

The 13th Asian Real Estate Society (AsRES) Annual Meeting
and International Conference Proceedings

第13届亚洲房地产学会年会 暨国际研讨会论文集

王洪卫 王 诤 主编

本书由上海华燕置业策划（集团）有限公司和上海万业企业股份有限公司赞助出版

The 13th Asian Real Estate Society (AsRES) Annual Meeting
and International Conference Proceedings

第13届亚洲房地产学会年会 暨国际研讨会论文集

王洪卫 王 诃 主编

江苏工业学院图书馆
藏书章

图书在版编目(CIP)数据

第13届亚洲房地产学会年会暨国际研讨会论文集/王洪卫,
王诃主编. - 上海:上海财经大学出版社,2008.7

ISBN 978-7-5642-0263-7/F·0263

I. 第… II. ①王…②王… III. 房地产-国际学术会议-文集
IV. F293.3-53

中国版本图书馆 CIP 数据核字(2008)第 092407 号

□ 责任编辑 史亚仙 等

□ 封面设计 周卫民

DI SHI SAN JIE YAZHOU FANGDICHAN XUEHUI NIANHUI JI GUOJI YANTAOHUI LUNWENJI

第13届亚洲房地产学会年会暨国际研讨会论文集

王洪卫 王 诃 主编

上海财经大学出版社出版发行
(上海市武东路321号乙 邮编 200434)

网 址: <http://www.sufep.com>

电子邮箱: webmaster@sufep.com

全国新华书店经销

上海望新印刷厂印刷装订

2008年7月第1版 2008年7月第1次印刷

889mm×1194mm 1/16 29.25印张(插页:1) 1033千字
定价:80.00元

第 13 届亚洲房地产学会年会暨国际研讨会论文集

编辑委员会

主 任：王洪卫 王 诤

副主任：葛震明 姚玲珍 杨太乐 方 芳 高晓晖

委 员：王洪卫 王 诤 葛震明 姚玲珍 杨太乐

方 芳 高晓晖 胡 昊 刘 伟 张学文

马祖琦 郑 睿 竺 叶 夏珊珊 张家耀

王夏儒 黄佳琦 梁 冲

前 言

为了进一步加强亚洲房地产领域内国际间的学术交流与合作,为中外房地产学者、业界人士以及相关政府官员提供一个高水平的互动平台,第13届亚洲房地产学会年会暨国际研讨会将于2008年7月12日至7月15日在中国上海举行。本届年会由上海财经大学和亚洲房地产学会(AsRES)主办,纽约城市大学巴鲁克分校房地产系与国际交流中心、加州大学伯克利分校城市经济与房地产中心、美国房地产与城市经济学会(AREUEA)、国际房地产学会(IRES)协办。会议交流的内容覆盖了住房保障、房地产可持续发展、房地产金融、房地产税收、开发投资、土地市场、城市经济以及政策法规等领域。具体安排上,除了举办关于目前理论研究和应用研究的大型专题研讨会外,还将就国内外若干热点问题设立专题论坛,给各界人士交流中国、亚洲地区乃至世界的房地产知识、经验和观点提供一个多维度、开放式的平台。

亚洲房地产学会(AsRES)成立于1996年,并在香港召开了首届年会。此后,又先后在香港、台北、夏威夷、北京、东京、汉城、新加坡、新德里、悉尼、温哥华和澳门等地召开年会,逐步成为国际房地产学术与应用领域最重要的国际会议之一,取得了令人瞩目的成就。2000年AsRES与清华大学合作,成功举办了第五届亚洲房地产年会。时隔八年,中国经济继续飞速发展,房地产业生机勃勃,学术氛围日益浓厚,AsRES又一次来到中国大陆。上海这颗美丽的东方明珠,作为中国经济的龙头,历来是国际间进行学术交流的胜地;刚刚成功举办了九十周年盛大校庆的上海财经大学,作为中国首屈一指的财经类院校,为中国经济发展培养了大量高素质的专业人才。本届AsRES选择了上海,选择了上海财经大学,这是对我们经济领域特别是房地产领域里取得成绩的肯定,是我们的荣耀,也是我们今后继续做出贡献、培养出更多优秀人才的动力!

