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SEGMENT VARIABLES OF CHINESE MUTUAL FUND INDIVIDUAL INVESTORS

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Abstract

Individual investors have been majority of mutual fund investors in most developed countries. The same trend is seen in China. Segmentation of individual investors is footstone of fund marketing research. This study focused on current situation of mutual fund industry in mainland China, and found out the main segment variables of mutual fund individual investors by reviewing not only related research papers in China, but literatures from top-tier academic journals worldwide. Also, some comments are proposed as well. This paper provides a further study with a solid base with comprehensive literature review and analysis. Also, theoretical support to marketers to promote mutual-fund-related products is given.

Key words: mutual fund, market segment, fund marketing.
JEL Classification: J11, M16, M31.

1. Introduction

Individual investors, which have been an important part of open-ended mutual fund holders in European countries and U.S., are also increasing their market share in Chinese market. The primary reason that investors attach much importance to open ended funds lies in the unique "redemption system", which has made management of mutual funds increasingly competitive. A mutual fund management company will be forced to drop out of the market unless it provides its investors with good returns, satisfactory services and enough information to retain them. Therefore, open-ended funds present more requirements to those fund management companies. In a sense, they have opened not only the size and duration of funds but also management companies. An excellent company cannot keep a long foothold in the market without the ability of communication, service and investment (Jordan and Klaus, 2002). The trend that funds promotion is moving towards service industry causes marketing theories, investor segmentation in particular, to be salient in funds sales.

Looking back the history on mutual fund industry development in U.S, individual investors are an absolute main component of mutual fund market all the time. Especially since 1990s, individual investors are the largest holders, and its holding share of total assets of mutual fund which has been straight over 70% (Wang, 2003). While individual investors have not became a main component in Chinese fund market yet, their significance could not be ignored. Since 1992, the scale of Chinese stock market increasingly expanded, and the main reason why stock indexes moved up was that the increasing number of individual investors resulted in endless source of new funds. Hence, it doesn't mean that there is no need to develop the individual investors while developing the institutional investors.

However, most existing knowledge about open-ended mutual fund holders are for institutional investors and little is known on individual investors. Compared to institutional investors, individual investors have completely different investment attitude and behaviors and hence these differences lead to diverse marketing strategies. The purpose of the study focuses on the description of individual characteristics for individual investors of open-ended mutual funds markets. We hope to shed some light on funds marketing researchers, who are targeting at individual investors.

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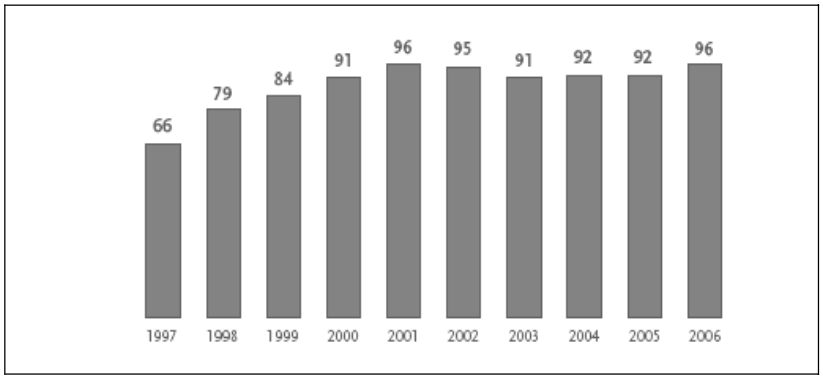
2. Development of Mutual Funds

2.1. Experiences of Developed Countries

In the past 30 years, the most lessons that mutual funds gained from the American market could be applied to Chinese markets, and the period of expansion will be significantly reduced (Shanghai Securities News, 2004) Therefore, it's quite valuable for China to learn experience from those countries where open-end funds have developed fairly advanced. In the end of 2000, individual investors of U.S. owned $5,500 billion financial assets of investment funds, 80% of the total (while it was 74% in 1990); by the end of 2005, the percentage of individual investors had risen up to about 90%, with the other 10% being owned by enterprises, state and federal governments. It might have good reason to say that American mutual funds market had been undoubtedly dominated by individual investors.

