Boom or gloom: A comparative study of the propensity of first home buyers in Beijing and Shanghai

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Abstract

This paper seeks to contribute to a better understanding of the propensity of first home buyers in Beijing and Shanghai in urban China. Under planned economy since 1949, housing was provided by the State through the danwei or 'work unit' organizations at monthly rental of about 1-3 % of the household income. However, little revenue could be generated from such low rental, resulting in poorly maintained buildings and insufficient housing investment by the government. To tackle the severe housing shortage problem, urban housing reform was introduced in 1988. The objectives of the housing reform were privatization and commercialization of housing. The focus was on affordable housing, like the Anju (comfortable) housing project for ordinary households.

By way of background, this paper will present an overview of the property markets in urban Beijing and urban Shanghai since 1988. Although a lot has been researched in the housing reforms, housing preferences and housing inequalities, there has been very little research into the home owning propensities of first home buyers (FHB) in China. Based on data collected in Beijing and Shanghai in Autumn 2004, this paper will aim to test the hypothesis that the higher the total incomes of FHB, the higher the level of buying an apartment or house.

Qualitative method will be used, with over 50 in-depth interviews conducted in each of the two cities studied. For deeper understanding of their homeownership propensities, descriptive data of the interviewees was analysed under five categories, namely: the socio-demographic characteristics; income levels; housing choice; mode of finance; and impact of government policies to assist FHB. The data was then transcribed, summarized and processed using a spreadsheet. The interview results appear to support the hypothesis that fulfilling the homeownership dreams for first home buyers is the result of affordability.

Key words: First home buyers, affordability, Beijing, Shanghai, China

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INTRODUCTION

Homeownership is a relatively new concept in China and owing a house is a dream of many Chinese. It will take some 10 to 20 years or more to make this dream of buying an apartment a reality.

This paper examines the home owning propensities of first home buyers (FHB) in Beijing and Shanghai in urban China. The socio-demographic profile will identify who they are; how much they earn; why they choose housing in city centre or the suburbs; their mode of finance; and the impact of government policies on taxes, fees and subsidies to assist them as FHB.

Based on data collected in Beijing and Shanghai in Autumn 2004, this paper will aim to test the hypothesis that the higher the total incomes of FHB, the higher the level of buying an apartment or house. The interview results appear to support the hypothesis that the key to fulfilling the homeownership dreams for aspiring first home buyers is affordability.

LITERATURE REVIEW

Literature on Chinese housing is rich. Studies by Hamer and van Steekelenburg, 1997; Fong 1989; Chiu, 2002 on urban housing in China are a good introduction to the topic for this paper. The emphasis of housing reform was shifted from reductions in rent subsidies to wage increases (Shaw, 1997), then subsidized private housing ownership (Wang and Murie, 1996). The ultimate goal of housing reform was commodification of housing. Equity was also a concern (Fong, 1989a).

On the notion of affordability, the World Bank (1992) estimates that the ratio of housing costs to incomes ranges from 1.8 to 5.5 in developed countries, compared with 2.5 to 6 for developing countries.

Before and during the early years of the housing reform, housing was provided by the State but was allocated through the work units. Inequalities between (Whyte and Parish, 1984; Wu, 1996; and Logan, Bian and Bian, 1999) and within work units (Fong, 1989b; Chu and Kwok, 1990 and World Bank, 1992) were common.

Nevertheless, affordable housing for the people has been on top of the agenda of the State Council. In 1978, housing investment was only 1.3% of the Gross Domestic Product in China. With the introduction of housing reforms in 1988, it surged to 8.0% of the GDP. Table 1 shows housing investment as a percentage of GDP from 1986 to 2000. As can be noted from the Table, housing development accounted for a low of 6.3% in 1990 and peaking at 8.6% in 1999. Under the influence of leader Deng Xiaoping's tour of South China in 1992, housing investment activities increased dramatically.

Table 1: Housing investment as percentage of GDP

(Billion Yuan)

Year	GDP	Housing investment	Percent
1986	10202.2	777.8	7.6
1987	11962.5	944.2	7.9
1988	14928.3	1187.1	8.0
1989	16909.2	1194.7	7.1
1990	18547.9	1164.5	6.3
1991	21617.8	1417.4	6.6
1992	26638.1	1716.9	6.4
1993	34634.4	2725.8	7.9
1994	46759.4	3806.4	8.1
1995	58478.1	4736.7	8.1
1996	67884.6	5198.5	7.7
1997	74462.6	5370.7	7.2
1998	78345.2	6393.8	8.2
1999	82067.5	7058.8	8.6
2000	89403.6	7594.1	8.5

Source: China Statistical Yearbook 2002

OVERVIEW OF THE HOUSING MARKET IN BEIJING

Table 2 shows the basic conditions of urban households of selected Chinese cities. As the capital city, Beijing is the political centre of China. With a population of 13.8 million, the GDP per capita in Beijing is USD\$3,056. As shown in Table 3 the per capita monthly income of urban employees in Beijing (1,370 Yuan) is less than urban employees in Shanghai (1,395 Yuan), yet Beijingers have slightly higher per capita monthly disposable income of 1,245 Yuan than their Shanghainese counterparts of 1,234 Yuan. This is partly explained by the higher cost of living in Shanghai (per capita monthly living expenditure of 983 Yuan and second only to Shenzhen) than Beijing's per capita monthly living expenditure of 964 Yuan.

