



Refereed papers presented at the 4th Australasian Housing
Researchers Conference
Sydney, 5th - 7th August 2009

Factors Affecting Housing Affordability and Preferences of the Elderly in Hong Kong

Prof. Francis K. W. Wong and Prof. Eddie C. M. Hui & Mr. C. K. Ko
Department of Building and Real Estate
The Hong Kong Polytechnic University

Dr. K. W. Chung
Department of Applied Social Sciences
The Hong Kong Polytechnic University

The online version of this article can be found at:

<http://www.fbe.unsw.edu.au/cf/apnhr/>

May 2010

National Library of Australia Cataloguing-in-Publication entry

Title: 2009 Housing Researchers Conference [electronic resource] :
refereed conference proceedings /
William Randolph ... [et al.]

ISBN: 9781740440325 (eBook)

Subjects: Housing--Research--Pacific Area--Congresses.

Other Authors/Contributors:

Randolph, W.
University of New South Wales. City Futures Research
Centre.

Dewey Number: 363.5099

Published in Randolph, B., Burke, T., Hulse, K. and Milligan, V. (Editors) (2010)
Refereed papers presented at the 4th Australasian Housing Researchers Conference, Sydney,
5th - 7th August 2009. Sydney: City Futures Research Centre, University of New South
Wales.

The papers published on the as part of the proceedings from the 4th Australasian Housing
Researchers Conference have all been subject to a peer reviewing process.

The contents and any opinions expressed represent the views of the authors only. This
publication is copyright. Apart from fair dealing for the purpose of private study, research,
criticism or review as permitted under the Copyright Act, no part may be reproduced without
prior written permission from the primary author.

Factors Affecting Housing Affordability and Preferences of the Elderly in Hong Kong

Prof. Francis K. W. Wong

Department of Building and Real Estate

The Hong Kong Polytechnic University, bskwwong@polyu.edu.hk

Phone: +852 2766 5821

Prof. Eddie C. M. Hui & Mr. C. K. Ko

Department of Building and Real Estate

The Hong Kong Polytechnic University, bscmhui@polyu.edu.hk & bsnickko@polyu.edu.hk

Phone: +852 2766 5881 & +852 2766 4309

Dr. K. W. Chung

Department of Applied Social Sciences

The Hong Kong Polytechnic University, sskwchun@polyu.edu.hk

Phone: +852 2766 5731

Keywords: Housing Affordability; Housing Preference; Elderly; Hong Kong

Abstract

This paper is mainly concerned with housing affordability and preferences of the elderly in Hong Kong. An empirical study was conducted to investigate housing affordability and the preferences of the better-off elderly. Traditional studies of housing affordability and preferences heavily emphasize on monetary factors, i.e. rent, income, and asset value. Yet, consideration of non-monetary factors, such as age, household characteristics, and health status, are being overlooked. Thus, this study focused on such non-monetary factors and investigated how these factors affect housing affordability and occupier preferences. The findings show that non-monetary factors such as age, health status, education level, and household features, exert a significant influence on housing affordability levels, while household features heavily affect the preferences of the elderly when choosing a housing unit. The study has significant policy implications for the government of the Hong Kong Special Administrative Region in the formulation of holistic housing policy for the elderly.

Introduction

As for other developed states and cities, Hong Kong is facing rapid expansion in the population of older people. By the end of 2008, 1.2 million of elderly were recorded, which is 17.1% of the total population and is the highest in the history of Hong Kong. It is estimated that the older population will reach 2.7 million in 2036, or 32% of total population (Census and Statistics Department, 2009). The elderly dependency ratio will increase from 170 in 2008 to 456 in 2036ⁱ.

The government is obliged to promote the well-being of the elderly; a concern which has been on the policy agenda since the colonial era. The leading principle of service to the elderly in Hong Kong is ‘*community care*’ and ‘*ageing in place*’. This means appropriate support should be provided to allow older persons to grow old in their home environment with minimal disruption. Government residential care services and nursing homes are the last resort for the elderly. Thus, the provision of affordable and preferred housing for the elderly is a critical step towards upholding the principle of ‘ageing in place’ and promoting the well-being of the elderly in Hong Kong.