According to statistic data of ICI in 2006, the number of people holding mutual funds also reached its highest in 2001, that was, 95,800,000, and slightly decreased thereafter, yet maintained at a level above 91,000,000 (see Figure 1). These are indications that open-ended mutual funds have commonly used financing tools or financial products fitting for small and middle investors.



Source: ICI and U.S. Census Bureau, 2006.

Fig. 1. Numbers (millions) of individual U.S. investors of mutual funds

Individual investors had become the main component of mutual fund pool and this fact is also happening in other countries. In Japan, unit funds (similar to close-ended funds) constituted most of funds before 1990s, while supplementary funds (similar to open-ended funds) were only subordinate. But the situation ultimately changed in 1990s, when assets of supplementary funds reached twice as much as that of unit funds. It was the same with most European countries such as U.K. In Russia, more and more individual investors have withdrawn their deposits from banks to purchase investment funds since 2005. By the end of January 31, 2005, there have been in total 235 funds management companies registered within Russian border; in charge of 405 funds; including 207 open ended funds, 134 close-ended funds and 64 other funds. A few years ago, only financial experts had interest in investment funds, however, the situation has been greatly changed since 2005. Currently, 75% of fund purchasers are individual investors who have never invested in stock market before, and only 25% are experienced investors (Sun, 2006). Consequently, when individual investors increasingly play a crucial role in mutual funds industry around the world, also, it is rapid growth in China. And in the next part, the state of individual investors in Chinese market will be discussed.

2.2. Mutual Fund: Perspectives from China

2.2.1. Market Structure of Funds in China

Investment funds in China started with closed-ended forms and now are moving towards open-ended ones, which is the generally adapted form in the global market now. The existing

close-ended funds will be either liquidated or changed to open ended funds in a few years. It can be predicted that investment funds in China will become pure open-ended funds sometime in the future. Fund profession has entered the age of open ended funds ever since Hua'an Fund Management Company launched the first open-ended funds in September 2001.

Moreover, the funds management industries of the two sides across strait both have quite sizable development. By the end of February 2006, there have been in total 45 fund companies in Taiwan (called Securities Investment Trust Companies, SITC for short), which had issued 496 funds with fund assets equal to about 483.7 billion RMB (60.4 billion US dollars). By the end of 2005, there have been 52 fund companies in China. Among 218 formally operated security investment funds, there were 163 open-ended funds and 54 close-ended funds, with the total asset amounting to about 58.7 billion USD (Hu, 2005). The number rose to 60 billion in the beginning of 2006. In February 2007, the Chinese mutual fund investment cost amounts to $110 billion USD financial assets of investment. The emergence of the growth is primarily based on two reasons: First, the orientation of investment major shifted from the money market fund (invested in short-term bonds) to stock products. Second, China's stock market had dramatically soared in 2006 (reached the historical peak from 1949), and value of stock-related assets relatively rose. Assets value under fund management system in Chinese are equivalent to 8% of the value of GDP of mainland China in 2006, that is, 214% of United States, 24% of Taiwan, and 7% of India. There is still considerable room for growth.

2.2.2. The Emergence of Individual Investors

Now, more and more fund managers have oriented their target market to individual investors since the second half of 2003, and started to attach importance to explore and market non-institutional investor. By professionals' estimate, the institution holds more than 50.45% fund share (Hu, 2005), but currently most of Chinese funds are invested by institutional investors, and the percentage reaches as high as 90% in some funds, while the percentage of individual investors is only near 10% (Yi, 2004).