Table 2
Basic Conditions of Urban Households of selected cities
June 2004

Region	Average Number of Persons per Household (person)	Average Number of Employees per Household (person)	Average Number of Dependents per Employee (person)	Per Capita Monthly Income(yuan)	Per Capita Monthly Disposable Income (yuan)	Per Capita Monthly Living Expenditure (yuan)
Average	2.97	1.54	1.93	978.63	892.24	684.69
Beijing	2.95	1.54	1.92	1370.84	1245.62	964.48
Tianjin	2.96	1.48	2.00	927.62	864.07	703.57
Shanghai	3.04	1.53	1.99	1395.95	1234.15	983.72
Guangzhou	3.07	1.68	1.83	1512.24	1300.91	967.86
Shenzhen	3.25	1.70	1.91	2324.36	2175.33	1229.49

Source: China Statistical Data – www.china.org.cn

To sustain economic growth, the national housing reform was launched in Beijing in 1998 to increase homeownership. State-supplied housing was abolished and monthly allowance from the housing fund would be given to employees. In order to privatise existing public housing, the government had started selling existing public housing to residents since 1996 at construction cost. The purchaser also had the right to resell the property at market value and buy another apartment. Another option was the Housing Provident Fund where employees were required to put 5%-7% of their salaries into the fund to purchase a house or to construct a government-subsidised house. Those that had a shortfall in capital could borrow up to 70%-80% of the property value from banks such as the Construction Bank of China, which had established a mortgage lending system in 1992 (www.Platinum.Asia.com).

There are three kinds of residential housing in the Chinese market: commodity, economy and cheap rent. The Beijing Real Estate Association defines commodity housing for buyers with an annual income of more than 65,000 yuan, economy housing for buyers earning 7,600-65,000 yuan and cheap rent below 7,600 yuan. The price of commodity housing ranges from 4,500 yuan to 6,000 yuan a meter, or about 400,000 yuan for an 80-square-meter apartment. At least 70% of the middle and low income groups in Beijing lack the potential purchasing power (Business Beijing, 2000).

Table 3 lists the national unit selling prices of houses from 1997 to 1999. With the exception of low-cost housing, the average selling prices of houses, residential buildings, villas and luxury apartments were higher in Beijing than in Shanghai.

Table 3
Average Selling Prices for Houses, 1999 (Yuan/sq. m)

	Selling Price of	Residential	Villas & luxury	Low-cost
	Houses	Buildings	apartments	Housing
1997	1,997	1,790	5,382	1,097
1998	2,063	1,854	4,596	1,035
1999	2,053	1,857	4,503	1,093
Beijing	5,647	4,787	11,311	2,435
Shanghai	3,422	3,102	5,720	2,606

Source: China Statistical Yearbook, 2000

Economical housing is subsidized housing for low income families and cannot be resold. There is no government subsidy for commercial housing and commercial houses can be purchased and re-sold. As can be seen from Table 4, 32 per cent more commercial housing units were completed in Shanghai than Beijing in 1999.

Table 4
Completed Floor Space of Residential Housing, 1999

	Completed	Villa, High-	Economical	Commercial
	Residential	grade	Housing	Housing
	Units	Apartment	_	_
National Total	1,946,358	44,025	484,978	1,417,355
Beijing	92,008	6,476	3,902	81,630
Shanghai	120,923	4,144	8,800	107,979

Source: China Statistical Yearbook, 2000

To promote and support a growing residential real estate market, the Ministry of Construction announced in June 2001 the abolition of 47 types of taxes and fees associated with housing construction (China News Briefs, 2001).

OVERVIEW OF THE HOUSING MARKET IN SHANGHAI

Shanghai metropolis is the trading centre of China and occupies an area of 6,340 square kilometres. With a population of 16.7 million, Shanghai is one of the most densely populated cities in China. The GDP per capita is USD\$4,505, much higher than Beijing's GDP per capita of USD\$3,056. The housing policy measures since 1999 aim at commodification of housing.

Urban housing reform has changed the welfare system of housing to a more market-oriented system. Before the economic reforms in 1978, housing under the old system of allocation of houses by the government was 'in-kind' benefit provided by state owned enterprises or work units at the local level. After 1978, the housing reform was geared at a market-oriented approach towards housing provision and consumption. During the transitional stage of a 'socialist market economy' from 1978 to 1989, work units were still allowed to construct houses for their employees but sale of publicly owned housing began. Since 1990, market-oriented housing policies were adopted by the local governments in Shanghai and other major Chinese cities to keep pace with rapid economic growth. In the "paradigm shift" (Li, 2003) to a market economy, the 1991 housing reform programme was launched. Other reform measures included the Housing Provident Fund Scheme since 1991 and the national Comfortable Housing Project of 1993 to 1998.

In the 1990s, real estate investment in Shanghai was about 1 billion yuan a year. In 2002, according to the Shanghai Municipal Mayor's Office, the figure topped 70 billion yuan. Jones Lang LaSalle (JLL) research estimated that the supply of new residential property in Shanghai in 2002-2004 could be 90 million square meters – perhaps one million new units. Real estate has become a pivotal industry in Shanghai and contributed to 6.5 percent of the local GDP last year. Based on the JLL analysis, close to 60% of households in Shanghai now own their own home, a level exceeding that of Hong Kong (AFR 2002).

The China Real Estate Index System (CREIS) Shanghai index is a measure of the residential prices of Shanghai. Examining Table 5 we see a continuous upward trend. The residential index for July is 782, up 4 points (0.5%) from the previous month; an increase of 77 points compared with the same period in the previous year, or an increase of 10.9%. The tilt towards the high-end market niche resulted in unrealistically high prices.

