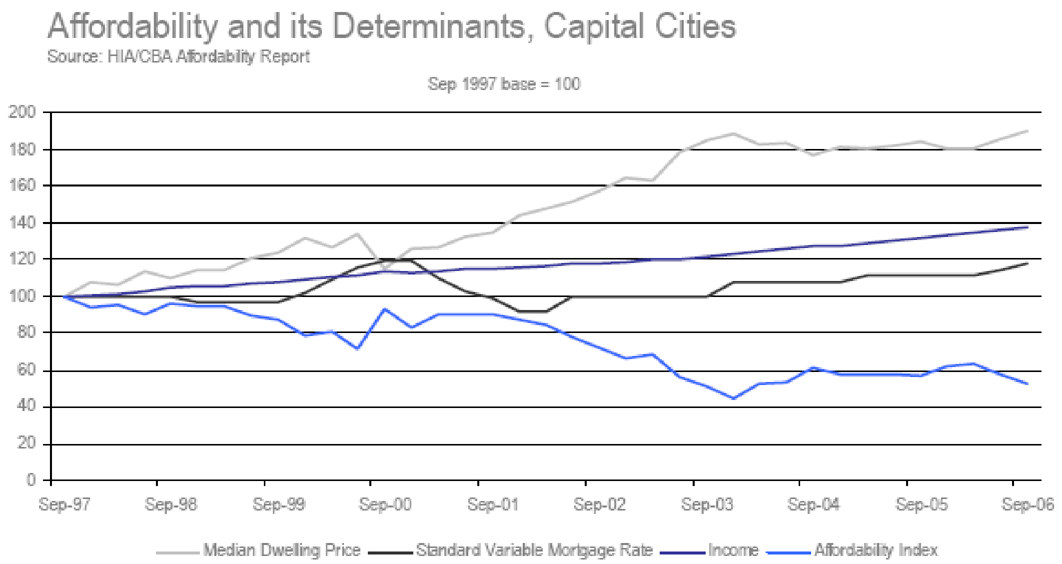

Figure 1: Housing Affordability Index, Australia (Source: HIA, 2007)

A survey by Cox & Parletich (2007) indicated that Australia has been rated as one of the "severely unaffordable or seriously unaffordable" countries in the world, where the national Median house price was 6.6 times annual income (Sydney was 8.5) more than double the "affordable" standard of 3.0. Figure 2 illustrates the situation in all markets of Australia where there has been a marked loss of affordability over the past 10 years (Cox and Parletich, 2007). The higher the ratio or median multiple is, the less affordable is housing. The affordability rate indicates that Australian low-moderate income families have trouble finding affordable, secure and appropriate housing (AHURI, 2007). Beer, et al. (2007) estimated that there are 700,000 to one million households who need affordable housing in Australia. Compared to other countries (Figure 3), housing in Australia is less affordable. Low to moderate income families incur financial hardships and difficulties to buy their own house. The causes of housing affordability stress could be multiple, interacting and complex (AHURI, 2007), involving higher dwelling prices, higher mortgage rates, lack of low rent housing and lack of acceptance of low-cost housing in the community, as well as changes of housing preference and speculative activities. The stresses also prevent the objectives of the Australian government to extend homeownership and social well being. It is therefore important to explore possible measures to improve housing affordability.

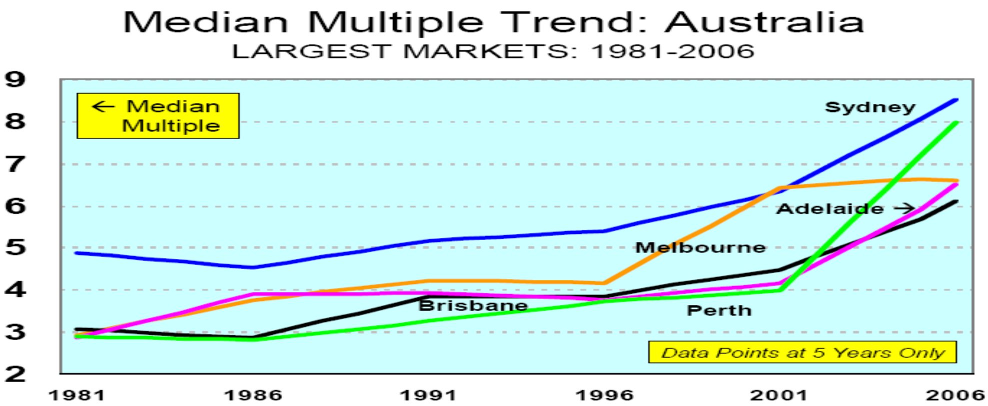

Figure 2: Median Multiple Trend: Australia [Source: (Cox and Parletich, 2007)]

