

## RELATIONSHIP BETWEEN PERSONAL FACTORS AND MUTUAL FUND INVESTMENT

Kewalee Mungngam<sup>1</sup>

Thipsuda Thianpom<sup>2</sup>

Napanut Juprang<sup>3</sup>

Tharitsaya Kongkaew<sup>4</sup>

Received 5 May 2021

Revised 18 June 2021

Accepted 24 June 2021

### Abstract

The purpose of this study was to study the relationship between personal factors and interesting mutual funds of investors in Pathum Thani Province. The statistics used in the data analysis were descriptive statistics: frequency and percentage, and inferential statistics: Chi-square test. The study found that most of the respondents are female, age between 23-40 years old, graduate a bachelor's degree, work as private company employee, and earn average monthly income of 15,000-30,000 baht. Hypothesis testing results found that personal factors correlating with interesting mutual funds include age, education, income, and occupation. The related organization can differentiate promotion and program design to match with customer's characteristics.

**Keywords:** Mutual Funds, Investment, Investors

<sup>1 2 3 4</sup> Faculty of Business Administration, Rajamangala University of Technology Thanyaburi, 39 Moo 1, Klong 6, Khlong Luang, Pathum Thani, 12110 Thailand

<sup>1</sup> E-mail: 1159105060829@mail.rmutt.ac.th <sup>4</sup> E-mail: tharitsaya@rmutt.ac.th

## Introduction

The savings sector is one of the country's major funding sources (Cerda et al., 2020). Financial institutional savings are used to finance the business sector. The large savings level will help businesses make great use of local funding sources. Accordingly, dependence on foreign capital and financial costs of the business will be reduced. In addition to households with a lot of savings, it will help reduce financial problems, and debt problems, and savings can be added to the wealth of personal finances. Savings will be used during critical situations. According to the National Statistical Office, "The results of the 2018 National Household Survey of Thai households found that there are approximately 21.6 million Thai households. The households that have saving money are 15.7 million households or 72.7%. and the other 5.9 million households or 27.3% have no savings. It was found that the number of households with savings in 2018 increased by 6.0% from 2016 (66.7% in 2016 and 72.7% in 2018). Reflecting that over the past two years, the proportion of households has increased their savings.

The bank is an important intermediary between people who have savings and those who want to spend their money. The bank's main transaction remains money saving and financial planning services through financial products (Parlar, 2017). The banking business is more competitive. Banks need to adapt and increase their competitiveness. The design of financial products and services will become more diverse and meet customer needs. In order to encourage more savings and investing in Thai households today, there is a form of savings by depositing money with the bank and saving through mutual funds. Data from the Association of Investment Management Companies shows that the percentage of savings through mutual funds is 44.1%. Banking businesses need to be prepared with investors, either with or without investment experience, who are more interested in saving money through mutual funds. The mutual fund is established by a mutual fund management company, that is the capital manager in accordance with the investment policy stipulated in the prospectus. It is intended for mobilization from small investors. With the issuance of instruments called "Unit Trust". Investing in mutual funds can help reduce investment risks because it will diversify investments in a variety of securities (Riedl & Smeets, 2017). Since mutual funds are managed by a professional manager, investors can choose to invest in funds with a variety of risks that they accept (Ma & Tang, 2019). Mutual funds are therefore an effective tool that helps people with savings to invest in investment systems and receive a return on their investment that is greater than bank deposits. According to the statistics of Thai mutual funds in 2018 by Morningstar Direct, it was found that the fund with the most investment was fixed income fund, with a value of 1.7 trillion Baht, while retirement mutual fund (RMF) showed a slightly increase in growth rate.