Table 5: China Real Estate Index System (CREIS) Shanghai index

Date	02/95	11/95	11/96	11/97	11/98	11/99	11/00	02/01	05/01	07/01
CREIS	835	829	810	754	669	641	663	666	682	705
		- 6	- 19	- 56	-85	- 28	+ 22	+ 3	+ 16	+ 13

08/01	11/01	12/01	01/02	02/02	03/02	04/02	05/02	06/02	07/02	08/02
710	729	731	737	739	746	757	767	778	782	794
+ 5	+ 19	+ 2	+ 6	+ 2	+ 7	+ 11	+ 10	+ 11	+ 4	+ 12

Figure 1: China Real Estate Index System (CREIS) Shanghai index



But the trend continued in August 2002. The CREIS Shanghai index of 794 represents a jump of 12 points and up 1.5%, or an increase of 84 points (up 11.8%) compared with the same period the previous year. The Shanghai property bubble returned again in August, especially on the low-end of the market at 3000-4999 yuan per square meter (some 45%) while those of medium-price range at 5000-6999 per square meter and high-end type at 7000 per square meter or above accounting for 35% and 20% respectively (Shanghai Investment 10/2002, p.64). The upward trend was attributable to:

- Increasing demand for residential houses in the medium to low price ranges,
- Improved facilities in the local community,

- The successful bid to host the World Expo 2010 in Shanghai,
- The over-heated real estate markets at Xuhui and Changning districts,
- The roll-on effects of the high-end property market.

In other words, prices are driven up by the luxurious real estate sector in urban areas.

The average growth of 9% per annum over the past two decades has contributed to China's economic takeoff. Local government incentives also helped Shanghai and Pudong to brace for their boom in the residential markets. The income tax refund policy in Shanghai from June 1, 1998 to May 31, 2003 where no income tax was charged on income from buying residential housing had led to a booming housing market there. There was no such policy in Beijing.

Other incentives in Shanghai included merging of foreign-domestic property market since 1 August 2001, giving foreign buyers the same rights as the local buyers of property. The local government even granted domicile to local property purchasers allowing them to live in Shanghai. In addition, those who bought commodity housing in Shanghai from 1998 to 2003 could have the mortgage payments deducted from personal income taxes. From 1 July 2000, the government regulated the supply of new land by selling land mainly through tenders and public auctions. The state also reduced the government levy of property transaction from 2% to 1% (www.Platinum.Asia.com).

To assist home buyers, families in Shanghai could borrow 100,000 yuan from the housing accumulation fund for home buying. It was established in 1996 when a 60-square-meter apartment in downtown Shanghai cost about 150,000 yuan (2,500 yuan per square metre), but by 2003, second-hand apartments within the Outer Ring Road more than doubled, reaching 5,000-7,000 yuan per square metre. The Shanghai government is now planning to offer more assistance to homebuyers (China Daily 2003).

Housing affordability in Beijing and Shanghai

Waxman (2002) has defined housing affordability as 'the cost associated with purchasing a house and its accompanying mortgage repayments relative to household income'. The home loan mortgage market is yet to be developed in China.

The House Price to Income Ratio (HPI Ratio) is a good indicator of the affordability of medium housing prices to middle-income families. For developed countries, it is from 1.8 and 5.5 whereas for developing countries, from 4 to 6. When the HPI Ratio falls between 3 and 6, house prices are generally affordable (Zhongguo fangdichan 2002).

Table 6 shows the HPI Ratio of Chinese urban households, 1991-2000. As noted from the Table, the HPI ratio in China was at an all time high of 11.7 in 1992. In year 2000, it went down to 7.9. But this was higher than the level of 3 to 6. For vibrant cities like Shanghai and Beijing, they were even higher at 9.2 and 10.7 respectively. This suggests that prices of commodity housing are far beyond the reach of urban dwellers, which is contrary to the spirit of the housing reform.

Table 6: House Price to Income Ratio of Chinese urban households, 1991 – 2000

Year	Average	Selling	Per capita	Size of	Annual	House
	selling price	price of a	annual	households	household	Price
	of	80m2	income of		income	Income
	commodity	commodity	urban		(yuan)	Ratio
	housing	housing unit	households			
	(yuan /m2)	_	(yuan)			
1991	756	60480	1700.6	3.43	5833.1	10.4
1992	996	79680	2026.6	3.37	6829.6	11.7
1993	1208	96640	2577.4	3.31	8531.2	11.3
1994	1194	95520	3496.2	3.28	11467.5	8.3
1995	1509	120720	4283.3	3.23	13834.1	8.7
1996	1605	128400	4838.9	3.20	15484.5	8.3
1997	1790	143200	5160.3	3.19	16461.4	8.7
1998	1854	148320	5425.1	3.16	17143.3	8.7
1999	1857	148560	5854.0	3.14	18381.56	8.1
2000	1948	155840	6280.0	3.13	19656.4	7.9

Source: China Statistical Yearbook 2001 and Zhongguo fangdichan 2002/2, p.14

HYPOTHESIS

This study examines the homeownership propensities of first home buyers in Beijing and Shanghai. The analysis looks particularly at the characteristics of two groups of first home buyers interviewed in Beijing and Shanghai in February and April 2004 to test the hypothesis that the higher the total incomes of FHB, the higher the level of home buying.

Listed in Table 7 is a broad picture of the per capita annual disposable income of urban households and the improvement in living standard in China evidenced by the Engle Coefficient trend, which indicates the percentage of disposable income spent on foodstuff has been decreasing from 57.5 at the beginning of the economic reform in 1978 to 37.9 in 2001. An Engle Coefficient of 60% or above implies the country or region is in poverty and an Engle Coefficient of 30% or below indicates the country or region is getting rich.