In order to provide affordable and preferred housing for the elderly, it is necessary to understand and identify which factors influence affordability and the preferences of the elderly.

Aims of the Study

This study is a critical investigation of the factors affecting housing affordability and the preferences of the elderly in Hong Kong. Traditional perspectives on housing affordability and preferences heavily focus on monetary factors. For instance, income, assets, and rent; while those non-monetary factors, such as household features, age and education level, are overlooked. Hence, this study mainly focuses on non-monetary factors to see how these factors affect affordability and preferences. Recommendations are suggested to the government on formulation of a holistic housing policy for the elderly.

Research Methodology & Details

A structured questionnaire was designed as a tool for collecting data from the elderly. The target population consisted of the better-off elderly in Hong Kong. This is because relatively little research has been concerned on affordability and the preferences of the better-off elderly. It is usually taken for granted that the better-off elderly are capable of affording their own housing units and buying housing suiting their preferences. Such a perspective, however, overestimates the economics strength of these elderly people. ‘Better-off’ is a relative concept and is only a general term to describe all households

with incomes higher than the Monthly Median Domestic Household Income (MMDHI). Many better-off people can only just afford housing and some only by sacrificing living quality. In addition, their relatively high household income excludes them from government subsidies and protection. , They are ineligible, for instance, to apply for public rental housing under the current housing policy. Thus, it is worth looking into and exploring the factors affecting the level of affordability of the better-off elderly.

A person is defined as elderly if aged over 60. This definition is commonly adopted in the academic field. A better-off person is usually defined as a person living in a household, for which the monthly household income is over the relevant MMDHI. However, due to the difficulties of collecting precise information on household income, because of ignorance or an unwillingness to reveal, say, other criteria were used to distinguish and identify the better-off elderly.

Firstly, the elderly were only selected from better-off districts; a better-off District has an MMDHI above the average of Hong Kong, i.e. over HKD \$18,000 (Census and Statistics Department, 2009). In order to improve the chance of finding the better-off elderly, the scope was further narrowed to finding the better-off *Constituency* in an identified district. A better-off Constituency has an MMDHI above the average of Hong Kong. The *District Elderly Community Centre* in the identified constituency was invited to provide a venue for the research team to conduct questionnaire interviews. The collected questionnaires were further screened, recipients of Comprehensive Social Security Assistance and tenants of Public Rental House were excluded. This is because these two public welfare and housing schemes are eligible only for the worse-off households, and would not apply to the target population of this study.

The elderly were approached through the centres. The centres used, are located in Tsuen Wan, Kowloon City, Shai Tin, Wan Chai, and Sai Kung. Simple random sampling was used to collect information from the elderly. Due to potential illiteracy, the questionnaire was administered completely by the researchers.

Data Description and Summary

Totally, 125 elderly people answered the questionnaire but only 103 were used. 22 elderly were either CSSA recipients or tenants of Public Rental Housing and had to be excluded from the analysis. The following analysis is based on the data provided by the 103 effective questionnaires.

Individual Characteristics

The 103 questionnaires included 70 from Females and 33 from Males. The average age was 76.1. All respondents were retired and almost all had worked in primary industries or secondary industries, such

as *Manufacturing, Clothing, and Hawking*, before retirement. 41.7% of the respondents had received primary education only, while 35.9% had no education. 91% of respondents were married, but 43 (45%) of those were widows. 4% of respondents were single. The health conditions were generally good with most perceiving their health status is better (29.1%) or much better (23.3%) than other people in the same age group. It is also noteworthy, however, that 23.3% also claimed their health status was worse than that of other people in the same age group. Melituria and Hypertension were two common diseases of the elderly, but some also had serious chronic diseases, such as Heart disease, Cancer, or Parkinson diseases. Good health status enables respondents to live independently by performing daily activities and taking care of themselves. 72.8% and 78.6% of respondents were able to perform all self-care tasks, e.g. taking medicine, and undertake such daily activities as dining, without any assistance. The remaining percentage required assistance in performing at least one self-care task or daily activity.

