Retirement Planning in an Emerging Market: A Cluster Analysis of Chinese Seniors' Attitudes and Behaviors

Yi Cai, California State University, Northridge[1] Yali Yang[2]

Background

Contemporary China presents a fertile ground to study the retirement preparedness, or lack thereof, of the senior population facing challenges in the emerging market. Many retirees face pension arrears due to insufficient funds from former employers. Also, it is generally acknowledged that the currently reformed retirement support system, in which current workers support current retirees, is not sustainable (Cai, Giles, & Meng, 2006). In addition, there is considerable uncertainty as to how well the traditional support from family and children can be expected, given the low fertility rate and increased mobility of adult children. It is estimated that the ratio of retirees to working age adults will reach about 40% by 2020 (compared with the projected ratio of 19.6 in the U.S. by 2020) (Cai, Giles, & Meng, 2006). Also, by 2030, every child would have to take care of two or more senior relatives (Shanghai Research Center on Aging, 2009).

The challenges therefore raise an important question as to how prepared Chinese seniors are when managing their own financial affairs and seeking alternative retirement planning solutions are becoming critical in old-age support. The low financial assets to income ratio among urban households in China (1.3 in 2002 estimated by Jackson, Nakashima, & Howe, 2009) may suggest seniors' own financial preparation for retirement is still at its infancy, and also there may be a lack of access to financial services. However, households in China will have more accesses and choices in the financial products and services and personal financial planning will experience a fast development in the near future (Liao, Huang, & Yao, 2010). There has been scant research on how Chinese seniors manage their financial matters. The current study aimed to gain better understanding of Chinese seniors' attitudes and behaviors with respect to provision for their retirement. Particularly, the characteristic variation within the population will be examined. With improved knowledge of financial attitudes and behaviors of different groups of seniors, responses to changes and challenges in the market may be better predicted; and policies and financial services may be better tailored to the needs of specific groups.

Methods

The data was based on a national sample of the Chinese senior population, aged 60 and over. The data collection took place from June 1, 2005 to June 1, 2006 in 20 provinces and metropolitan areas. Twenty thousand senior householders were randomly selected (probability-proportional-to-size sampling was employed) and structured face-to-face interviews with a questionnaire were utilized. Only one person in a household responded to the interview. There were 19,924 valid questionnaires returned, resulting in a 99.8 percent response rate. All interviewers had been trained by The China Research Center on Aging. Each interview lasted approximately 45 minutes.

A two-step cluster analysis was used in the current study. The method is based on a distance measure that enables data with both continuous and categorical attributes to be clustered. The Schwarz's Bayesian Inference criterion (BIC) was used to selection the clusters.

The demographical, behavioral, and attitudinal variables were used in the cluster analysis. The demographical and behavioral variables were gender, age, education, working status, living condition, residence (urban or rural), family income, and current need for care, social and community involvement, indebtedness, and retirement savings. The attitudinal variables involved participants' attitudes toward their lives, their social and monetary concerns, feelings of their current conditions, and beliefs of dependability of different sources of retirement income. Participants' attitudes, concerns, and feelings consisted factors from a factor analysis.

Results Respondent Characteristics

Overall, respondents had an average age of approximately 70 years. About 59 percent were male. On average, they spent approximately eight years in school. A majority of the respondents lived in urban areas (96.4%).

A majority of the respondents (94.8%) were still working to earn incomes; and the average annual family income was RMB 23,130 Yuan (approximately US$ 3,300). A little more than one fourth (22.7%) of the respondents were living alone; however, over 90 percent of the respondents did not need care at the time of the survey. With regards to the participants' retirement preparedness, less than one third had saved for their retirement and the mean savings was only RMB 40,712. Only 7.3% of the participants had debts, with a mean of RMB 21,201.

Cluster Analysis

There were 6,683 valid cases in the cluster analysis. The auto-clustering algorithm indicated that a two-cluster solution based on the BIC value. The resulting clusters 1 and 2 contained 3,174 and 3,479 cases, which corresponded to 47.5% and 52.1%, respectively. An outlier cluster of 20 cases (0.4%) was identified and excluded from the subsequent analysis.

Demographic profiling.   In cluster 1, the proportion of female respondents was substantially greater than that of male respondents. Almost all respondents were still working to earn income. The mean age of the respondents was 70.2 years and they had attended school for about seven and a half years on average. In terms of living conditions, the respondents lived primarily in urban areas and about a half of them were living with a spouse or children; however, a majority of them did not need care from family members.   Cluster 2 was characterized by primarily male respondents who were slightly younger than those in cluster 1; with higher educational level and higher family income (the comparisons were statistically significant). Respondents in cluster 2 participated, on average, more social and community groups than those in cluster 1; nevertheless, respondents in both clusters had limited social and community-group participation. With regards to the respondents' retirement savings and indebtedness, those in cluster 2 had more savings as well as debts, on average, than those in cluster 1.

Attitudinal profiling.   The mean values of the factors were estimated with regard to the respondents' attitudes, concerns and feelings and the comparisons between the two clusters using one-way ANOVA. On average, respondents in cluster 1 showed a stronger attitude than those in cluster 2 that seniors are burdens. Also, respondents in cluster 1 felt more helpless and inactive than those in cluster 2. There was no difference between the two clusters in terms of respondents' concerns with financial and social issues. With regards to their beliefs of dependability of different retirement income sources, a significant higher percentage of the respondents in cluster 1 than those in cluster 2 (58.3% and 30.6%, respectively) believed that children are the most reliable income sources for retirement.

Validation of the cluster solution.   Although the number of clusters was objectively determined on the basis of BIC, it was essential to assess the stability of the cluster solution. A logistic regression analysis of the two clusters was performed with five variables that were not used in the cluster analysis: being communist party member or not (often denotes high socioeconomic status), money spent on insurance, money given to children, money received from children, and medical expenses (all the amounts were on annual basis). The resulting model indicated a good fit, which was statistically significant at $p < .001$ (-2 log-likelihood = 6292.8, chi-square = 272.5, d.f. = 5). The Nagelkerke's pseudo-R^2 was 0.1. Table 7 shows that all predictor variables were statistically significant at $p < .05$, with an exception of money given to children.

Conclusion

The results of the current study showed that Chinese seniors' attitudinal and behavioral traits are relevant to the classification with regards to their retirement preparedness. Each different group of seniors may raise different key issues in meeting their needs for retirement management. To fulfill these group-specific needs, it is important for policy makers and financial service providers to provide corresponding social support programs, financial education programs, and financial products and services

References

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Endnotes

[1] Assistant Professor, Department of Family and Consumer Sciences, California State University, Northridge

[2] Ph.D. Independent researcher.