



Macquarie University ResearchOnline

This is the author's version of an article from the following conference:

Yusuf, Farhat, Brooks, Gordon and Zhao, Ping (2006) Consumption patterns of urban households in China, 1990-2003 *Australian and New Zealand Marketing Academy (ANZMAC) Conference 2006*, (4 - 6 December, 2006 : Brisbane).

Access to the published version:

http://conferences.anzmac.org/ANZMAC2006/documents/Yusuf_Farhat.pdf

Consumption Patterns of Urban Households in China, 1990-2003

**Farhat Yusuf, Gordon Brooks, Macquarie University
Ping Zhao, Chinese Academy of Social Sciences**

Abstract

This paper presents data from a series of nationally representative sample surveys of income and expenditure patterns among urban households in China. Findings indicate that during the 13 year period 1990 to 2003, the urban population was increasing at a rate four times faster than the national population and that the urban household size declined to an average of only three persons. Both income and expenditure levels increased, while the proportion of total expenditure spent on food declined. Expenditure on some other items, such as housing and healthcare increased. Most urban households reported ownership of colour TVs, refrigerators, washing machines and mobile phones. The importance of the cultural factors is emphasised.

Introduction

With its population of nearly 1.3 billion people, China is the largest country in demographic terms (Hussain, 2002). From a business point of view, it is the biggest emerging consumer market in the world (Economist, 2005). Since its independence in 1949, China has been a socialist country. In recent years, with the increasing emphasis on industrialisation and the move towards becoming a market economy, there is evidence of increasing inequality in income distribution in China (see *e.g.*: Fang, *et. al.*, 2002; Khan & Riskin, 2001; Meng, *et. al.*, 2005). The income disparities may be illustrated by the fact that in 2003 the average income per capita was RMB2,622 for rural residents; while the corresponding figure for those living in cities was RMB8,472 (China, 2005). It may be noted that the exchange rate is around 6RMB to one AUD.

Many researchers have studied income distribution in China; however, very few have focused on consumption patterns. Most of the research on consumption is based on small, localised surveys. The main objective of this paper is to study the consumption behaviour of Chinese households using data from a series of surveys conducted by the National Bureau of Statistics over the period 1990 to 2003 using nationally representative samples. The scope of this research is limited to urban households, as they are the ones who constitute the major proportion of the Chinese “middle class” and have disposable incomes that enable them to enjoy the fruits of economic development and industrialisation much more than their rural counterparts.

Literature Review

An electronic search of the Academic Source Premier and Business Source Premier (EBSCO) databases conducted on June 25, 2006 for articles with ‘China’ as a keyword in peer reviewed journals that have ‘marketing’ in the title, between July 1996 and June 2006, produced 40 results, the earliest of which was from February 1999. Only five of these papers addressed the market

segmentation of mainland China (Chen *et. al.*, 2005; Dickson *et. al.*, 2004; Sun & Wu, 2004; Cui & Liu, 2000), and only Cui and Liu (2000) address the breadth of mainland China. Further searches identified research papers dealing with specific expenditure categories such as food (Gould & Villarreal, 2006; Min, *et. al.*, 2004). A search of the research reported in Chinese identified some papers which dealt with consumption behaviour in China. As noted previously, some of the research has been on consumer classes and expenditure on different commodities (see *e.g.*: Song & Zhao, 2003; Xu & Tang 2000; Qiu & Song, 2004), however, none is based on large-scale national surveys.

Data

Data collected by the Chinese National Bureau of Statistics in its annual Household Income and Expenditure Surveys were used. These surveys have been conducted separately in urban and rural areas of China for more than 20 years. The surveys collected information on the socio-demographic characteristics of the sampled households, their cash income and expenditure, the quantity of, and the expenditure on, major commodities purchased, and the possession of durable consumer goods. Both face-to-face interviews and diary systems were used to collect the relevant information.