Household Characteristics

As to household characteristics, only 39.8% of the respondents can be regarded as conventional or ordinary family, living with a spouse and with children. 36.9% of respondents claimed to be living alone and 19.4% respondents were living with a spouse only. This living pattern distribution is slightly different from that revealed by the 2006 census, where more than 50% of elderly people were living in conventional families. This explained firstly by the fact that nuclear families increasingly replace traditional families in modern society and secondly, because the study target population, i.e. the better-off elderly, are in better-off households, where the relatively high economic ability encourages children to depart from their parents and live independently.

As all respondents from Public Rental Houses were excluded, 89.3% of the respondents already owned their own housing unit. The remaining respondents were renting.

It is argued (Lau, 2001) that all households in Hong Kong can afford housing. The worse-off households can rely on CSSA and other public housing schemes to pay for or to subsidize rent and other costs. Better-off households are able to afford housing on their own. The study finding is in line with this argument. The better-off elderly are in general able to afford their housing. A subjective measure of affordability gave a mean score of 3.78, which indicates that the respondents felt easily able to afford their units.

Factors Affecting Housing Affordability

This study does not discuss the measurement of affordability. The study, instead, emphasizes those factors affecting affordability. Traditional studies have heavily focused on monetary factors, i.e. income, savings, assets, rent, and housing related costs (Howenstine, 1983; Maclellan and William

1990; Bramley, 1990; Hancock, 1993). Scholars have addressed different monetary factors and have attempted to incorporate them into a definition of affordability. Little researches have been conducted on how non-monetary factors affect affordability. This study, therefore, looked into the non-monetary factors and investigated the correlation between non-monetary factors and affordability.

Non-monetary factors can be divided into two categories. These are household factors and individual factors. The following hypotheses were set before the correlation investigation started:

1. The fewer the working adults in a household, the lower the affordability
2. The higher the age, the lower the affordability
3. The more health status has deteriorated, the lower the affordability
4. The less education received, the lower the affordability

Numbers of Working Adults in the Household

The study shows that the correlation coefficient between working adults in the household and unit affordability is 0.426, which means a fair degree of correlation. Table I shows that households with at least one working adult tend to have higher unit affordability than those with no working adults, and vice versa.

Table I Cross tabulation between affordability and number of working adult in a household

Affordability level	Distribution of Number of Working Adult in Household of Elderly				
	0	1	2	3	More than 3
1(very difficult to afford)	12.7%	0%	0%	0%	0%
2 (difficult to afford)	20.6%	0%	0%	0%	0%
3 (just affordable)	15.9%	9.5%	7.1%	0%	0%
4 (easily affordable)	34.9%	33.3%	42.9%	100%	0%
5(very easily affordable)	15.9%	57.2%	50%	0%	100%

It is not difficult to understand why with fewer working adults in a household, the housing is less affordable. However, it is believed that the elderly will be affected by this factor more seriously than other age cohorts. This is because the elderly are unable to generate high and stable incomes by participating in the labour market. Physical deterioration and voluntary retirement causes the elderly to depart from the labour force, stopping a major source of income.

In conventional families, the elderly can rely on their children to play the role of bread winner and bear the housing costs. In addition, saving and Old Age Allowances from the government further increases a household ability to afford accommodation. Yet, it is found that unconventional families

are increasingly being formed and more children are leaving their parents and living independently. It is not difficult to understand that those children who are not living with their parents, tend to avoid their responsibility for the housing costs of their parents, because they need to buy a house for themselves. Elderly people are more likely than others to live in household without working adult. Thus, the elderly are more likely to live alone or with an elderly spouse and are low in their ability to afford housing.

Age

It is commonly believed that with older age, the ability to afford housing will also be higher. This is because in the process of wealth accumulation, the saving ability of adults increases due to the earning ability which also increases due to career promotions, For instance, the earning and saving ability of a fresh graduate is lower on average than a person who has worked for 10 years. However, this commonly held view is challenged by the finding. The contextual different of elderly makes the correlation between age and affordability completely different. But, for the elderly there is little correlation between age and the ability to afford housing.