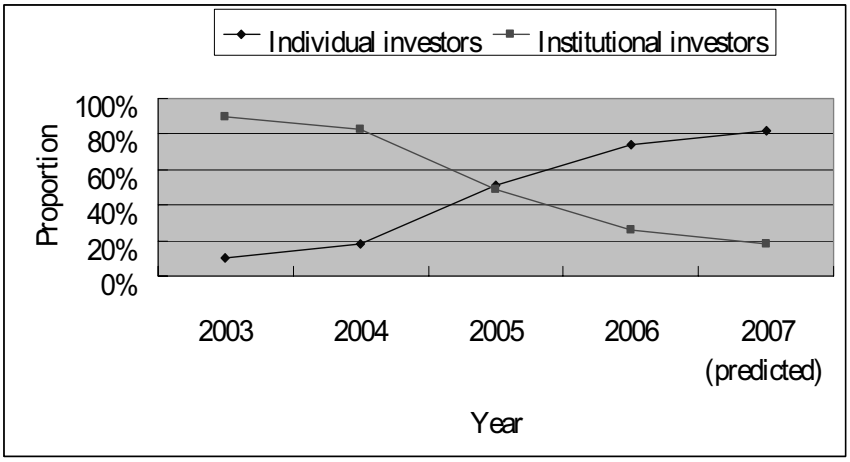
Table 1

Contributions of investors holding to open-end funds

	Individual Investors	Institutional Investors
2003	10%	90%
2004	18.4%	82.6%
2005	50.8%	49.2%
2006	74.2%	25.8%
2007 (Forecast)	82%	18%

Source: Shanghai Securities News (2007).

However, the structure of fund holders changed greatly in 2005-2006, as of December 31, 2006, the percentage of open-ended funds holders has been reached nearly 74.21%, that 20% jump would be higher than the end of the first half of 2005, while the percentage of institutional investors fell to almost 25.79% (Shanghai Securities News, 2007). This is because the stock market of mainland China encountered the best bull market ever in the history of the past 50 years. Thus, in recent years, people eagerly invested in stock market in the form of funds.



Source: Shanghai Securities News (2007).

Fig. 2. The proportion of individual/institutional investors in China

Yet, with more and more foreign capitals entering China, with China's commitment to release control of foreign capital after joining WTO, and with gradual development of investment fund market, it can be estimated that China is bound to follow the international trend and individual investors will finally become mainstream investors. In a word, marketing programs carried out to individual investors will be a very important means to market open ended funds in China sooner or later. Research on and classification of individuals' characteristics will be the basis for marketing programs, thus gaining an increasing concern.

Stephan Binder (2007) pointed out that the Chinese fund management industry assets will exceed $1.4 trillion in 2016, and it is the world's fastest-growing country. Meanwhile, Chinese investors are no longer satisfied with traditional, low-interest bank savings, preferring to seek investment channels with a high rate of return which greatly promoted economic development. In general, although flourishing growth has been witnessed in China, fund industry still has many challenges.

There are problems in China such as strong political orientation, fewer investment directions, higher fees and government supervision divergence, which directly lead to quite poor fund earnings. Limited supply from Chinese fund market and failure to establish an effective system to restrict and eliminate fund managers are also reasons for poor earnings. The issuance of funds requires approval of supervising institution. Fund managers generally aim at maximizing the asset possibly raised. Also, fund managers depend on institutional investors too much with little concern about individual investors.

Besides, funds are homogeneous. Although there are stocks, bonds, money, and hybrid, they are similar to one another in terms of investment objects, standard of rates, and the expected profits. In addition, the specific fund names in Chinese (e.g. Selected Fund, Excellent Fund, Fast-growing Fund, and Profitable Fund) are rather confusing to investors. Some people believe that the reasons for homogeneity are on the one hand limited channels of investment and on the other hand regulations made by supervisors. No matter what the reasons are, it is true that investor segments have not been done in the process of funds designing.

All the time, every fund management company has been orienting their major target market of open ended funds to institutional customers. But since institutional funds are intermittent to a great extent, they are in need of redemption at the year-end (Liu, Yu, and Zhang, 2005). In addition, institutional investors have excellent bargaining ability, so they have obtained far more preferential conditions than common investors in subscription. People in practical business all know that many funds, besides completely free in-and-out fees, would also provide 1% discount for institutional investors. The highest discount having ever appeared was up to 3%, then, after deduct-

ing tax and other expenses, institutional investors could get a rate of return at 1.2% by calling funds immediately after the closing period. All these have fostered opportunistic action of institutional investors, resulting in vast amounts of funds redemption occurrence from time to time (Liu, Zhou, and He, 2005).

3. Methodology

Until now, there are few studies on characteristics of individual investors in the current literature reviews though some mutual funds professionals and scholars have conducted marketing research in developed countries (the study of individual investors is rare in Chinese context). This paper summarized Chinese fund individual investor segment variables based on not only previous Chinese local and first-hand research paper and information, but also analysis from top-tier journal papers published in *Financial Services Review, Journal of Finance, Journal of Financial Services Marketing, Journal of Psychology and Financial Markets, Journal of Portfolio Management, Journal of Psychology and Financial Markets*, and *The International Journal of Bank Marketing*.