Table 7
Per Capita Annual Disposable Income and Engle Coefficient of Urban Households

Year	Per Cap. Annual Disposable Income of Urban households (yuan)	Index (1978=100)	Engle Coefficient
1978	343.4	100.0	57.5
1979	387.0	112.7	57.2
1980	477.6	127.0	56.9
1981	491.9	127.6	56.7
1982	526.6	133.9	58.7
1983	564.0	140.6	59.2
1984	651.2	158.1	58.0

1985	739.1	160.4	53.3
1986	899.6	182.5	52.4
1987	1002.2	186.9	53.5
1988	1181.4	182.5	51.4
1989	1375.7	182.8	54.4
1990	1510.2	198.1	54.2
1991	1700.6	212.4	53.8
1992	2026.6	232.9	52.9
1993	2577.4	255.1	50.1
1994	3496.2	276.8	49.9
1995	4283.0	290.3	49.9
1996	4838.9	301.6	48.6
1997	5160.3	311.9	46.4
1998	5425.1	329.9	44.5
1999	5854.0	360.6	41.9
2000	6280.0	383.7	39.2
2001	6859.6	416.3	37.9

Source: China Statistical Yearbook 2002

Commodification of Housing

The ultimate goal of housing reforms for the past 20 years or so has been commodification of housing whereby market forces determine the pricing and distribution of housing resources. Not only have housing construction and development of the real estate industry triggered economic growth, but people's consumption pattern and living conditions have also improved. As shown in Table 8 one third of household expenditure is devoted to children's education, which is more than the proportions spent on food, housing or medical care.

Table 8: Household expenditure by items

Expenditure item	Percentage
Children's education	33.5
Food	27.4
Housing	15.2
Medical care	11.1
Computer & accessories	4.5
Private vehicle	1.6
Education	1.5
Durables	1.4
Travel	0.9
Clothing	0.8
Telephone charges	0.5
Social functions	0.4
Others	1.3
Total	100.0

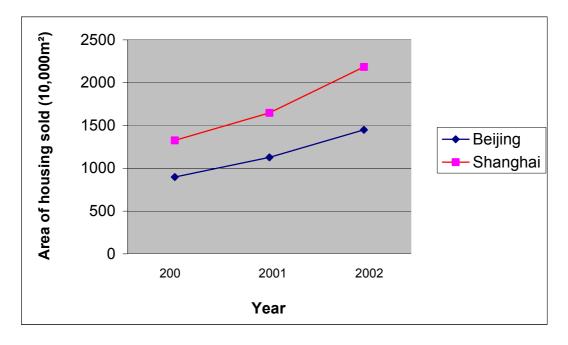
Source: Real Estate Times 2002. 22, p.44

Real GDP in China grew by an average of 9 percent a year from 1978-1996, contributing to significant increase in per capita income. The amount of bank savings for people in both urban and rural areas had increased from 21 billion yuan in 1978 to 7,376 billion yuan in 2001 (China Statistical Yearbook, 2002). This has resulted in one in five of the interviewees in Beijing and one in three of the interviewees in Shanghai had bought houses or apartments by one-off payment, as discussed in the research findings below.

In terms of the area of housing sold from 2000 to 2002, Shanghai outnumbered Beijing by over 30% as depicted in Table 10 and Figure 2. This may be attributed to the rapid pace of development of the Pudong New Area to the east of Shanghai since April 1990 with the objective that Shanghai will be a world city again. Pudong's share of gross national product in Shanghai will increase from 8.1% in 1990 to 25% in 2000, and retailing from 4.0% to 30% (Yeh, 1996).

Table 10: Area of residential housing sold in Beijing and Shanghai

Area of housing sold (10,000m²)				
Year	Beijing	Shanghai		
2000	898.22	1326.64		
2001	1127.50	1647.90		
2002	1450.00	2184.00		



Source: Apple Daily Hong Kong, 31 December 2002, p. B12.

Pudong is a main area of construction in Shanghai. Of 49.3 million sq. m of land leased in Shanghai in 1993, 45.9 million sq. m or 93 % was in Pudong (Karantonis and Zhang, 1996). Some of the interviews in Shanghai were carried out in residential buildings in Pudong.

METHODOLOGY AND DATA

3.1 Qualitative research

Qualitative methods allow the researcher to explore more deeply the possible issues for change which may be effective in shedding light on potential changes (Levy and Henry 2003). For this paper, over 50 in-depth interviews were undertaken with first home buyers in Beijing and Shanghai in 2004. They are not representative of the conditions at national or individual level. Regional disparities in China require separate studies for other cities.

3.2 In-depth interviews

The in-depth interviews were carried out in Beijing and Shanghai to ascertain the propensity of FHB in these two cities. Fifty interview questions were prepared during the pre-testing stage. They centred on the socio-demographic characteristics of the interviewees, their housing choices, how they financed their first homes, whether they were buying as owner occupiers or for investment. In addition their views on the impact of government policies to assist FHB – such as cutting property taxes, fees and costs of land, as well as interest rate and down payment subsidies. The following categories summarise the area of the questions discussed during the interviews:

- I. Social-economic background
- II. Household income levels
- III. Household characteristics
- IV. Housing preferences
- V. Homeownership aspirations
- VI. Housing finance and views on government initiatives to help FHB

The interviews were mainly conducted in residential apartments and housing estates in the urban areas of Beijing and Shanghai. Descriptive data were transcribed, summarized and processed using a spreadsheet. After the pilot test in Beijing in February 2004, the interview questions regarding interviewees' occupation and income levels have been revised for use in these interviews.

Consent Form

To ensure confidentiality and privacy of the interviewees, approved consent forms had been prepared and signed by the interviewees. The consent form introduced the researcher and stated the objectives of the interviews.

Part I Socio-demographic background of the interviewees

Background of the interviewees such as gender, age group, marital status and occupation showed their demographic profile.

Part II Household income

Interviewees' personal and household income ranges, whether there would be any income support from other members of the family that would shed light on their ability to become first home buyers.