Even worse, the finding shows a negative correlation between age and the ability to afford housing; the correlation is -0.49, which is a strong correlation. To cross tabulate age and housing affordability, table II vividly shows how the affordability of housing decreases with higher age. All respondents are divided into 4 age groups, i.e. 60-69, 70-79, 80-89, and 90-99; it is found that for the age group 60-69, all respondents rated affordability as easy or very easy. The older age groups, however, found it more difficult to afford housing.

Table II Cross tabulation between age and affordability of housing

Affordability level	Age Distribution of Elderly (by Age group)			
	60-69	70-79	80-89	90-99
1 (very difficult to afford)	0%	6.5%	15.2%	0%
2 (difficult to afford)	0%	6.5%	27.3%	25%
3 (just affordable)	0%	6.5%	21.2%	75%
4 (easy to afford)	40%	34.8%	36.3%	0%
5 (very easy to afford)	60%	45.7%	0%	0%

The inverse relationship between age and housing affordability can be attributed to the specific context of the elderly. It is known that almost all of the elderly have left the labour force due to voluntary retirement or physical incapability. Once retired, the process of wealth accumulation stops but savings are consumed continuously. Public allowances are too small to increase the savings of the elderly. Originally, the government assumed that children would take care of their parents and pay their living and housing costs; but this assumption has proved to be flawed because children are

leaving their parents to live independently. The finding above suggests that these children, who have apart from their elderly parents, also feel no responsibility to bear their housing costs. With no way to increase their income and maintain savings, housing affordability for the elderly decreases the older they get.

Deterioration of Health Condition

Another factor where significantly affects housing affordability is health status. It is hypothesized that the more serious the deterioration of health, the lower is housing affordability. The elderly suffer many different diseases, it is important to investigate the correlation between health status and the ability to afford housing.

There is correlation between health status and housing affordability. For those elderly whose health has deteriorated, housing affordability will also be lower. The correlation is -0.541, which is significant. To cross tabulate health status and affordability, table III shows that the more the elderly perceive themselves as having poorer health than others in the same age group, they claim that housing is more unaffordable, and vice versa. 50% of the elderly, who rated themselves with worse health condition than the others of the same age group, claimed housing to be ‘*very difficult to afford*’. There were no elderly who rated their health highly and found housing ‘*very difficult to afford*’

Table III Cross tabulation between age and affordability

Affordability level	Distribution of Health Status of Elderly (1: much better; 5 much worse)				
	1	2	3	4	5
1(very difficult to afford)	0%	3.4%	0%	12%	50%
2 (difficult to afford)	0%	6.9%	29%	20%	12.5%
3 (just affordable)	8.3%	13.8%	11.8%	12%	25%
4 (easy to afford)	16.7%	44.8%	47.1%	44%	0%
5 (very easy to afford)	75%	31%	11.8%	12%	12.5%

Health condition does not directly relate to the number of diseases. The elderly usually have Hypertension and Melituria. These two diseases, however, are chronic but not as serious as other diseases, such as Cancer and Heart Disease. Medicines for these two diseases are government subsidized, and therefore exert little economic pressure on the elderly. However, it is also common for the elderly to have such serious diseases, as Heart disease, Cancer, and Parkinson’s diseases, which are far more serious, but the better and more appropriate medicines are excluded from government subsidies. The nature of healthcare is special, in that demand for medical treatment is inelastic in economic terms. This means people usually pay medical costs regardless of the size of the costs and are willing to pay for it at the expense of other living costs, including housing costs. Therefore, for

elderly who have a serious disease, medical treatment would reduce the level of housing affordability for them.

Education level

Education level is another relevant variable. Education levels are highly related to incomes as well as savings. It is interesting to look into education levels and see how it affects housing affordability. All elderly and those soon to be elderly, 50-59 year olds experienced no compulsory education. Only a few of them received education. Housing affordability for them is expected to be different to those born after 1970 when compulsory education was launched.