4. Segment Variables of Mutual Fund Individual Investors

Segmentation is the basis for successful marketing in terms of marketing principles and programs. Based on the result of segmentation, the marketing mix could then be conducted. Since the importance of individual investors has been emphasized, more and more companies attempt to solve marketing problems by establishing their own marketing research department or with the help of outside marketing consulting services. Statistic information and studies about individual investors' characteristics, such as age, marriage, level of education, income, asset portfolio and purchase channels are regularly released by Investment Company Institute (ICI).

Moreover, investors' channel preferences, switching behaviors, customer relationship management, channel design and advertising strategy are hot topics that are getting emphasized. Behavioral finance and psychology have been integrated into the studies, those on investors in particular. See details of these variables in the following.

4.1. Demographic Characteristics

These variables include age, gender, household income, education attainment, ethnicity, marital status, stage in the family life cycle and social class. ***Age*** is widely used as a variable to explain investor behaviors. Alexander et al. (1998) found that the median of fund holders is 43 years old and that those below 43 are more likely to hold funds by means of pension plans. Chow and Riley (1992) argued from the theoretical perspective that investors tend to cut down their investments on stocks when they grow old and that the older investors, the less they dislike risks.

As to ***gender***, generally speaking, women are more conservative and less willing to take risks than men. According to studies by Cohn et al. (1975), Chow and Riley (1992), Jianakoplos and Bernasek (1998), and Sunden and Surette (1998), female investors hold financial assets with larger returns and lower waves. Harlow and Brown (1990) found a higher level of enzyme monoamine oxidase in women, which provides biological evidence for the view that women dislike risks. Stinerock and Stern (1991), Wong and Carducci (1991), Prince (1993), and Powell and Ansic (1997) believed that women are not confident because the investment market is male-dominated, which sociologically explains why female investors are disgusted at risks.

Also, ***household income*** is an important variable. According to Alexander et al. (1998), the investors who buy funds be means of brokers, pension plans, or those who purchase directly from fund companies have larger incomes than those who invest through other channels such as banks and insurance companies.

Stage in the family life cycle is the last one factor. Some studies reveal that individuals have different financial objectives at different stages in the family life cycle. These objectives include emergency-meeting, mobility maintenance, large quantities of purchase, payment of children education, retirement, future earnings and enhancement of assets (Baker and Fletcher, 1987; Stanley et al., 1985).

A Sino-U.S. joint venture Everbright Pramerica Fund Management Ltd. has chosen a most pragmatic way, that is, comprehensive market research (Shanghai Securities News, 2004). In the first quarter of 2004, the global market research of Pramerica and the marketing department of Everbright Pramerica took a lot of efforts and time to launch a detailed investigation so as to assess the opportunities and challenges that fund companies faced. Moreover, deeply understand the ideas and expectations for the current domestic investors. All respondents met the requirements as follows. In this sense, it released clues of the demographic characteristics of mutual fund individual investors in China.

- The leading decision-maker of family investment, age ranged from 25 to 50, and owned housing.
- Own at least 50,000 RMB stocks, bonds or real estate investment.
- Annual household income was more than 50,000 RMB, or household yearly income ranked approximately top 20% in urban areas.
- Not the employees of banking, securities, insurance, investment industry, advertising, market research, and consulting firm.
- Not expatriates of offshore company.

4.2. Knowledge of Investment

Knowledge of investment is consisting of ***knowledge of risk*** and ***financial literacy***. Alexander et al. (1998) found that knowledge of risk exerts influences on investors' choice of channels. They tested many questions only to show basic knowledge of investment. However, there are some people who do not believe they will lose money when investing money on funds. This helps to segment individual investors to a certain extent. Alexander et al. (1998) also developed the concept of financial literacy. In their study they made a test on the differences of individuals' financial literacy. The test asked interviewees whether they could answer assigned questions. The number of correct answers is the financial literacy.

Numerous people have heard of funds, however, a majority of them poorly knew the mutual funds. Even so the mutual fund gives the impression of many advantages, and allows non-professionals to be involved in investment with the relatively low risk, thus realizing capital gains (Shanghai Securities News, 2004).