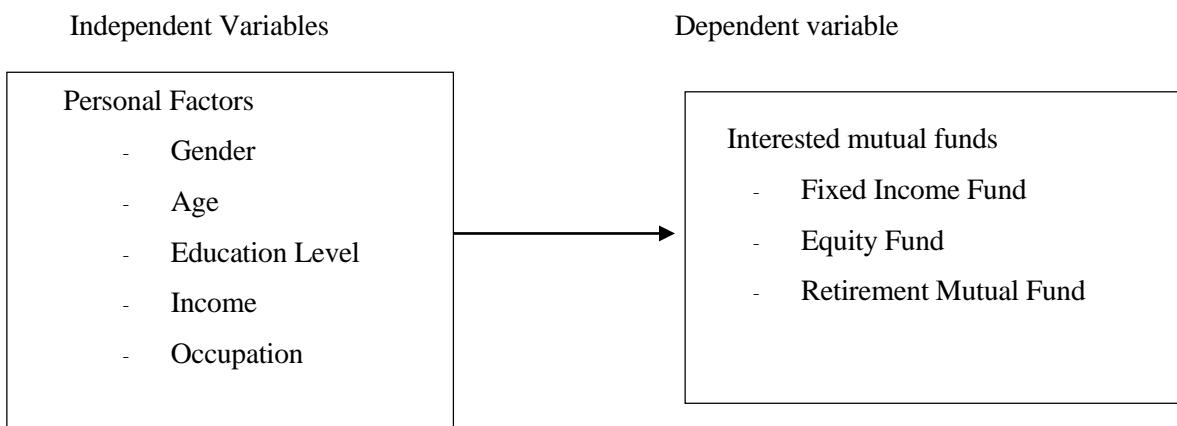
However, there are recently obstacles interrupting decision to invest in mutual funds are about the behavior of the buyers including spending habits, income level, expenses as well as personality (O'Neill et al., 2000; Bhavani, & Shetty, 2017; Singal, & Manrai, 2018), which can lead to provide appropriate matching between the buyers and sellers. As a result, the objective of this research is to study the relationship between personal factors and interested mutual funds. The results obtained from

this study can be used to design mutual funds to match the characteristics of personal factors that benefit the mutual fund industry.

### **Research objective**

The objective of the study aimed study the relationship between personal factors and interesting mutual funds of investors in Pathum Thani Province.

### **Conceptual framework**



**Figure 1** Research conceptual framework

### **Research hypothesis**

#### **Hypothesis 1:**

**Hypothesis 1:** Gender is correlated with decision to invest in mutual funds.

**Hypothesis 2:** Age is correlated with decision to invest in mutual funds.

**Hypothesis 3:** Education level is correlated with decision to invest in mutual funds.

**Hypothesis 4:** Monthly income is correlated with decision to invest in mutual funds.

**Hypothesis 5:** Occupation is correlated with decision to invest in mutual funds.

### **Literature Reviews**

The concept of demography is different demographic factors also behave differently (Bencharongkit, 1999). Marketing segmentation or demographic study is used to find the target group. It can help understand people's age, gender, education level, income, and occupation, which can be used to set a planning and strategies suitable for the behavior of the target audience. According to the demographic factors, gender is one of the factors that is important. Some products or services can use gender to differentiate the needs of consumers because different genders have different attitudes and perceptions. This results in different purchasing decision behaviors. The second variable is age. Profoundly, each type of product and service will be able to meet the needs of consumers of different ages. In addition, the study

of demographic study also reveals the customers' average or monthly income. Indeed, consumer income is a variable that determines the ability to purchase goods and services. Consumers with higher income are more likely to purchase goods and services than lower income consumers. Therefore, income may be used as a rough divider that consumers with similar income levels tend to have similar purchasing behavior. Lastly, education level and occupation can have significant relationship between dependent and independent variables. Importantly, the previous research explores that education level and occupation can contribute to consumers that having different attitudes, perceptions, and purchasing behavior. Adopted to the study of decision to purchase the mutual funds, the demographic factors are significant considered.

For mutual fund investment, there are various funds that have been in focus. These can include fixed income fund, equity fund, and retirement mutual fund. In relation to fixed income fund, it refers to the funds that have been invested in debt securities (Samarbakhsh & Shah, 2021). Meanwhile, equity fund means the principal investment given to stocks which it can be either actively or passively (index fund) managed (Lucas et al., 2019). Lastly, retirement mutual fund refers to the long-term investment promoting savings for having a comfortable life after retirement (Stinson, Doxey & Rupert, 2021).

Based on related research studies, Muhammad (2017) studied the personal factors affecting mutual funds investment. The study found that gender factors influence investment decisions in mutual funds. Females are more likely to invest in mutual funds than males. The difference personal factors in terms of age, occupation, level of education, and the average monthly income have no different in investment decisions for mutual funds. While Kaewket and Sanuthavipha (2017) found that personal factors including gender, age, marital status, education level, monthly income, and the maximum personal income tax base have different levels of decision-making to invest in Bualuang Asset Management's RMF for employees of Bangkok Bank Public Company Limited, Central Region. Furthermore, Waikhru and Subwarabol (2018) studied the factors affecting the average investment decision in retirement mutual funds of citizens in Bangkok and revealed that age was related to investment decisions in RMF, which older people was more likely to invest in RMF. Also, Bongini, and Cucinelli (2019) studied about university students and retirement planning and found that pension knowledge, money management and the highest level of financial literacy positively influence their intention of the university students to invest in a pension fund.