From the 103 effective questionnaires, it is found that correlation between education and housing affordability is 0.44, which is a medium level and positive correlation. It proves that those elderly with better education are less likely to be unable to afford housing. Table IV’s cross tabulation shows that better education reduces the possibility of being unable to afford housing. It is very obvious that the elderly with higher education levels will have higher housing affordability levels. For instance, 21.6% of the uneducated elderly, rated it very difficult for them to afford housing, the percentage decreases rapidly to zero if the elderly had received primary education or better. Higher education also guarantees better housing affordability. 56% of the elderly, who received secondary education or better, rated housing as ‘*very easy to afford*’. That percentage decreases to 27.9% and 21.6% if the elderly received only primary education or no education respectively.

Table IV Cross tabulation between Affordability and Education level

Affordability level	Distribution of Education Level of Elderly		
	No education	Primary education	Secondary or above
1 (very difficult to afford)	21.6%	0%	0%
2 (difficult to afford)	13.5%	18.6%	0%
3 (just affordable)	18.9%	13.9%	0%
4 (easy to afford)	24.3%	39.5%	43.5%
5 (very easy to afford)	21.6%	27.9%	56.5%

Hong Kong is a place without a comprehensive pension system and retirement protection. Their savings for retirement are entirely based on their occupations and income earning ability. Better education enables people to find jobs with more stable and higher incomes. In other words, low income implies limited saving and people are unable to buy investment products, such as, shares or insurance to generate future income. The structural change in the economy from primary and secondary industries to tertiary industries in the 1980s further reduced job stability and job incomes of lower level educated people. As a consequence, savings are too limited to afford housing and therefore, the low educated elderly are more likely to be unable to afford housing.

Factors Affecting Housing Preferences

Housing preferences is another realm that this study is concerned with. It was very important to collect precise information on the housing preferences of the elderly and to understand what factors will shape these housing preferences. The study has provided valuable information enabling the government to provide housing for the elderly which they preferred.

Before discussing the factors affecting housing affordability, the housing preferences of the elderly have to be understood first. A set of questions was designed to collect this information. Respondents were asked to rate their housing preferences on a Likert scale, where 1 represented 'strongly disagree', and 5 represented 'strongly agree'. The question asked to what extent the respondents agreed the importance of certain criteria in the choosing of a house or flat. The stated preferences were not supposed to taken into accounts any constraints, the economic resources of the respondents, for example.

The top 5 housing preference were, '*close to community facilities*' (3.8), such as an elderly centre, a park, and sports facilities; '*close to market or supermarket*' (3.8); '*live in a familiar community with strong sentiment*' (3.7); '*close to hospital*' (3.6); and '*close to social network*' (3.5), such as close to a friend or neighbour. Rather than focusing on the specific housing preferences themselves, this research aims at understanding what factors will affect the elderly's housing preferences.

Proximity to Community Facilities, Community Possessing Strong Sentiment, Proximity to Social Network

The rating of '*close to social network*', '*live in a familiar community with strong sentiment*', and '*close to community facilities*' are very high, this high score reflects that the elderly, in general, agreed the importance of these options and would prefer to have them if they were able to choose their own house.

Correlation analysis shows that these three different, but related preferences correlate with elderly household members. Correlation analysis shows that there is a significant correlation between the number of household member and these housing preferences (Table V).

Table V Correlation between Social Network, Community Sentiment, and Facilities

Factors between variables	Correlation
Number of household members VS preference to live nearby community facilities	-0.703
Number of household members VS preference to live in a familiar community with strong sentiment	-0.56
Number of household members VS preference to live in a their social network	-0.569

The strong and negative correlation means that the elderly are more likely to prefer their housing to be ‘close to social network’, ‘close to a familiar community with strong sentiment’, and ‘close to community facilities’ the fewer the number of members in household.

This finding can be attributed to two different, but related reasons. Firstly, it can be explained by the need for social activities. Social activities are needed by all human beings. The elderly have a strong need for social activities when they retire and originally, one of the functions of the family was to provide social activities, for instance, family gatherings. But family social functions are reduced as more children depart. Singleton elderly or elderly living with their spouses rely on the social network of friends and neighbours to provide social activities. A social network and a familiar community with strong community feeling are very important for those households with only 1 to 2 family members, i.e. singleton elderly or elderly living with spouse only. Community facilities, such as a centre for the elderly, provide a venue and different organized social activities for the elderly to participate in. Thus, the elderly with fewer household members are more likely to prefer to have community facilities near their houses.