Part III Household characteristics

Interviewees' dwelling details, such as the year in which they bought the apartment or house, the area, the number of bedrooms; whether it was sale of publicly-owned government housing, work-unit provided housing or commodity market-oriented housing, and whether they had bought it furnished or as an empty shell.

Part IV Housing preferences

Reasons for purchasing their existing property, whether they had looked at other properties and reasons for not buying the other properties were explored. The interviewees were asked how they found the properties they had purchased and their satisfaction level if they had employed estate agency services. Whether they were satisfied with the quality of the apartment or house and their housing preferences for multi-storey high-rise or low-rise buildings were recorded.

Part V Home buying propensity

The interviewees' intention to buy in the next 3 years, whether they would like to buy an apartment or house in the suburbs or city centre and the reasons for such choices.

As homeownership was a relatively new concept in China, factors contributing to home buying and the advantages and disadvantages of becoming homeowners were examined.

Interviewees were also asked whether they had bought the apartment or house for residential use or as an investment. For investment purposes, the kind of area they were looking at, including number of bedrooms, price range, and location, type of apartments or houses, whether they preferred the property furnished or unfurnished, leaving room for them to do the decoration work.

Part VI Housing Finance

The sources of funding for home purchase, whether there was assistance from relatives, friends or other sources. It was interesting to note whether one-off payment was popular among first home buyers or, increasingly, home loan mortgages as more avenues of home purchase finance were available.

Where interviewees had a home loan mortgage, the amount of mortgage re-payment as a percentage of their monthly income, how much they had paid as a deposit and its share of the purchase price of the apartment or house; the mortgage period, the percentage mortgaged and the rate of interest on the loan. Also whether there would be any penalty for late mortgage payments or any administrative fees for early re-

payments of the mortgage and whether their apartment or house was covered by insurance.

How they would resolve the problem of not being able to pay the mortgage payments. They were also asked to respond to questions like: "Did other members of the family pay for the deposit of the property? Did other members of the family help with the mortgage payments?' and so on.

Finally, their views were sought on government initiatives to improve affordability for FHB, such as:

- □ Reduction in property-related taxes and fees
- □ Reduction in the costs of land
- Down payment subsidies by the government, and
- □ Mortgage interest subsidies by the government

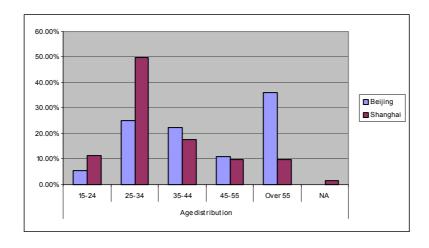
DISCUSSION OF FINDINGS

Of the 51 interviewees in Beijing, 15 were renters or non first time home buyers, so the number of valid interviews was 36. This was slightly above our target, which was to conduct 35 in-depth interviews in Beijing and 35 interviews in Shanghai. For the 69 interviews carried out in Shanghai (comprising 11 pilot interviews in March and 58 interviews in April), 5 were not first time home buyers and two interviews were incomplete, leaving a balance of 62 valid interviews.

Part I Demographic Background of First Home Buyers (FHB)

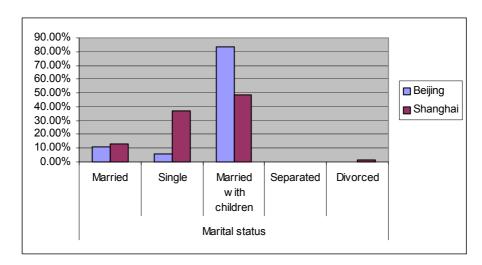
The 25-34 age cohort in Shanghai of 50 per cent was similar to the situation in Australia where first home buyers are relatively young, with over 60 per cent aged between 25 and 34 years (Rodrigues, 2003, p.8). However, 36 per cent of FHB interviewed in Beijing were retirees and those in the 25-34 age cohort were only 25 per cent.





37 per cent of FHB interviewed in Shanghai were single, compared with less than 6 per cent in Beijing, reflecting higher propensity to become single person home owners in Shanghai than Beijing. 83 per cent of FHB interviewed in Beijing were married with children, whilst in Shanghai a couple with children represented 48 per cent.

Figure 4: Marital Status of FHB



36 per cent of those interviewed in Beijing reported as having retired, while for the same group in Shanghai was less than 5 per cent. Hence, more people interviewed in Shanghai were in full-time employment with the ability to meet mortgage payments.

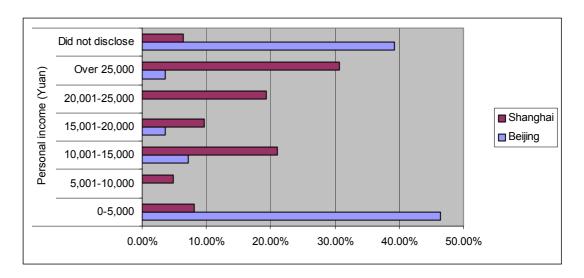
Part II Income levels

[Note: USD \$1.00 = approximately 8.28 Yuan]

Personal income

In line with the robust economy, the interviewees in Shanghai earned more with over 31 per cent of them were earning over 25,000 Yuan a year. By contrast, 46 per cent of the interviewees in Beijing earned less than 5,000 Yuan a year.

Figure 5: Personal Income (Yuan)



Family income

42 per cent of the interviewees in Shanghai had a total family income of over 35,000 Yuan a year in contrast to Beijing, which only had 19 per cent. One in five of the interviewed families in Shanghai were earning 30,000-35,000 Yuan per year, compared with less than 3 per cent in Beijing.