## **Research Methodology**

### **Population and Sample**

The target group of the study is population living in Pathum Thani and nearby provinces. The study period for this research is from November 2019 to March 2020, with questionnaires distributed to 400 people, who is a customer of Bangkok Bank Public Company Limited, from January to February 2020 (Yamane, 1967).

## Tools and data collection

For this research, the researchers created a questionnaire by applying the theories and related studies to design questions. After questionnaire was designed, validity tested by related experts in banks and reliability tested by Cronbach's alpha from tryout round were performed. Accordingly, the questionnaire is divided into 2 parts as follows. For Part 1, there is demographic characteristics of the respondents consisting of gender, age, education level, occupation, and average monthly income. Another part is Part 2 containing the investment behavior of Bangkok Bank customers who invest the 3 mutual fund types: Fixed Income Fund, Equity Fund, and RMF. In data collection, the designed questionnaire sets were distributed to 400 customers who conduct financial transactions at Bangkok Bank, which convenient sampling method was employed.

## Data Analysis

Once the data was collected, it was then analyzed by using descriptive statistics: frequency, and percentage. The hypothesis was tested by Chi-square.

## Research Results

**Table 1** Demographic characteristics of the sample

Demographic characteristics	Number (people)	Proportion (%)
1. Gender		
Male	193	48.25
Female	207	51.75
2. Age		
23 - 40 years old	196	49.00
41 - 55 years old	157	39.25
Above 55 years old	47	11.75
3. Education Level		
Senior high school or equivalent	24	6.00
Diploma or equivalent	55	13.75
Bachelor's degree	230	57.50
Higher than Bachelor's degree	91	22.75
4. Occupation		
Student	22	5.50
Civil servants / state employees / state enterprise employees	74	18.50
Private company employee	165	41.25
Business Owner / Self-employed	122	30.50
Others	17	4.25

**Table 1** Demographic characteristics of the sample (Cont.)

Demographic characteristics	Number (people)	Proportion (%)
5. Average monthly income		
Less than 15,000 baht	35	8.75
15,000-30,000 baht	195	48.75
30,001-50,000 baht	71	17.75
More than 50,000 baht	99	24.75
Total	400	100.00

From Table 1, it was found that of the sample group 400 people were mostly female (51.75%), aged between 23-40 years old (49%), graduated from bachelor's degree (57.50%), were married (65%), worked in private companies (41.25%), and earned 15,000-30,000 baht per month (48.75%).

### **Hypothesis Testing Result**

**Hypothesis 1:** Gender is correlated with decision to invest in mutual funds.

**Table 2** Analysis of the relationship between gender and decision to invest in mutual funds

Gender	Mutual fund type			Total
	Fixed Income Fund	Equity Fund	RMF	
Male	68	63	60	191
	35.6%	33.0%	31.4%	100.0%
Female	68	83	58	209
	32.5%	39.7%	27.8%	100.0%
Total	136	146	118	400
	100.0%	100.0%	100.0%	100.0%

Sig. = 0.374

$\chi^2 = 1.968^*$

\* Statistical significance at level 0.05

From Table 2 analyzing the relationship between gender and decision to invest in mutual funds, the result indicated that there is no correlation between gender and investment in mutual funds because Sig value is higher than 0.05.

**Hypothesis 2:** Age is correlated with decision to invest in mutual funds.

**Table 3** Analysis of the relationship between age and decision to invest in mutual funds

Age	Mutual fund type			Total
	Fixed Income Fund	Equity Fund	RMF	
23 - 40 years old	93 47.0%	87 43.9%	18 9.1%	198 100.0%
41 - 55 years old	39 25.2%	56 36.1%	60 38.7%	155 100.0%
Over 55 years old	4 8.5%	3 6.4%	40 85.1%	47 100.0%
Total	136 100.0%	146 100.0%	118 100.0%	400 100.0%

Sig. = 0.0000

$\chi^2 = 118.703^*$

From Table 3 analyzing the relationship between age and decision to invest in mutual funds, the result indicated that there is correlation between age and investment in mutual funds because Sig value is lesser than 0.05.