Another reason for the correlation is the need for informal care. Informal care is that provided by non-family members, such as friends and neighbours. As stated above, more children are leaving their parents in order to live independently and so care by family or more precisely, by children is greatly weakened. Also, even for some conventional families, their adult children are often working long hours and this also weakens children’s caring role. Informal care provided by friends and neighbours is therefore important for the elderly, especially for those singleton elderly and the elderly living with a spouse. Moreover, the social workers in an elderly centre also provide professional care for the elderly, e.g. psychological care and social care. Hence, the elderly are more likely to prefer ‘close to community facilities’, ‘close to social network’, and ‘close to a familiar community with strong sentiment’ if they live alone or as an old couple.

Closeness to Market or Supermarket

The elderly also strongly prefer housing which is close to a market or supermarket. It is very important to know whether or not the elderly in Hong Kong prefer to live near a market. Some elderly people do prefer to live far away from market preferring a quiet and clean environment, but most prefer convenience at the expense of a quiet and clean environment. In order to discover who most preferred to live near a market, different variables have been cross tabulated. It is found that those elderly, who require assistance in moving, tend to rate closeness to market or supermarket higher. The details are presented in Table VI.

Table VI Cross tabulation between elderly requiring assistance for movement and close to market or supermarket

Elderly requiring assistance for movement	Distribution of the Likert rating on preference for closeness to market				
	1 (Completely disagree)	2	3	4	5 (Completely agree)
No	2.3%	5.7%	26.4%	46.6%	19%
Yes	6.3%	6.3%	0%	56.1%	31.3%

56.1% and 31.3% of elderly requiring assistance in moving scored 4 and 5 on the preference for a market or supermarket near their housing. Only 46.6% and 19% of those not needing assistance gave 4 or 5. The elderly requiring assistance in moving tend to trade-off quiet and clean living environment for convenience. The elderly are also less likely to drive a car, and this is another factor leading to a preference to be close to the market. Transportation costs and time are also saved. The departure of children to their own housing also increases the need for a close and accessible market, partly because the children may no longer be able to provide transportation by car. Being close to a market is, therefore, very important for the elderly, especially for those requiring assistance in moving.

Closeness to a Hospital

The elderly also prefer housing which is 'close to hospital' and it is found that this preference is strongly correlated with health status. The elderly have a higher preference for the option 'close to hospital' if their health condition is poor. The correlation is 0.472, which is a significant value. No elderly with poor status rated *strongly disagree* and *disagree* to 'close to hospital'; in contrast, 44.7% and 50% (21.4% + 28.6%) of elderly with better health condition rated *disagree* and *strongly disagree* respectively to show their strong concern to the housing which is 'close to hospital' (Table VII)

Table VII Cross tabulation between Health Condition and rating to close to hospital

Rating to the preference of 'close to hospital'	% Distribution of the Health Condition (1: much worse; 5: much better)				
	1	2	3	4	5
1 (Strongly agree)	66.6%	55.6%	32%	21%	3.6%
2	0%	33.3%	40%	18.5%	32.1%
3	33.4%	11.1%	20%	15.8%	14.3%
4	0%	0%	8%	44.7%	21.4%
5(Strongly disagree)	0%	0%	0%	0%	28.6%

The elderly with poor health require medical treatment regularly or physiotherapy. Cancer and heart disease requires regular treatment and prescriptions from doctors. The elderly who have suffered strokes require physiotherapy to recover physical movement, say once a week or once month. Closeness to hospital will reduce transportation costs and time. The elderly also usually suffer sudden heart attacks, strokes and accidents, such as broken bones. Being close to a hospital enables the carer to quickly send the elderly to hospital, thereby increasing the chance of survival.

Policy Implication & Recommendations

So far some factors affecting housing affordability and preference have been identified; individual factors, i.e. age, education level, health status; and household factors, i.e. the number of working adults in a household, influences housing affordability. The elderly also have strong preferences for living 'close to community facilities', 'close to supermarket', 'close to social network', 'in familiar community with strong sentiment', and 'close to hospital'.