本届年会从筹办伊始,就得到了国内外学术界的广泛关注和参与,共计收到会议注册申请600多份,提交论文近400篇。各位学者知识渊博,见解独到,选题大多是学术前沿性的问题,并且含有很强的现实意义。但由于篇幅限制,这里对参会的论文只选择了部分出版,并在出版过程中对部分论文进行了修改。希望通过这次年会的举办,以及会议论文的发表,这些研究成果能为更多的人所拜读,能为房地产领域内宏观政策的制定提供一定参考,能为推动亚洲和世界房地产业的健康发展做出积极贡献。

会议的顺利筹办,离不开各方人士的鼎力支持,我们对此深表感谢。

我们已经做好了充分的准备来迎接这次盛会的到来,希望国内外学者可以在此交流切磋,各抒己见,诞生出更多的理论成果,让AsRES年会的盛况在上海得到传承和发扬!

王洪卫

目 录

Contents

前 言	1
-----------	---

Housing

A Conceptual Model for Improving Housing Affordability in Sydney	3
Xin Janet Ge	
A Management Model for Price-restricted Housing in Beijing	12
Wang Hao, Hu Yu-cun, Shen Qi-ping, Guo Xiao-ping	
A Modified Repeat Sales Index for Apartments: Using Both Transaction Price and Asking Price	19
Bae Ik-Min, Lee Chang-Moo	
A Study into the Demand for Apartments in Central Auckland	30
Xin Janet Ge, Francis P. F. Lai	
Bubbles in China Housing Markets	40
Rui Chen	
Defining Housing Submarkets in Beijing	46
Wenbin Li, Siyuan Di, Libo Hao	
House Price Trigger and Infusion Trap	60
Yikun Huang, Xin Janet Ge	
Research on Compensation System of Urban Housing Demolition Based on Evolutionary Game Theory	68
Jiangang Shi, Daizhong Tang	

Investment and Development

Investment Strategy for Redevelopment Projects under Uncertainty	77
Sandy Jia Jin Chen, Rose Neng Lai	
Principles of a New York City Real Estate Developer: How do They Apply to the Asian Market?	97
Lewis Friedman	

Land

Economic Impacts of Compensation Policies for Agricultural Land Acquisition in China: A Property Rights Approach	111
Lai Shih-Kung, Chou Ming-Hung, Hsu Shiao-Yung	

Real Estate Services

The Influence of E-Commerce on Business Performance: The Real Estate Brokerage in Taiwan Province	121
Huang Ming-Yi	
Group Property Valuation	131
Maryam Khalili Araghi	

REITs

Capital Structure Decisions in Turkish REITs	139
Isil Erol	
REITs Return Behavior and Legal Infrastructure: The 1993 Revenue Reconciliation Act and Inspirations for China Emerging REITs Market	156
Minye Zhang, Yongheng Deng	

Urban Economics

Brownfields and Redevelopment in China: Learning from the American Experience and Two Award-winning Redevelopment Projects in China	179
Barry Hersh	
Development of a Property-related Evaluative Framework for Urban Sustainability: Under the Property-led Urban Development Model in China	186
Yunqing Xu, Junjian Cao, Ramin Keivani	

Others

Skills for Engaging Communities in the Housing Neighbourhood Facilities Process: The European Experience	205
Rozilah Kasim, Abd Razak Ahmad, Sabariah Eni	
Tenants' Acceptance Level of Current Tenancy Terms for Selected Office Buildings in Kuala Lumpur, Malaysia	229
Yasmin Mohd Adnan, Tey Hue See	

住房保障与可持续发展

中国住宅业可持续发展的定量界定	241
姚玲珍 张小勇	
经济租赁房、经济适用房及廉租房比较分析	245
胡微红 唐燕云 胡 昊	
美国内城住房问题初探	253
马祖琦 孙晋芳	
我国廉租房融资拓展的研究	257
方 芳 张文龙	
中国大城市住房发展评估——以上海市为例	262
葛震明	