4.3. Financial Maturity

Kamakura et al. (1991) put forward the concept of ***financial maturity***. They discovered that the consumption of financial services is moving from services of high solvency and low risks to those of more complexity and low solvency. They also assumed that investors prefer the products of low complexity and risks before they adopt complex ones. They classified all the financial products into four categories: (1) basic products, (2) risk management and cash reserve products, (3) growing products to make up inflations, and (4) risky tax deductible asset. The investors who adopt the first two categories stay at a low level and those who have the last two remain at a high level. Harrison (1994) applied segmentation to financial products. He listed all of the financial products with different complexity levels and asked the subjects to select what had been used. The total number of product categories chosen is the score for financial maturity. Several clusters are obtained by cluster analysis. In this way the standard of high and low level is objective. Although this index is not designed specially for fund investors, it can be used to examine the characteristics of fund buyers.

4.4. Psychological/Behavioral Variables

Since the late 1980s behavioral finance theories have been popular in the U.S. The newly developed theories, a combination of economics, finance and psychology, appeared due to the fact that the existing financial theories fail to explain what is going on in reality. Contrary to traditional portfolio theories, behavioral finance theories describe true behaviors of investors

and analyze the effects of cognition, affection and attitudes on personal information processing process and decision-making.

Drawing on behavioral finance theories, marketing scholars apply the characteristics of individual investors to market segmentation. What have been most often used as a variable is risk attitudes of investors. Different from the measurable standard deviation in traditional financial theories, this concept of risk refers to a risk based on an individual's intuition and emotion (Olsen and Cox, 2001). Olsen and Cox (2001) found out the attributes of ***risk perception***. Jordan and Kaas (2000) designed a Likert scale to measure risk perception. "1" means "I strongly disagree" and "5" means "I strongly agree". In order to obtain a total score of risks, they put the above four variables into one category by using factor analysis and then compared risk perception of different investors. Also, the concept of ***risk profiles*** was put forward by Lenard et al. (2003). Unlike risk perception, which measures emotions and attitudes, risk profiles examine how investors respond in a particular context. Three questions were used to test risk profiles, involving market response, re-investment and market expectation.

Based upon the individual investors' status of urban residents, Zero Investigation Institution conducted a survey in 2002. In the report, individual investors are defined as individuals with one of those investment behaviors, such as individual stock, bonds/funds, regular savings, the purchase of investment-oriented insurance, exchange transactions. In terms of psychological endurance level of investment risk as well as future consumption forecast, individual investors are divided into four types by researchers (Xun, 2002).

5. Conclusion

The mutual fund management in China is formulating its own unique models of product design and development, marketing as well as trade supervision. In a word, the segment standards concerning fund investors are in great numbers and detail, on which academicians have not yet agreed with each other.

Looking back the history of researches on individual investors, demographic variables are usually used, at the same time, by means of discriminant analysis and cluster analysis, to find out marketing characteristics of different market segments such as characteristics concerning choice of channels, response to advertisements, and choice of different types of funds, etc. Recently, numerous variables such as attitude variables are getting emphasis. This trend means that segmentation based on behavioral characteristics, due to the difficult assessment, is important but still in quite a vague period.

Since drastic changes in business environment drove enterprises to adjust quickly and properly, the prevailing individual investors' behaviors was not sufficient to handle drastic environment changes. Until now, researches using attitude and behavior variables as segment variables are quite few. It is necessary to find out meaningful attitude and behavior variables since segmentation based on behavioral characteristics is directly linked to purchase behaviors.

References

1. Alexander, G.J, Jones, J.D., and Nigro, P.J. (1998), "Mutual fund shareholders: characteristics, investor knowledge, and sources of information". Financial Services Review, 7, No. 4, pp. 301-316.
2. Hu, Lifeng (2005), "An Overview of the Fund Profession: Rapidly Increasing Scale and the Reshuffling Market", *Financial Times*, Dec. 30th, 2005, p. 3.
3. ICI and U.S. Census Bureau, (2006), "Ownership of Mutual Funds and Use of the Internet", *Research Fundamentals*, October 2006, 15, No. 6, pp. 1-10. Article available on: http://www.ici.org/pdf/fm-v15n2.pdf.
4. Jianakoplos, Nancy and A. Bernasek (1998), "Are Women More Risk Averse". *Economic Inquiry*, 36, No. 3, pp. 620-630.
5. Jordan, Jenny and Klaus P. Kaas (2002), "Advertising in the mutual fund business: The role of judgmental heuristics in private investors' evaluation of risk and return", *Journal of Financial Services Marketing*, 7, No. 2, pp. 129-140.