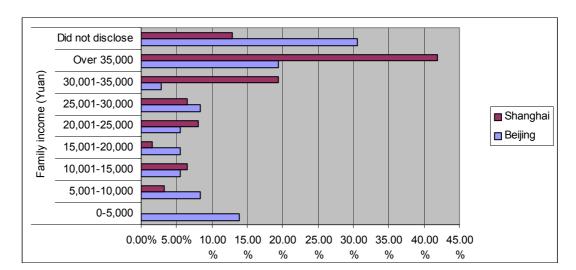


Figure 6: Family Income (Yuan)

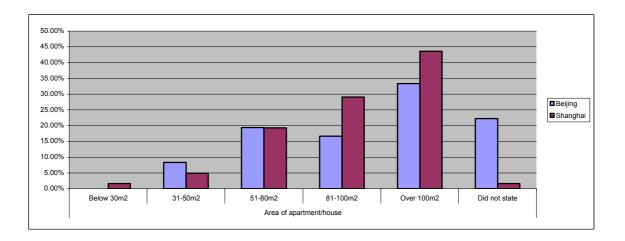
As regards income support from other members of the family, almost half of the interviewees (49 per cent) in Beijing did not have any income support from other members of the family. While for Shanghai, 26 per cent received income support from the spouse and 37 per cent from other members of the family.

Part III Household characteristics

61 per cent of households interviewed in Shanghai bought their apartments in the previous three years and the corresponding figure in Beijing 28 per cent. Hence, the households interviewed in Shanghai were more recent home buyers. For Beijing, 39 per cent of the interviewees had bought their homes within 1999 to 2001 whereas 22 per cent were reported for home buyers in Shanghai during that period.

The interviewees in Shanghai tended to live in larger apartments or houses, with 44 per cent over 100 m2 and 29 per cent 81-100 m2. In Beijing, the corresponding figures were 33 per cent and 17 per cent respectively.

Figure 7: Area of Apartment/House



Nevertheless, the people interviewed in Beijing (72 per cent) and Shanghai (82 per cent) had bought a new apartment or house. It should be noted that 82 per cent of the apartments bought by the interviewees in Shanghai were commercial housing and in Beijing only 39 per cent. 17 per cent of the interviewees in Beijing had bought public housing and 28 per cent lived in 'work unit' housing, whilst in Shanghai were less than 5 per cent for each of these types of housing.

90.00% 80.00% 70.00% 60.00% 50.00% Beijing ■ Shanghai 40.00% 30.00% 20.00% 10.00% 0.00% Public housing Work unit housing Commodity Did not state housing Type of housing

Figure 8: Type of Housing

Part IV Housing preferences

In Beijing as in Shanghai, location and budget were the main consideration for choice of their apartments. However, more interviewees in Shanghai (21 per cent) had expressed suitable area as the main reason for the choice of their present apartment. In addition, in Shanghai, 68 per cent had looked at other properties before buying and in Beijing, 53 per cent.

In terms of satisfaction with the quality of housing they had purchased, 84 per cent in Shanghai were satisfied with the quality of their apartment but only 47 per cent in Beijing were satisfied.

Regarding type of building, more buyers in Beijing (75 per cent) preferred low-rise buildings (less than six stories) than Shanghai (34 per cent). Use of estate agency services were not common in the two cities, but the interviewees in Shanghai (50 per cent) were more satisfied with the sale service of their property than those in Beijing (19 per cent).

Part V Homeownership aspirations

More interviewees in Shanghai (52 per cent) intended to buy an apartment in the next three years than those in Beijing (39 per cent). It should be noted that more interviewees in Shanghai (37 per cent) preferred the suburbs than the case in Beijing (28 per cent).

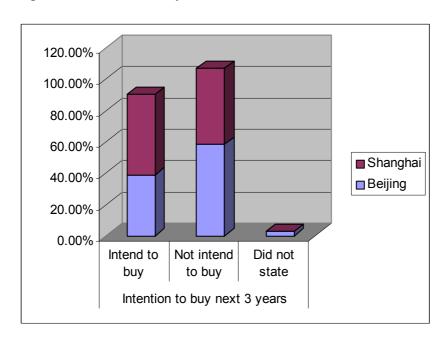


Figure 9: Intention to Buy in the Next 3 Years

With regard to the reasons for selecting a property, more buyers in Beijing attributed that to proximity to good transport (28 per cent) than their counterparts in Shanghai (22 per cent). Although almost half of the interviewees in both cities considered home purchase to improve living condition, 33 per cent in Shanghai would purchase home for investment than 24 per cent of those in Beijing.

There was stronger emphasis on the sense of security of homeownership in Beijing (32 per cent) than those in Shanghai (27 per cent). However, the emphasis on homeownership as a hedge against inflation (28 per cent in Shanghai and 24 per cent in Beijing) and wealth accumulation (13 per cent in Shanghai and only 3 per cent in Beijing) was strongly felt in Shanghai.

Did not state Advantages of homeownership Other social stability Economic prosperity Accumulation ■ Shanghai of wealth Beijing Hedge against Wealthiness Security Superiority 0.00% 10.00% 20.00% 30.00% 40.00%

Figure 10: Advantages of Homeownership

Interviewees in Shanghai (26 per cent) were more concerned with their mortgage repayments than those in Beijing (17 per cent), reflecting higher proportion of first home buyers with a mortgage in Shanghai (76 per cent) than in Beijing (61 per cent).

However, buyers in Beijing were more concerned with management fees (30 per cent) and maintenance charges (23 per cent) than those in Shanghai, being 12 per cent and 16 per cent respectively.