中国如何在土地短缺的情况下实现住宅可持续供应:英国的经验借鉴 269
曹军建

中国现有经济适用房和廉租房政策的公平和效率分析..... 275
钱瑛瑛 杨 颖

对城市居民实行住房“双轨制”的思考 281
张学文

住房投资需求、消费需求与租买选择——对北京的实证分析 284
牛 毅 叶剑平

住宅产业的绿色技术创新研究..... 300
华锦阳

土地市场研究

土地利用绩效评价及标准研究——以上海市为例..... 307
郑迎宁 胡 昊 邢元志

南京市征地区片综合价存在问题及完善研究..... 314
任 奎 周生路 叶 方

上海市产业用地结构研究..... 321
楼 江 李 爽

中国农村集体土地所有权现状及其改革研究..... 326
邢元志 胡 昊 郑迎宁

中国 26 个城市房地产开发的土地利用效率估算 330
邹琳华 高 波

中低价位住宅用地空间选择的优势度分析..... 340
吕 萍 甄 辉 张 帆

房地产金融

中国住房公积金制度发展及其问题探讨..... 347
曹建元

国外住宅消费融资模式的比较与我国的选择..... 350
潘爱民 叶卫东 宋 军

上海发展房产倒按揭贷款的探讨..... 355
应望江 吕 庆

房地产价格

城市内土地、住房价格空间结构研究综述 365
顾 杰

城市交通对住宅价格影响研究——用 Hedonic 住宅价格法对北京市住宅市场的实证研究 375
曲卫东 常青青
我国房地产价格对消费、投资的影响研究 385
杨大楷
城房指数的广州实践 389
廖俊平 余焰城 巩 峰

房地产管理

非居住物业维修资金管理问题研究 397
叶 方
试论物业管理纠纷的防范 401
郭宗遼 周 烨
住房维修资金政府代管阶段保值增值问题研究 404
刘 伟 方 芳

房地产税收

房地产税税负归宿研究:基于房地产市场结构视角 411
程 瑶
我国房地产保有环节的税负分析 415
高晓晖 付 蓉
中国物业税税基评估体系及批量评估技术的应用研究 419
丁 科 胡 昊 葛震明

其 他

大学周边商业地产发展分析——以复旦大学为例 427
何 芳 叶嫔华
基于 Z 值模型的上市房地产公司财务风险预测研究 433
沈 洪 杨雪芬 王玉芝
中国三大都市圈产业发展的现状、问题与对策 438
陈康幼 张 杨
推动中国新型节能门窗的发展 442
龙文志
上海市郊区农民建房政策构建——从宅基地角度的分析 448
王克强 胡海生 刘红梅

Housing

A Conceptual Model for Improving Housing Affordability in Sydney

Xin Janet Ge

(School of the Built Environment, University of Technology, PO Box 123 Broadway, Sydney, NSW 2007, Australia)

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

1 Introduction

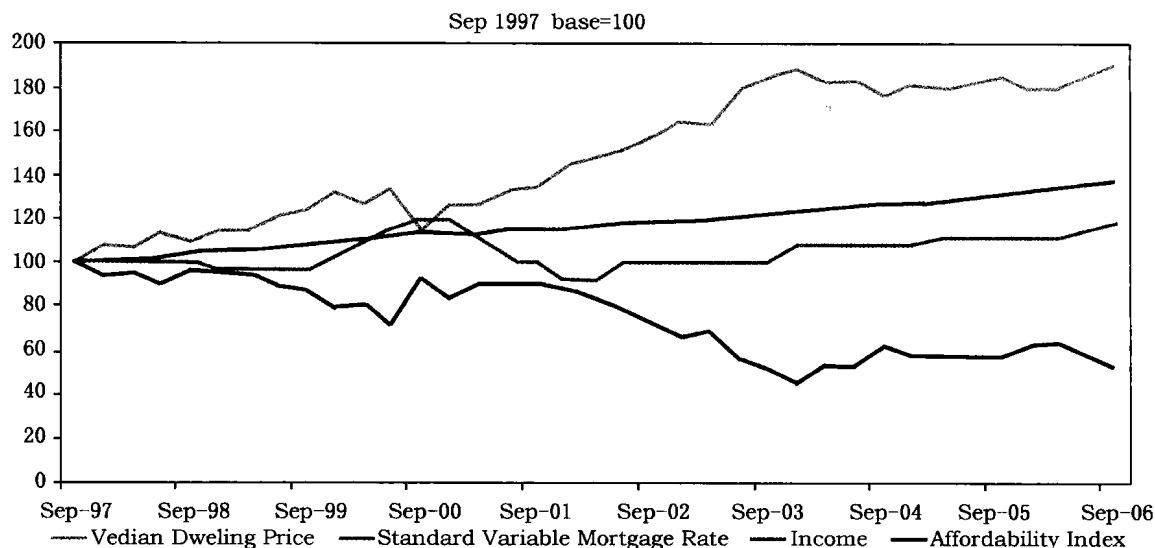
The recent affordability report by HIA (2007) shows that the HIA - Commonwealth Bank Housing Affordability Index again fell to under 100 for first home buyers. In Sydney, house prices are among the highest in the world. The median house price reached AU \$560,132 and median unit price AU \$406,045 in 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 rates 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 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.