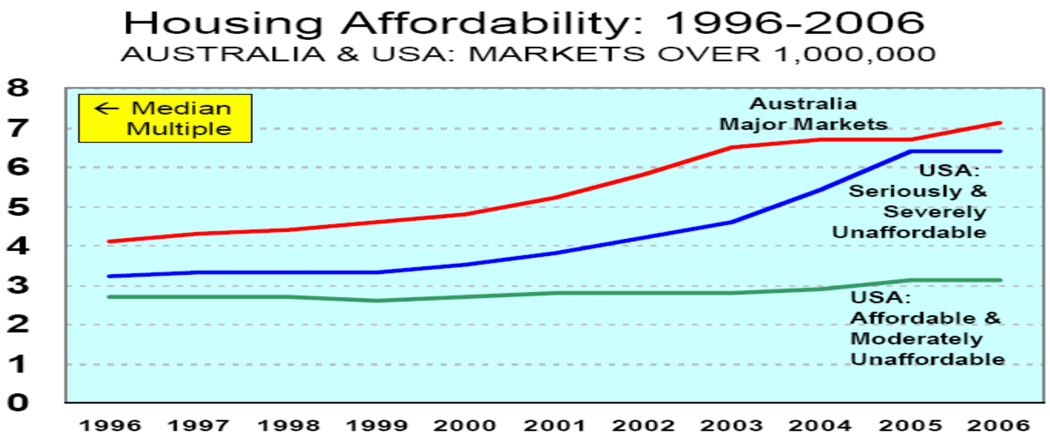

Figure 3: Housing Affordability in Australia and USA [Source: (Cox and Parletich, 2007)]

The purpose of this paper is to describe an alternative policy that proposes a conceptual model – co-operation between government, private firms (developers/investors) and the low-moderate income families – to assist the low-moderate income families to gain access to home ownership. The study is organised in the following sequence: Firstly, a review of the literature on housing affordability to compare benefits and disadvantages of policies; Secondly, a proposal for a conceptual model describing the roles of each party and demonstrating how, working together, they can achieve a solution. Finally benefits and risks of the participants are analysed leading to a conclusion.

LITERATURE REVIEW

Improving affordability and extending home ownership are perennial concerns reflected in the literature on affordability, housing standard, government policy and subsidies for assisting homeownership for low-moderate income families. Home ownership has impacts on a) individual wealth; b) individual health, both psychological and physical health in term of self-esteem and/or perceived control over life; and c) youth behaviours, by lowing the probability of teenage parenthood and increasing the probability of success in education (Rohe et al., 2002). Two issues have been addressed in particular regarding housing affordability for the low-moderate income families: lack of down-payment for accessing home ownership and lack of income to pay rent or mortgage over time.