Sample households in these surveys were selected using a two-stage stratified systematic random sampling procedure. While the sample sizes and exact sampling procedures used in earlier surveys could be somewhat different from the more recent surveys, the samples were indeed very large. For example, the sample size in 2003 survey was nearly 50,000 urban households (China, 2005). It may be noted that the sampling procedures used ensured a probability sample large enough to enable the derivation of robust estimates for urban areas in the whole of China, various regions of China and certain large cities.

Findings

Household Characteristics

China had a population of 1.143 billion in 1990, which had increased to 1.292 billion in 2003. On the other hand, the urban population increased from 302 million in 1990 to 524 million in 2003 (China, 2005). Between 1990 and 2003, the annual growth rate in the total population of China was around one percent per annum, however, during the same period the urban population increased at a much faster rate, in excess of four percent per annum. Table 1 gives an overview of the characteristics of urban households in China. The faster growth in urban population was mainly a result of rural to urban migration, which has accelerated in recent years. For example, in cities such as Beijing, Shanghai and Tianjin the proportion of people not holding the domicile (“hukou”) in those cities was 31%, 11% and 13% respectively (China, 2005). Another interesting fact evident from this table is the steep decline in the average household size; the household size in 2003 was only 86% of what it was in 1990. This phenomenon can be largely ascribed to the success of China’s one-child policy. Another startling trend evident in Table 1 is that although both the average income and expenditure levels increased during the period under review, household savings as a proportion of the household income nearly doubled. This

phenomenon has been observed in some other studies (see *e.g.*: Qin, 2003; Zhang & Wan, 2004) and is particularly interesting given that McEwan *et al.* (2006) report both decreasing numbers of Chinese whose primary aim is to work hard and get rich, and increasing numbers who report their personal goals are self-satisfaction and self-expression. This contrast between measured behaviour and indicated values suggests that a greater understanding of the Chinese culture and psyche is desirable.

Table 1. Selected Characteristics of Population and Urban Households in China: 1990-2003

Characteristic	1990	1995	2000	2002	2003
Urban population (in millions)	302	352	459	502	524
% urban population	26	29	36	39	41
Urban households (in millions)	86	109	147	165	174
Average household size	3.50	3.23	3.13	3.04	3.01
Average annual household income (in RMB)	5,307	13,821	19,706	24,859	27,274
Average annual household expenditure (in RMB)	4,476	11,426	15,644	18,331	19,598
Savings as % of household income	16	17	21	26	28

Expenditure Patterns

Table 2 shows expenditure on broad item categories. The changing consumption patterns over the years are quite interesting. Perhaps one of the most dramatic features of Table 2 is the drop in the proportion of total expenditure that was spent on food. Other items that exhibited increases in 2000-2003 compared to 1990-1995 were all categories other than clothing and household facilities and services. The reported increases in expenditure on many of the items (*e.g.* housing, education and medical services) may be explained by the fact that the level of government and employer subsidies for these items has declined in recent years.

Table 2. Proportion of Total Expenditure by Urban Households on Broad Item Categories: China 1990-2003

Item category	1990	1995	2000	2002	2003
Food	54	50	39	38	37
Clothing	13	14	10	10	10
Household facilities & services	8	7	7	6	6
Medicine & medical services	2	3	6	7	7
Transport & communication	3	5	9	10	11
Education & culture	9	9	13	15	14
Housing	5	8	11	10	11
Other items of expenditure	5	3	3	3	3

Table 3 gives the income and expenditure for urban households using data for 2003, according to the income quintiles of urban households. The disparity in income and expenditure patterns and savings rates between the rich and poor is apparent. Moreover, similarities between the lowest quintile in 2003 and the 1995 national averages, particularly for the proportional expenditure on food, are quite remarkable.