**Hypothesis 3:** Education level is correlated with decision to invest in mutual funds.

**Table 4** Analysis of the relationship between education level and decision to invest in mutual funds

Education level	Mutual fund type			Total
	Fixed Income Fund	Equity Fund	RMF	
Senior High school or equivalent	11 45.8%	9 37.5%	4 16.7%	24 100.0%
Diploma or equivalent	25 46.3%	12 22.2%	17 31.5%	54 100.0%
Bachelor's degree	86 37.1%	104 44.8%	42 18.1%	232 100.0%
Higher than Bachelor's degree	14 15.6%	21 23.3%	55 61.1%	90 100.0%
Total	136 100.0%	146 100.0%	118 100.0%	400 100.0%

Sig. = 0.0000\*

$\chi^2 = 66.855$

From Table 4 analyzing the relationship between education level and decision to invest in mutual funds, the result indicated that there is correlation between education level and investment in mutual funds because Sig value is lesser than 0.05

**Hypothesis 4:** Monthly income is correlated with decision to invest in mutual funds.

**Table 5** Analysis of the relationship between monthly income and decision to invest in mutual funds

<b>Monthly income</b>	<b>Mutual fund type</b>			<b>Total</b>
	<b>Fixed Income Fund</b>	<b>Equity Fund</b>	<b>RMF</b>	
Less than 15,000 Baht per month	32 86.5%	3 8.1%	2 5.4%	37 100.0%
15,000-30,000 Baht per month	86 44.3%	81 41.8%	27 13.9%	194 100.0%
30,001-50,000 Baht per month	17 13.1%	58 44.6%	55 42.3%	130 100.0%
More than 50,000 Baht per month	1 2.6%	4 10.3%	34 87.2%	39 100.0%
Total	136 100.0%	146 100.0%	118 100.0%	400 100.0%

Sig. = 157.945\*

$\chi^2 = 0.0000$

From Table 5 analyzing the relationship between monthly income and decision to invest in mutual funds, the result indicated that there is no correlation between monthly income and investment in mutual funds because Sig value is higher than 0.05.

**Hypothesis 5:** Occupation is correlated with decision to invest in mutual funds.

**Table 6** Analysis of the relationship between occupation and decision to invest in mutual funds

<b>Occupation</b>	<b>Mutual fund type</b>			<b>Total</b>
	<b>Fixed Income Fund</b>	<b>Equity Fund</b>	<b>RMF</b>	
Student	20 90.9%	2 9.1%	0 0.0%	22 100.0%
Civil servants / state employees / state	41 55.4%	16 21.6%	17 23.0%	74 100.0%
enterprise employees				
Private company employee	49 29.5%	95 57.2%	22 13.3%	166 100.0%

**Table 6** Analysis of the relationship between occupation and decision to invest in mutual funds (Cont.)

Occupation	Mutual fund type			Total
	Fixed Income Fund	Equity Fund	RMF	
Business Owner / Self-employed	26 21.5%	33 27.3%	62 51.2%	121 100.0%
Other	0 0.0%	0 0.0%	17 100.0%	17 100.0%
Total	136 100.0%	146 100.0%	118 100.0%	400 100.0%

Sig. = 0.0000\*

$\chi^2 = 151.286$

From Table 6 analyzing the relationship between occupation and decision to invest in mutual funds, the result indicated that there is correlation between occupation and investment in mutual funds because Sig value is lesser than 0.05.

### Discussion of Research Findings

From the study of the relationship between personal factors and mutual funds with sample of 400 people in Pathumthani Province and nearby areas, the result found that age, education and occupation had relationship with decision to invest in different mutual funds. Here, the funds can be divided into 3 types, namely, fixed income funds, equity funds, and retirement mutual funds. People under 40 years old would mostly choose to invest in fixed income funds, while those over 40 years old would choose to invest in RMFs. Consequently, it was shown that people over 40 years old were more interested in saving for retirement than those under 40 years old. According to research of Waikhru and Subwarob (2018), the study indicated that the older groups would be interested in investing in RMFs. Furthermore, the people with an undergraduate education would choose to invest the most in fixed income funds, while those with a higher degree of education would choose to invest the most in equity mutual funds. This may be because investment in equity mutual funds carries more investment risks than fixed income funds and RMF, as well as having a wide variety of investment policies. This resulted in a group of low-risk investors choosing to invest in fixed income funds and RMFs, rather than equity funds, which were people over 40 years of age with undergraduate education.

When analyzing occupational factors, it was found that group of students and civil servants are mostly interested in fixed income funds. Private company employees are mostly interested in equity funds. Business owner/self-employed are mostly interested in RMFs. The result indicated that different occupations would choose to invest in different funds. The fixed income funds are suitable for investors who can accept low risk, interesting the student group and government officials to tend to choose the fixed income funds. The equity funds are more suitable for investors who can accept more risks. This

is because a group of private company employees are most interested in investing in equity funds, which give higher return. In the meantime, RMF is mostly suitable for investors who want to accumulate savings for retirement, it is of the greatest interest to the self-employed group. This may be due to the uncertain nature of the high-income occupation. This has led to the need for this professional group to find a savings plan that will help make money spent happily after retirement. The study is consistent with Kaewket and Sanuthavipat (2017) found that personal factors including gender, age, marital status, education level, monthly income, and the maximum personal income tax base have different levels of decision-making to invest in Bualuang Asset Management's RMF for employees of Bangkok Bank Public Company. However, the study done by Bongini, and Cucinelli (2019) who revealed that recently the university students are also interested in retirement planning. The students now want to be millionaire and have sufficient money when they retire after work. Therefore, if retirement planning is well planned for the students can be also interesting.