Improve down-payment

To help the down-payment, mortgage deregulation has played important roles over the last two decades, in which the mortgage market offered a wide range of products, including high loan to value products, self-certificated mortgages as well as sub-prime loan (Mercer, 2003). Deregulation is a process that opens up the mortgage market to competition, which enhances widening access to housing finance from banks or financial institutes for housing buyers. Diamond and Lea (1992) suggested that deregulation provides efficiency in terms of the price of mortgages, given the terms attached to them and the way in which risk is allocated. The benefits of mortgage deregulation include that they improve affordability by allowing many low-moderate income families to reduce the burden of down-payments by borrowing more in relation to primary and secondary incomes and in relation to property value for the purpose of gaining access to an affordable home ownership. However, the consequences of the mortgage deregulation are that they increase the risks for the low-moderate income home purchasers, who have to extend the period of mortgage payments or increase the amount of each mortgage instalment, in order to meet the mortgage interests and principle payments to the lenders. Stephens (2007) examined how the deregulation of the mortgage market had important impacts on the structure of the mortgage industry, on society and on the economy. He suggested that mortgage market deregulation had not only allocated higher gearing risks associated with homeownership, but also contributed to higher house prices due to inelastic housing supply. The higher level of housing prices creates more hardship for low-moderate income families aiming for home ownership. In terms of economic impact, Stephens suggested that mortgage deregulation changed the relationship between interest rates and the housing market and the housing market and the economy by making the demand for credit more interest sensitive. In Australia, deregulation was recommended by the Campbell Inquiry (1981) and the Martin Report (1983) when the mortgage interest rate ceiling on all new savings banks' loans for housing was removed. Wood and Bushe-Jones (1990) examined post-1985 interest rate, house price and incomes data from six capital cities and computed movements in the deposit gap (the difference between borrowing capacity and house prices) in Australia and found that house price inflation was the major factor contributing to a widening of the deposit gap. Oikarinen (2008) demonstrated a significant two-way interaction between housing prices and housing loan stock in Finland, and suggested that the availability of credit eases liquidity constraints of household, which is likely to lead in higher demand for housing reflected in higher housing prices. On the other hand, housing prices significantly influence household borrowing through various wealth effects. The easier it is to get mortgage finance, the greater the demand and the more are borrowed, increasing the risks of default. The higher the house price inflation, the higher the chance that interest rates raise, making homeownership harder to obtain. This phenomenon is a malignant-cycle for the low-income families.

There are many costs involved in obtaining ownership. Apart from down payment, agent fees, mortgage stamp duty and transaction tax, moving expenses, initial home repairs; add another two to five percent to the property value in upfront costs. The relationship between savings and down payment had been studied by Mayer and Engelhardt (1996), who used survey data in US to explore housing affordability for first-time buyers by looking at how buyers financed their homes. They found that first-time home buyers relied on gifts from relatives rather than on their own savings in accumulating the down payment and consistent increases in house prices had a significant effect on down payment accumulation. Government provided assistance for the first home buyers is another way to help with the down-payment problems. An example can be viewed through the First Home Owner Grant (FHOG) scheme which was introduced on July 2000 in Australian. The scheme provides a one-off grant of up to $7,000 to first home buyers that satisfy all the eligibility criteria (FHOG, 2000). Each State government has its own scheme, such as the NSW First Home Plus Scheme provides generous exemptions or concessions on transfer and stamp duties for eligible first home buyers in order to assist low-income families to achieve home ownership. Government subsidies are short-term solutions to take away stress from lack of saving for down payments. However, this scheme can only help families who lack savings but have a permanent source of income to pay the on going mortgage services.

In mainland China, most housing used to be provided by individual firms which belonged to the government, but homeownerships have gradually become more popular since the economic reforms in the late 80s. The higher rate of homeownership attained was through the selling of housing by individual firms at discounted prices. Many young people or families who were not working in government recognised firms (Guoying Danwei), had to step into the private housing market. With a rapid increase of population in the cities, housing prices begun to boom after 2001 which means that most families will never be able to access homeownership based on their income. Li and Yi (2007) examined the housing finance system in Guangzhou and found that the main source of money facilitating home purchases is the nationwide mandatory Housing Provident Fund (HPF). However, only about 20 percent of home purchases were financed by the HPF and personal savings and parental support were the most important sources of funding for home purchase. Access to mortgage finance has played a relatively minor role in China's drive towards homeownership.

Income subsidies of rent and mortgage payment

Long-term strategies are required to improve housing affordability. For many low-income families, low income is another reason for delaying or giving up on homeownership. Housing affordability is a policy and community concern in many nations. Policies mainly attempt to use land-use planning to influence private development to incorporate elements of affordable housing provision (Paris, 2007). In Australia, housing policy has been influenced by a Neo-liberalism that emphases market-based solutions, with a range of direct and indirect government assistance programs to support private investment in housing for both homeownership and private rental (Beer et al., 2007). Beer (2004) reviewed the debate on housing affordability in Australia and the role of planning systems in achieving affordability. He concluded that planning approaches per se offer relatively little prospect for improving housing affordability in Australia and the adoption of urban consolidation principles and urban containment boundaries by a number of state government had negative outcomes for housing affordability due to reduced land supply for housing and potentially higher regulation costs for developers to convert fringe land to residential development. Again in 2007, Beer, et al. further examined the role of neo-liberalism on the planning system in responses to housing affordability problems and concluded the strategies had a limited capacity to improve housing affordability. HIA (2007) research showed that home affordability has declined because of poor planning and housing policies by state and local governments. These policies have both increased the price of vacant land and decreased the supply of affordable housing and rental stock.