Table 3. Urban Households' Income, Savings and Expenditure on Broad Item Categories by Income Quintile: China 2003

Item	Quint.1	Quint.2	Quint.3	Quint.4	Quint.5
% of total annual household expenditure spent on:					
Food	46	42	39	37	32
Clothing	9	10	11	10	9
Household facilities & services	4	5	6	6	8
Medicine & medical services	7	7	7	7	8
Transport & communication	8	9	10	11	13
Education & culture	13	13	14	15	15
Housing	11	10	10	10	11
Other items of expenditure	2	3	3	3	4
Average annual household:					
Expenditure (in RMB)	10,360	15,770	19,182	23,623	36,468
Income (in RMB)	11,808	19,742	25,433	32,751	56,694
Savings as % of household income	12	20	25	28	36

Expenditure on Selected Consumer Durable Goods

Table 4 shows trends in the ownership of selected consumer durable goods by urban households in China during the period 1990-2003. It is interesting to note that more than 90% of all urban Chinese households have a mobile phone, refrigerator and a washing machine. The very high ownership rate, in excess of 130%, of colour television sets is worth noting. The television market, however, has previously been influenced by factors that promote homogeneity. Chairman Mao created China Central Television in 1958 which today has 16 advertising supported channels. He also managed the affordability of television sets so that the majority of Chinese households own televisions, reportedly "tuning in" for about three hours a day (Madden, 2006).

Using the 2003 data, Table 5 again emphasises the gap between the rich and the poor in the same manner as indicated by Table 3 earlier.

An interesting fact to note from Tables 4 and 5 is the absence of some of the modern conveniences such as dishwashers. It appears that very few Chinese urban households in 2003 (around 0.6%) had dishwashers. The highest proportion was noted in Shanghai where it was 1.4%. In all Chinese urban areas this proportion was below 1% (China, 2005). Motor cars were comparatively more popular in cities such as Beijing where the motor car ownership rate was nearly 7%; whereas the rates in all other large cities including Shanghai and Tianjin were much

below 2% (China, 2005). Given that China has quite a booming automobile industry, these low ownership rates are surprising. Growth in new registrations for the period 2000-2004 has been reported to average 41%, yet this only represents 6.3 million new registrations in that period for a large population (Datamonitor, 2005).

Table 4. Selected Consumer Durable Goods per 1,000 Urban Households: China, 1990-2003

Item	1990	1995	2000	2002	2003
Air conditioners	3	81	308	511	618
Cameras	192	306	384	441	454
Colour televisions	590	898	1,166	1,264	1,305
Computers	*	*	97	206	278
Hi-fi stereo component systems	*	105	222	252	269
Mobile phones	*	*	195	629	901
Motor cars	*	*	5	9	14
Motor cycles	19	63	188	222	240
Refrigerators	423	662	801	874	887
Video disc players	*	*	375	526	587
Video recorder	*	182	201	184	179
Washing machines	784	890	905	929	944

* <1 per 1,000 households.

Table 5. Selected Consumer Durable Goods Ownership per 1,000 Urban Households by Income Quintile: China, 2003

Item	Quint.1	Quint.2	Quint.3	Quint.4	Quint.5
Air conditioners	166	366	542	723	1,223
Cameras	190	327	430	538	747
Colour televisions	1,079	1,192	1,281	1,383	1,557
Computers	59	148	234	353	564
Hi-fi stereo component systems	132	210	275	308	402
Mobile phones	350	646	897	1,101	1,438
Motor cars	2	4	6	10	42
Motor cycles	159	221	252	253	306
Refrigerators	681	845	913	964	1,012
Video disc players	405	526	613	642	728
Video recorder	77	139	167	211	288
Washing machines	834	921	954	980	1,019

Conclusion

Three important points emerge from the above analysis. Firstly, the Chinese urban market has been in a state of transition. It is growing in terms of size, income, product adoption (for a substantial range of products) and the proportion of the Chinese market that it represents. The growth of this market and the ease of distribution to urban areas, relative to rural areas, make urban China an attractive market. Secondly, Chinese households save a significant proportion of their earnings. While direct comparisons may not be appropriate, it would appear that the market for savings products and services is certainly no less robust than the market for consumer durables. Thirdly, while urban Chinese have acquired a number of consumer durables, there are indications that as a result of increasing standards of living and easier access to modern communications media they are likely to become one of the largest consumer markets in the world. Successful marketing to this emerging market will require appropriate strategies, consistent with the Chinese culture and psyche.