The analysis of income factors found that those earning less than 30,000 baht per month are most interested in investing in fixed income mutual funds. The people earning 30,001-50,000 Baht per month are most interested in investing in equity mutual funds. Those earning more than 50,000 Baht per month are most interested in investing in RMF mutual funds. Therefore, different professions result in different mutual fund choices.

## **Suggestions**

### **Suggestions from the study**

From the study, the results indicated that personal characteristics including age, education, and occupation have relationship with investment decision in mutual funds. Therefore, this study can suggest that the related organization should design the programs and promotion related to the mutual funds that can respond the different age, education, and occupation. When there are more varieties of payment into the fund, the customers will have more choices to compare and choose the best ones matching with their wants.

### **Suggestions for future research**

In addition to personal factors that affect the selection of different types of mutual funds, there are other interesting factors that can affect the selection of different types of mutual funds. These factors perhaps include the marketing mix factors, risk factors, risk acceptance, as well as attitudes and incentives towards the return on investment. Moreover, the future research can consider using other research approaches such as interview technique, focus group and other in order to deeper insights of customers' behaviors. Lastly, this study focused only in single area which the future study can expand the samples so that the result can be compared and its related knowledge can be generalized.

## References

Muhammad, K. (2017). *Investment decisions in mutual funds of investors in Bangkok*. (Independent research, Finance and Banking Department, Faculty of Business Administration Ramkhamhaeng University).

Waikhru, W. & Subwarob, T. (2018). Factors affecting average investment decisions in retirement mutual funds of citizens in Bangkok. *The Graduate School Conference*, 1(1), 931-941.

Bencharongkit, Y. (1999). *Recipient analysis*. Bangkok: Faculty of Communication Arts Chulalongkorn University.

Kaewket, S. & Sanuthavipha, S. T. (2017). *Factors affecting decision-making to invest in retirement mutual funds or the Bangkok Bank Public Company Limited Long-Term Equity Fund, Central Region*. (Faculty of Social Sciences, Kasetsart University).

Yamane, T. (1967). *Statistics, An Introductory Analysis* (2nd Ed.). New York: Harper and Row.

O'Neill, B., Xiao, J. J., Bristow, B., Brennan, P., & Kerbel, C. M. (2000). Successful financial goal attainment: Perceived resources and obstacles. *Journal of financial counseling and planning*, 11(1), 1-12.

Bhavani, G., & Shetty, K. (2017). Impact of demographics and perceptions of investors on investment avenues. *Accounting and Finance Research*, 6(2), 198-205.

Singal, S. V., & Manrai, R. (2018). Factors affecting investment in mutual funds. *Journal of general management research*, 5(2), 96-107.

Riedl, A., & Smeets, P. (2017). Why do investors hold socially responsible mutual funds?. *The Journal of Finance*, 72(6), 2505-2550.

Ma, L., & Tang, Y. (2019). Portfolio manager ownership and mutual fund risk taking. *Management Science*, 65(12), 5518-5534.

Cerda, R., Fuentes, R., García, G., & Llodrá, J. I. (2020). Understanding domestic savings: an empirical approach. *Applied Economics*, 52(9), 905-928.

Parlar, T. (2017). Using data mining techniques for detecting the important features of the bank direct marketing data. *International journal of economics and financial issues*, 7(2), 692-696.

Samarbakhsh, L., & Shah, M. (2021). Fixed income mutual fund performance during and after a crisis: a Canadian case. *Journal of Economics and Finance*, 1-23.

Lucas, N. A., Manurung, J. C., Manurung, A. H., & Usman, B. (2019). The analysis of market timing, exchange rate of us dollar, and inflation to equity fund performance during 2011-2017. *Journal of Applied Finance and Banking*, 9(5), 125-140.

Stinson, S. R., Doxey, M. M., & Rupert, T. J. (2021). The effects of income tax timing on retirement investment decisions. *The Accounting Review*, 96(2), 435-463.

Bongini, P., & Cucinelli, D. (2019). University students and retirement planning: never too early. *International Journal of Bank Marketing*. 37(3), 775-797.