A Laissez-faire land-use planning system is used in Ireland (Norris and Shiels, 2007). They found that housing price inflation since the mid-1990s affected accessibility creating difficulties for many aspirant homeowners and concluded that the planning system contributed little to address the affordability. Planning limits on the expansion of urban areas has been linked to low housing output, monotonous low-density suburban development and an excess of single dwellings in the open countryside. Whitehead (2007) studied whether there is a link between land-use planning system and affordable housing with empirical evidence from England and concluded that the land-use planning to support the provision of affordable housing is one valuable tool. However, he suggested that large-scale government financial support is necessary if affordable housing targets are to be achieved. In Hong Kong, Chiu (2007) investigated the approaches and the effectiveness of the government in using the planning system and land policies to help provide affordable housing and concluded that the ownership of land and development rights enable the Hong Kong Government to operate a massive public housing program to meet the housing needs of half the population at affordable rent and price levels.

Apart from the land-planning system, another way to support long-term housing affordability is government subsidy policies. In the US, the federal government has provided mortgage insurance, secondary mortgage market, mortgage subsides, the mortgage interest deduction, the National Affordable Housing Act for supporting homeownership for over a century (Basolo, 2007), but homeownership is still a dream for many families. Basolo (2007) studied the attitudes of city mayors about local policies and homeownership as well as investigated explanations for support of homeownership policy in US. He found that cities are more likely to assist moderate-income households to achieve homeownership since large subsidies are required to adequately subsidize ownership for low-income households. The low-moderate income families may be unable to sustain the long-term costs of owning a home. Moreover, low-income buyers are likely to buy in lower cost areas that might have stagnated or have depreciating property values and thus they end up worse off.

A CONCEPTUAL HOUSING AFFORDABILITY MODEL

Affordability is a very complicated issue which cannot be solved by one model. This model tries to attract private firms to join in helping the low-moderate income families to get access for their shelters. There are increasing demands of mortgage financing for purchasing houses. One decade ago, only 30% of owners needed mortgage and 42% of owners did without finance. Among the total households in 2005/06, however, 35% of owners required finance and only 34% of owners did without. This implies that there is an increasing burden of home ownership because housing is more expensive and less affordable for purchasers. This increased burden is due to the rate of inflation and the nature of mortgage payments (Brueggeman and Fisher, 2008) in which household's income are unable to catch the consistent increase of housing prices.

Gibb and Whitehead (2007) suggested that there are three sources of finance for ownership: the individual household's own available resources; borrowing from others and therefore paying later; or contributions from others, notably through government taxation and subsidy. The low-moderate income families are not able to generate enough savings for down payments to become owners and/or rely on incomes for serving their debt payments without support from others. On the other hand, banks or other financial institutes incur higher risks for lending to low-moderate income families, and may not be able to lend enough to low-moderate income families who lack securities. Though the low-moderate income families can receive financing through sub-prime mortgage, they have to pay extra interest and insurance costs for risk compensation to the lending institutes due to their lower income. Moreover, government provided tax benefits and/or subsidies may only provide short-term support for the low-moderate income families because of resource limitation. Traditionally, land planning and family subsidies are the main measures to support the low-moderate income families. With scarcity of land for housing, low-moderate income families may be unable to sustain the long-term costs of owning a home and the lower cost areas might have great chance of depreciating property value (Basolo, 2007). Subsidy programs can solve only short-term difficulties for the low-moderate income families and increase burden for the government in the long term. There are also great burdens for the government to produce and/or manage public housing using tax payer's money. Solving affordability issues are difficult and complex tasks which are impossible to achieve by one single party and one single measure. Thus, an alternative measure is recommended to address the affordability issue; this is a conceptual model of collaboration among government, private firms (developers or investors) and low-moderate income families.

Description of the proposed model

The conceptual model is an agreement and a process of collaboration among government, private firms and the low-moderate income families to improve housing affordability. Government must be involved and to lead. Without government participation, improvement in housing affordability and home ownership will not be easily achieved. According to a HIA (2007) report, a slow release of urban land by State government, a significant rise in property taxation and an increase in fees and charges levied by Local Governments are the three factors that cause increasing housing prices. Improved affordability can only be achieved when the government is involved and is willing to give up some property tax. Both Federal and State government shall be responsible for improving housing affordability. However, the State governments are preferred to be involved in terms of implementation because they have the power, similar as the Federal Government, to make their own laws. Each state has its own constitutions, as well as a structure of legislature, executive and judiciary. The State Government can formulate appropriate housing policies based on its own available resources and market conditions. Private firms such as developers and investors can be one of the parties in the proposed model. Figure 4 illustrates the relationships among the parties in the model.