Affordability and its Determinants, Capital Cities

Source: HIA/CBA Affordability Report



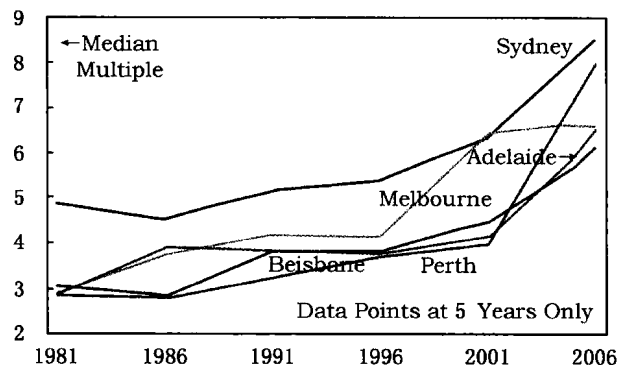
Source: HIA, 2007.

Figure 1 Housing Affordability Index, Australia

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.

Median Multiple Trend: Australia
LARGEST MARKETS: 1981-2006



Source: Cox and Parletich, 2007.

Figure 2 Median Multiple Trend, Australia

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

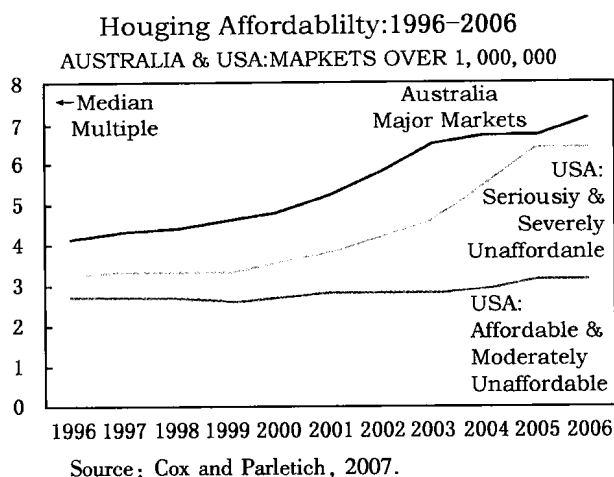


Figure 3 Housing Affordability in Australia and USA

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.

2 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 lowering 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.

2.1 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, for example, 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 ongoing mortgage services.

In 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 1980s. 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 organized 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 some families will never be able to access homeownership based solely 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).

2.2 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 emphasises 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 ca-

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 SAR, 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 SAR 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 subsidies, 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.

3 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 2005/2006, 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 incomes 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 is 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.

3.1 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.

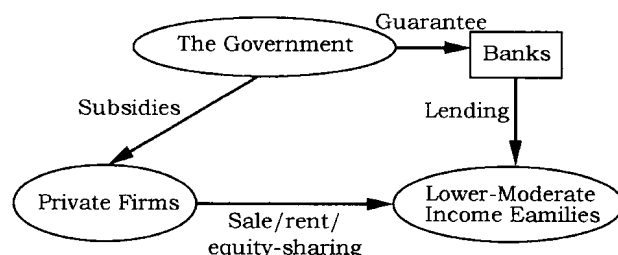


Figure 4 A Conceptual Model for Housing Affordability

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. Question therefore arise: Can the private firms 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 per-