References

- Chen, J., Aung, M., Zhou, L., Kanetkar, V., 2005. Chinese ethnic segmentation and conspicuous consumption: Are there moderators or mediators effect of acculturation dimensions? *Journal of Consumer Marketing* 17 (2/3), 117-136.
- China, 2005. *Statistical Yearbook*. National Bureau of Statistics, Beijing.
- Cui, G., Liu, Q., 2000. Regional market segments of China: Opportunities and barriers in a big emerging market. *Journal of Consumer Marketing* 17(1), 55-72.
- Datamonitor, 2005. *New cars in China industry profile October 2005*. Datamonitor Asia-Pacific, Hong Kong.
- Dickson, M., Lennon, S., Montalto, C., Dong, S., Li, Z., 2004. Chinese consumer segments for foreign apparel products. *Journal of Consumer Marketing* 21(5), 301-317.
- Economist, 2005. *Industry Forecast June 2005*. Economist Intelligence Unit, London.
- Fang, C., Zhang, X., Fan, S., 2002. Emergence of urban poverty and inequality in China: Evidence from household survey. *China Economic Review* 13, 430-443.
- Gould, B.W., Villarreal, H.J., 2006. An assessment of the current structure of food demand in urban China. *Agricultural Economics* 34(1), 1-16.
- Hussain, A., 2002. Demographic transition in China and its implications. *World Development* 30(10), 1823-1835.
- Khan, A.R., Riskin, C., 2001. *Inequality and Poverty in China in the Age of Globalization*. Oxford University Press,

- Madden, N., 2006. How China buys and sells TV. *Advertising Age* 77(19), 26-26
- McEwan, W., Fang, X., Zhang, C. and Burkholder, R., 2006. Inside the mind of the Chinese consumer. *Harvard Business Review* 84(3), 68-76.
- Meng, X., Gregory, R., Wang, Y., 2005. Poverty, inequality and growth in urban China, 1986-2000. *Journal of Comparative Economics* 33(4), 710-729.
- Min, I., Fang, C., Li, Q., 2004. Investigation of patterns in food-away-from-home expenditure for China. *China Economic Review* 15(4), 457-476.
- Qiu, X. Q., Song, Z., 2004. Survey on the consumption of five classes. *Occupation* 7, 31-33 (in Chinese).
- Qin, D., 2003. Determinants of household savings in China and their role in quasi-money supply. *Economics of Transition* 11(3), 513-537.
- Song, Z., Zhao, P., 2003. Expanding Consumption and Building Comprehensive Well-off Society in China: The First Report on China's Economic Development and Policies. Chinese Social Sciences Literature Press, (in Chinese).
- Sun, T., Wu, G., 2004. Consumption patterns of Chinese urban and rural consumers. *Journal of Consumer Marketing* 21(4), 245-253.
- Xu, Z. G., Tang, P. H., 2000. Chinese consumer trends and structural changes in consumption. *Business Economy Management*, 44-48 (in Chinese).
- Zhang, Y., Wan, G.H., 2004. Liquidity constraint, uncertainty and household consumption in China. *Applied Economics* 36, 2221-2229.

Acknowledgements

The senior author wishes to acknowledge his gratitude to the Chinese Academy of Social Sciences (CASS), and in particular Professor Xu Jin, for their help and cooperation during his visit to China in April 2006. Although both CASS and Macquarie University have supported this research, any views expressed are the authors' own and do not reflect the views of either organisation.