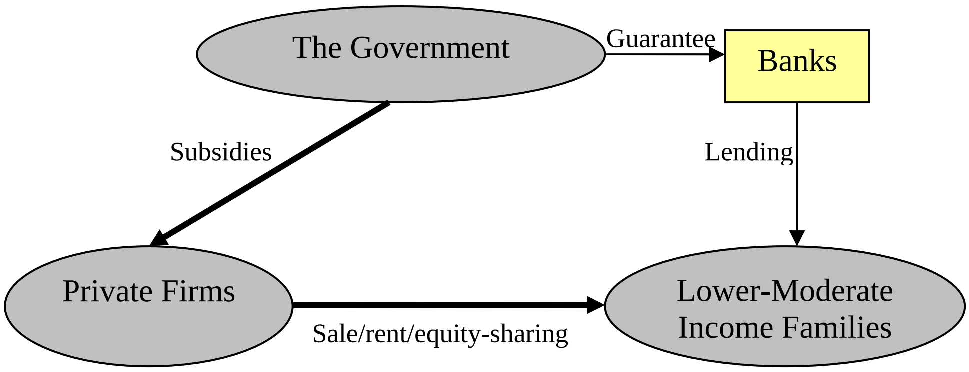

Figure 4: A Conceptual Model for Housing Affordability

In the proposed model, private firms are encouraged to join the housing affordability program by a series of negotiable conditions and policies provided by the governments. Currently the Federal government provides tax credits of $6,000 per dwelling to private firms that invest in affordable housing and the state government will also offer $2,000 per dwelling in cash or in kind assistance to encourage developers and investors to build residential properties for rent at 20% below market rates over the next five years (AFR, 2008). Other attractions include cutting stamp duty or infrastructure charges, the provision of cut price land, as well as negotiable density bonuses. However, the aim of private firms is to maximise profits of their investments. A question therefore arises whether the private firms can be attracted to the housing affordability program? How is the amount of tax credits determined? If the tax credits apply to all States, developers/investors may not want to work in Sydney because of the higher cost of land. The affordability problem in Sydney may not be relieved.

On the other hand, the State Government may be a guarantor of low-moderate income families, to secure mortgage lending provided by banks if required. The model only aims to assist low-moderate income families. Thus, the Government needs to define and determine the level of income that applies. Beer (2004) defined housing stress as when a household is in the bottom 40 percent of the income distribution and paying more than 20, 25 or 30 percent of their income on housing. According to Yates, et al. (2006), more than 1.1 million households spend more than 30 percent, and over 400,000 households spend more than 50 percent of their income on housing. Stone (2006) draws upon the US experience to formulate a residual income housing affordability standard for the UK and found that the method could differ from those based on the ratio standard. In Australia, three organisations produce affordability index for different purposes. They are the Housing Affordability Index measured by the Housing Industry Association (CBA, HIA) and the Home Loan Affordability Indicator measured by the Real Estate Institute of Australia (REIA), as well as the BIS Shrapnel Home Loan Affordability Index. Kryger (2006) explained that the Housing Affordability Index produced by HIA measures accessibility to home ownership for an average first-home buyer. It is calculated as the ratio of average disposable income per household to the qualifying income required to meet repayments on a 25-year loan, for 80 per cent of the median price of an average established dwelling purchased by a first-home buyer. An increase in the CBAHIA index represents improved affordability. On the other hand, the REIA Home Loan Affordability Indicator is a ratio of median family income to average new loan repayments. An increase in the REIA indicator represents improved affordability. Further more, the BIS Shrapnel Home Loan Affordability Index shows the proportion of full-time male average earnings needed to meet the mortgage repayments on a typical housing loan. A decrease in the BIS Shrapnel indicator represents improved affordability. Both indexes produced by HIA and REIA focus on family income and have the similar measurement. Accordingly, the Housing Affordability Index and Home Loan Affordability Indicator are more appropriate and could be used by the Government as indicators for determining income level of the low-moderate income families. The low-moderate income families can be categorised to a number of groups, for example, weekly qualifying income for loan less than $180, in between $181 to $294 and $295 to $497, which represents 30 to 35 percent of family income depending on which income group the families fall into. Table 1 is the group of family income applied by the company of City West Housing. Government will only guarantee for those low-moderate income families who are first-time buyers or families suffering from income stress and crisis for homeownership. Obviously, very few families are able to access homeownership without support at interest rate of 9 percent or above and a loan of $250,000. This information will allow government to determine how many families are eligible for the proposed model and how many rental houses to be provided.