To recapitulate who particularly will be strongly affected by these factors, the unconventional family, such as the singleton elderly or the elderly couples will be affected adversely due to lack of money support and lack of primary care provided by children. Secondly, those elderly with poor education will be adversely affected because poor education leads to limited saving and assets. Thirdly, the elderly in poor health with serious diseases will have less money available for housing because savings are consumed continuously to pay medical costs and no compensation is available.

In relation to housing preferences, the type and size of the family affects the choices of the elderly. Unconventional families tend to prefer a market and community facilities to be near their houses. Also, a social network and a familiar community with strong community spirit are critical to these elderly

because of the need for informal care and for social activities with friends locally. Those elderly with poor health also usually prefer a hospital near their houses for rapid access to its services.

Based on the findings, some recommendations to help government to formulate a holistic housing policy for the elderly are as follows:

1. Affordable housing should be provided for elderly couples and the elderly living alone, by softening the existing mean test criteria, to ensure that they are able to afford housing without having to reduce basic living standards.
2. Higher tax allowances should be provided to encourage adult children to live with their parents.
3. Investigate comprehensive retirement protection system to increase the housing affordability for elderly and the soon-to-be old.
4. A specific housing subsidy should be provided for those birth cohorts who received no compulsory education. The subsidy should be mean-tested.
5. Provide extra subsidies for those elderly with serious diseases. For instance, when the elderly are applying for public housing, health condition should be taken into account and subsidies for better medical treatment should be increased.
6. Hospitals or clinics should be built specifically for the elderly and located close to housing areas, where the elderly tend to live.
7. Community centres and markets should be close to areas where the elderly tend to live. Barrier free entrances should be built and different facilities must be easy to access.
8. The principle of allowing people to stay in their own houses as they age should be upheld. Avoid disrupting their social networks by removing them from their familiar communities.
9. If resettlement is necessary, housing in the original district should be provided to avoid disrupting social networks.

Conclusion

This paper has examined how some non-monetary factors affect housing affordability and housing preferences for the elderly. The better off elderly are relatively rich in economic resources and they are supposed to be capable of buying a house which suits their preferences. But different non-monetary factors discussed above can cause housing affordability be reduced. In fact, these factors are not confined only to the better-off elderly. It is expected that they will also exert adverse and even more serious effects for the worse-off elderly too. Further study is required, therefore, to investigate how the non-monetary factors above also affect housing affordability for the worse-off elderly.

Affordable housing does not imply that the housing is necessarily preferred, and vice versa. People usually settle for housing which is affordable at the expense of their housing preferences. Therefore,

only to concentrate on the issue of affordability is inadequate for understanding the full housing need picture for the elderly. Housing preferences must also be allowed for during policy formulation and the government should provide housing for the elderly, which is not only affordable but is close to their social and health care needs.

Acknowledgement

This project was funded by The Central Research Grants of The Hong Kong Polytechnic University. The Project Account Code is U-591.

References

- Howenstine, E. J. (1983). *Attacking Housing Cost: Foreign Policy and Strategies*. New Jersey: Centre for Urban Policy Research..
- Maclennan, D. & Williams, R. (1990). *Affordable Housing in Britain and America*. York: Joseph Rowntree Foundation.
- Bramley, G. (1990). *Bridging the Affordability Gap*. London: Association of District Councils.
- Hancock, K. (1993). Can Pay? Won't Pay? The Economic Principles of Affordability. *Urban Studies*, 30 (1), 127-145.
- Census and Statistics Department (2009). *Hong Kong Monthly Digest of Statistics*. Hong Kong: Government Logistics Department
- Lau, K. Y. (2001). *A Comparison of Indicator Used in Measuring Housing Affordability in Hong Kong and their Validity*. Hong Kong: Department of Public and Social Administration, City University of Hong Kong .

ⁱ The Elderly Dependency Ratio is calculated by the Person aged 65 or above / Person aged 15-64 X 1000