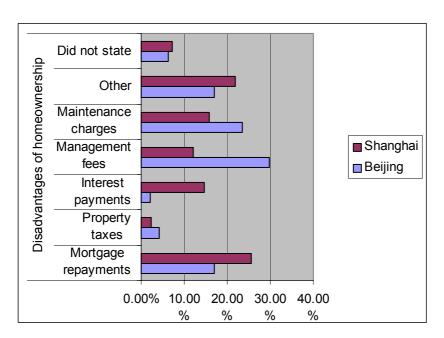


Figure 11: Disadvantages of Homeownership

On the issue of whether they were buying an apartment for their own use or for investment, the interviewees in both cities were not keen on buying for investment, only 23 per cent in Shanghai and 19 per cent in Beijing.

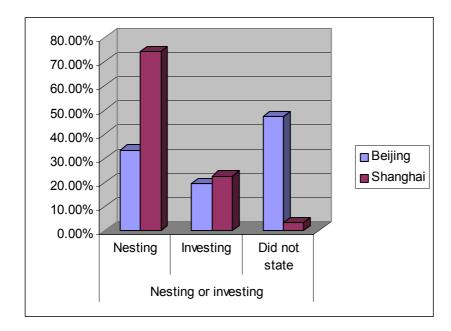


Figure 12: Occupier or Investing

While investment property of 81-100m2 and over 100m2 were popular among those interviewed in Beijing (38 percent and 31 per cent) and Shanghai (36 per cent and 18 per cent), more interviewees in Shanghai (30 per cent) preferred 51-80 m2 apartments than Beijing (23 per cent), reflecting higher property prices in Shanghai.

The price range of the investment property also differed. 62 per cent of the interviewees in Beijing favoured budget type of investment property between 310,000-500,000 Yuan, while those for the same type of investment property in Shanghai was 31 per cent. In fact, 28 per cent of those interviewed in Shanghai preferred investment property of 510,000-700,000 Yuan compared with less than 8 per cent in Beijing.

Interestingly, 47 per cent of the interviewees in Shanghai found the city centre attractive for property investment, compared with 38 per cent in Beijing. 57 per cent of those interviewed in Shanghai favoured building of less than 6 stories and those sharing the same preference in Beijing was 60 per cent.

78 per cent of those interviewed in Shanghai wanted investment property with amenities whereas for those in Beijing, 86 per cent. While 70 per cent of those interviewed in Shanghai would like the investment property unfurnished so that they could add some personal touch to the decoration, the same was true of only 40 per cent in Beijing.

Part VI Housing finance

The interviewees in both cities depended mainly on income savings for home purchase (84 per cent in Shanghai and 68 per cent in Beijing), but 15 per cent of those interviewed in Beijing had other source of housing finance than those in Shanghai of less than 5 per cent.

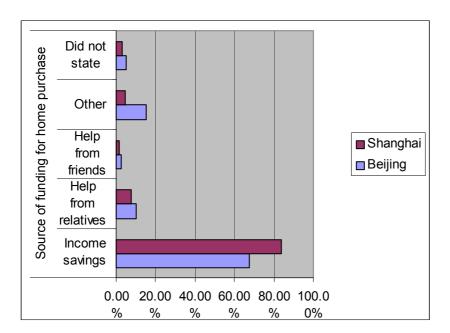


Figure 13: Source of Funding for Home Purchase

76 per cent of the interviewees in Shanghai had a mortgage, compared with 61 per cent in Beijing. This reflected the higher proportion of more expensive commercial housing bought by those in Shanghai (82 per cent reported earlier) than that of Beijing (39 per cent). Hence, one-off payment for the sale of public or 'work unit' housing was more common in Beijing (33 per cent) than in Shanghai (21 per cent).

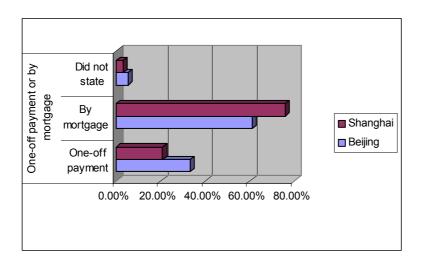


Figure 14: One-off Payment or By Mortgage

Mortgage payments absorbed up to 20-40% of the monthly income of the buyers in both cities. However, 11 percent of those interviewed in Beijing revealed mortgage payments of less than 10 % of their monthly salary due possibly to lower property price and smaller loan amount.

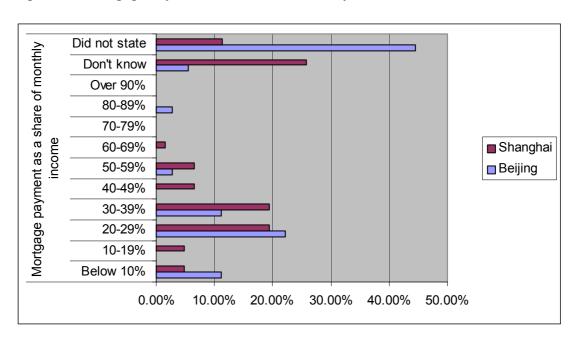
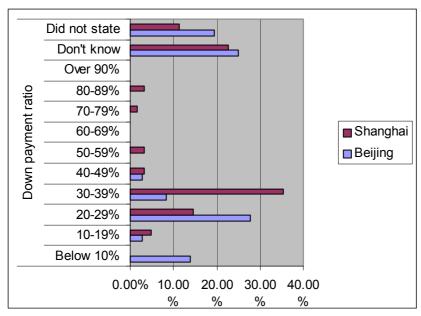


Figure 15: Mortgage Payment as a Share of Monthly Income

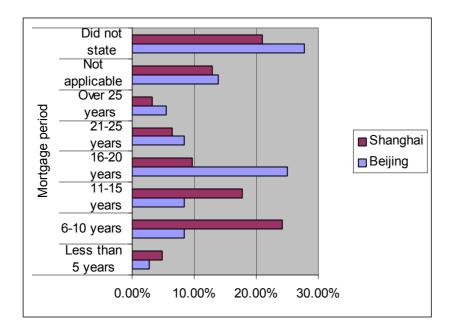
Homebuyers in Shanghai tended to pay more down payments than their counterparts in Beijing, especially for down payment of over 250,000 Yuan (15 per cent in Shanghai, but only 5 per cent in Beijing). In addition, 8 per cent of those interviewed in Beijing paid under 50,000 as down payment, compared with less than 2 per cent in Shanghai, again reflecting the lower cost of the sale of public or work unit housing in Beijing.