Table 1: Family Qualifying Income

Groups	Family Income	Weekly Qualifying income
1	< $27,238	< $180
2	$27,239 to $43,622	$181 to $294
3	$43,623 to $ 73,819	$295 to 497

The proposed model is suggested as follows:

The developers/investors find sites to build townhouses or units that promise the number of units for selling or rent to the low-moderate income families at a rate 20 percent less than the market rent. The development sites are selected at a location with various cultures and communities, convenience for accessing public transportation, schools and shopping centres. The reasons for the particular sites are that many houses for low-moderate income families are located away from city centres and transportation. Not only have the buyers costs of living increased, but so has their wealth (Basolo, 2007). The developers/investors will be eligible for the government tax credits per household and receive benefits of density bonuses and charges. Most of developers/investors do not like equity-sharing with purchasers because of the potential for disputes. However, there is a benefit for the developers/investors to use some money for alternative investments.

The low-moderate income families can select options to rent, buy or equity-sharing with the developers/investors for the concessional housing if they are eligible. If they select to rent, they are only required to pay 80 percent of the market rent. In the case of purchasing the property, government will provide guarantee for their borrowing if required. The low-moderate income families can also have an option to share equity with the developers/investors if both parties agree. Di (2007) studied the relationship between length of homeownership and income using longitudinal data from the Panel Study of Income Dynamics between 1984 and 2001 in US and concluded that there is a positive association between length of homeownership and future household income. It is expected that the income of the low-moderate income families will be increasing when they accumulate working experience. Thus, they are then able to buy the part of shared equity from the developers/investors.

The benefits and risks of the participants in the model

Are there any benefits to the participants in the model outlined here? The answer is "yes". The low-moderate income family will benefit from rent payments matching their income and obtain a stable shelter for their families.

However, the government will be benefits the most from this model. Government has an inescapable responsibility to improve housing affordability for low-moderate income families to maintain economic and social stability. One of the benefits for government in the model is that it can promote its reputation for exercising social responsibility by supporting and improving housing affordability and homeownership. The government will benefit from employing the skills, expertises and money provided by the private firms, who have experience in constructing and managing housing efficiently and effectively. The Government is able to save tax payers money without being involved in public housing. Moreover, the model provides that the government is able to discharge its financial support to the low-moderate income families apart from the tax credits to the developers.

For the collaborative developers and investors, the aim will be profit maximization. The participating firms will receive benefits of tax credits and some others deduction of charges by government.

CONCLUSION

In Australia, many State Governments have established housing affordability strategies that incorporate an explicit planning system, such as Affordable Housing in Sustainable Communities Strategic Action Plan by the Queensland Department of Housing in 2001. However, policy reviews show that planning alone cannot solve the housing affordability problem (Beer et al., 2007). This study proposes an alternative model for low-moderate income families to improve their ability to rent or buy housing. The model brings together the government, private firms and low-moderate income families in order to create an affordable living environment for the low-moderate income families to access housing and ownership. The roles and responsibilities of each participant have been described and potential risks of each party have also been addressed. Recent response to the affordability crisis, incorporates the new government's plan to subsidy private firms to build an extra 50,000 houses over five years, 3,000 in the first year (CEC, 2008), which demonstrates the necessary for the proposed model.

The model adds to current policies of housing affordability. There is not one solution for solving housing affordability problem. This model is one alternative for improving housing affordability but it requires that Government must not only be involved in appropriate land planning, subsidise programs and other necessary measures, but also encourage private firms to participate in helping low-moderate income families.

The model requires further study by an empirical test for verifying whether the model can work properly for the involved parties. Whether private firms will be attracted to join the program, participate in equity sharing and accept the consequence of default of payments by low-moderate families will also need to be addressed.

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