6. Kamakura, W.A., Ramaswami, S.N. and Srivastava, R.K. (1991), "Applying Latent Trait Analysis in the Evaluation of Prospects for Cross-selling of Financial Services", *International Journal of Research in Marketing*, 8, No. 4, pp. 329-349.
7. Lenard, Mary Jane, Syed H. Akhter, and Pervaiz Alam (2003), "Mapping Mutual Fund Investor Characteristics and Modeling Switching Behavior", *Financial Services Review*, 12, No. 3, pp. 39-59.
8. Liu, Matthew, Yu, Jiaming, and Zhang, Jialing (2005), "The Research of Investors' Preference to Mutual Fund Sales Channel Selection", *Reform and Strategy*, May (5), pp. 44-52.
9. Liu, Matthew, Zhou, Chun, and He, Guoquan (2005), "Comparative Analysis of Angel Investment and Risk Investment Fund", *Business Economics and Administration*. 163 (May), pp. 89-96.
10. Olsen, R. and Cox, C. (2001), "The influence of gender on the perception and response to investment risk", *Journal of Psychology and Financial Markets*, 2, pp. 29-36.
11. Powell, Melanie and David Ansic. (1996), "Gender Difference in Risk Behavior in Financial Decision-Making: An Experimental Analysis". *Journal of Economic Psychology*, 18, No. 1, pp. 605-628.
12. Prince, Mehrin (1993). "Women, Men and Money Styles". *Journal of Economic Psychology*, 14, No. 3, pp. 175-182.
13. Shanghai Securities News (2004), "The Research Results of Individual Investment in Chinese Fund Market", *Shanghai Securities News*, July 2nd, 2004.
14. Shanghai Securities News (2007), "The Structure and percentage of Chinese Mutual Fund Investors", *Shanghai Securities News*, Feb. 15th, 2007.
15. Stanley, T.O., Ford, J.K. and Richards, S.K. (1985), "Segmentation of Bank Customers by Age", *International Journal of Bank Marketing*, 3, No. 3, pp. 56-63.
16. Stinerock, Robert and Barbara Stern (1991). "Sex and Money: Gender Difference in the Use of Surrogate Consumers for Financial Decision-Making". *Journal of Professional Services Marketing*, 7, No. 4, pp. 167-182.
17. Stephan Binder (2007), "Manager of Fidelity True North Fund says the clues are in the numbers", *Globaandmail.com*, article available on: http://www.theglobeandmail.com/servlet/Page/document/v5/content/subscribe?user_URL=http://www.globefund.com%2Fservlet%2Fstory%2FGFGAM.20061220.RBINDER20%2FGFStory%3Fquery%3Dmanulife%2Bfinancial&ord=9150033&brand=globefund&force_login=true.
18. Sun, Jianyun (2006), "Fund Investment is Popular in Russia", *Financial Times*, Feb. 15th, 2006, p. 11.
19. Sunden, Annika and Brian Surette. (1998), "Gender Differences in the Allocation of Assets in Retirement Plans". *American Economic Review,* 88, pp. 207-221.
20. Wang, Gang (2003), "The Assets of Individual Investors Chose and the Development of Fund Industry", *Reform*, No. 3, pp. 95-98.
21. Wong, Alan and Bernardo Carducci. (1991), "Sensation Seeking in Financial Risk Taking in Everyday Money Matters". *Journal of Business and Psychology*, 5, No. 1, pp. 525-530.
22. Xun, Ling (2002), "Four Groups Carved up the Individual Investment Market", *Finance and Accounting Monthly*, No. 8, p. 30.
23. Yi, Fei (2004), "Does 'Sudden Death' test Open Funds? Investor Structure Paradox Causes Pressure", *Chinese Securities*, Sep. 30th, 2004, p. 5.