Figure 16: Down Payment Ratio



Homebuyers in Shanghai chose shorter mortgage periods of 6-10 years (24 per cent) and 11-15 years (18 per cent), compared with 8 per cent each for the same mortgage periods in Beijing. Yet Beijing buyers (25 per cent) noticeably chose a longer mortgage period of 16-20 years than those in Shanghai (less than 10 per cent).

Figure 17: Mortgage Period



25 per cent of the buyers in Beijing had a mortgage of up to 90 per cent of the price of their property, while it was only 6 per cent in Shanghai. In fact, 29 per cent of the interviewees in Shanghai (8 per cent in Beijing) had a mortgage of up to 80 per cent of the property price and 16 per cent (less than 5 per cent in Beijing) had a mortgage of up to 70 per cent of the property price. This could be explained by higher salaries, hence higher re-payment amounts and shorter re-repayment periods in Shanghai.

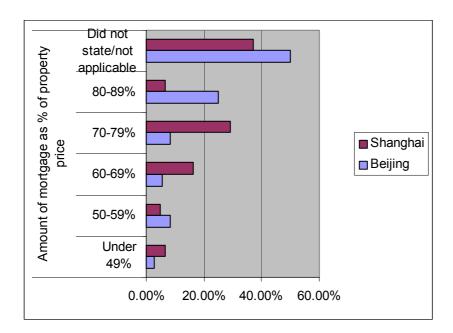


Figure 18: Amount of Mortgage As Percentage of Property Price

Not surprisingly, more buyers in Shanghai (55 per cent) had their home insured than those in Beijing (43 per cent). But there were more contributions from other family members on paying down payments in Shanghai (32 per cent) than in Beijing (22 per cent).

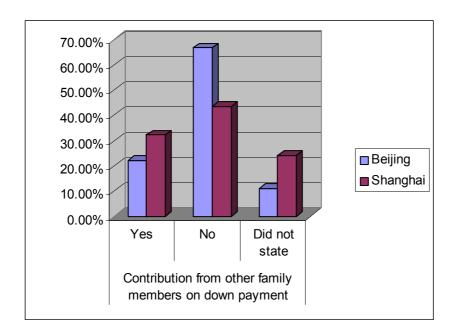


Figure 19: Contributions from Other Family Members on Down Payment

Similarly, there were more contributions from other family members on mortgage payments in Shanghai (27 per cent) than in Beijing (less than 14 per cent).

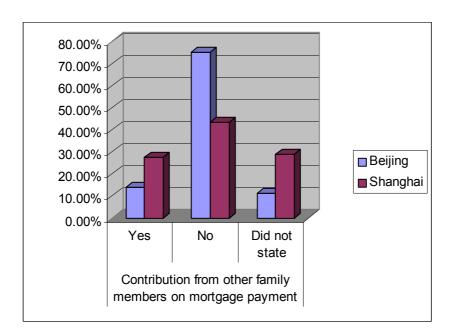


Figure 20: Contributions from Other Family Members on Mortgage Payment

With regard to the impact of tax deduction on affordability of FHB, the interviewees in Beijing were more definite (83 per cent) than those in Shanghai (less than 71 per cent). However, more interviewees in Shanghai (82 per cent) believed cutting the costs of land helpful than in Beijing (78 per cent).

It was the impact of down payment and mortgage interest subsidies that were more divergent. 94 per cent of the interviewees in Shanghai found the down payment subsidies helpful while less than 81 per cent in Beijing thought so. Finally, on the impact of mortgage interest subsidies enhancing people's ability to become first home buyers, 90 per cent of the interviewees in Shanghai found them useful but less than 78 per cent in Beijing held that view.

CONCLUSION

Homeownership is giving the Chinese people a stake in society for the first time since reform and opening-up of the world's most populous nation. A newly minted middle class has emerged and is changing the economic landscape of China. The summary of findings for the two groups of people interviewed in Beijing and Shanghai has shown that the propensity to buy a home increases the higher the total family incomes of the first home buyers. But other factors such as better housing choices, more avenues of finance after China's accession to the Word Trade Organization, and government policy incentives are at work. On the supply side, the development of the new Pudong area and redevelopment of Shanghai had contributed to the completion of 31% more residential units in Shanghai than Beijing in 1999 (Table 4).

One third of the interviewees in Shanghai had received income support from their spouse or other family members for home purchase. Therefore, the households in

Shanghai were more recent home buyers with almost two thirds having bought their apartments in the previous three years.

We have seen a unique policy measure of income tax refund in Shanghai from 1998 to 2003 whereby homebuyers could have the mortgage payments deducted from personal income taxes, which boosted the booming housing market in Shanghai. There was no such policy in Beijing.

Finally we have seen from the interview findings the significance of homeownership not only as a hedge against inflation or wealth accumulation, but also a sense of security vital to social stability and economic prosperity of the country. As income continues to rise (see Table 7) and the upper middle class continues to grow, the real estate boom is expected to continue for the next decade.

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