The Influence of Investment Knowledge and Risk Perception on Mutual Fund Choices among Millennials Investors in Bangkok Metropolitan Area

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Abstract

Mutual funds are one of the simplest investments and are considered a 'gateway' investment for new investors, which should make them ideal for new investors such as younger Millennials. It is more diversified portfolios in many sectors than direct investment in one sector. This research paper focused on investment knowledge and risk perception on mutual funds investment among Millennials investor which is largest population in Thailand. The research done have been collected from 427 Millennials mutual fund investors in Bangkok. The objective of this study was to investigate the effects of investor characteristics on investor knowledge, investor anxiety, risk-taking propensity, and risk aversion on the choice of mutual funds. Descriptive statistics showed that most of investors making transaction via mobile application and relying on online social media for source of information. Most frequent sources of information is online media and most popular sites for young and old millennials are difference. Popular media in young millennials are longtunman, finnomena and Thai mutual fund. While popular media in old millennials are asset management website, aomMoney and Finnomena. Moreover, they had moderate investment anxiety and low to moderate risk-taking propensity, along with moderate investor knowledge and risk aversion. The result of logistic regression was investment knowledge effects to equity fund and commodities investment. Investment anxiety effects to fixed income investment. In term of risk-taking effects to money market fund and equity fund, while risk aversion only effects to equity fund. Finally, none of the factors had an influence on REIT, balanced funds and FIF

*Keywords***:** investment behavior, millennial, mutual funds, risk, investment knowledge

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Introduction

Over the past few years, the growing influence of millennial has been recognized both commercially and academically. By definition, millennials refer to the group of people who were born between 1981 to 1996 (Michael, 2019). This generation is currently dominating the global demographic composition, currently account for 23% of the world's population (worldmeters, 2020). Moreover, about 58% percent of millennials live in Asia, fueling consumption, economic and financial activities in the region (Peterson, McCaffrey, & Sillman, 2019). As a result, there have been a wealth of study, attempting to understand their characteristics and behaviors.

In particular, various researchers observe that millennials possess different characteristics, compared with Baby Boomers or Generation X (Ng & Johnson, 2015). As the millennials grow up with technological evolution, they are often identified as digitally savvy, confident, self-directed and goal oriented.

However,global investor study and developed market showed that millennials possessed lower level of confidence in making investment decision.Older generations are more confident and risk-ready than Millennials (Schroders, 2017).Two-thirds of Millennials agreed that they had similar investing approaches as their parents, that their parents had the right to investing approach, and its work well that cause lack of comfort and confidence to decision making in investment by themselves. (Wilmington, 2019).

In Thailand, Millennials are the largest group of Thai population representing over 22% or 14.3Millions people (NSO, 2018). Thailand research reported by BOT shows that although this generation have higher financial knowledge more than other generations, they lack financial management and do not plan for long-term financial goals (BOT, Financial Access Survey of Thai Households, 2016). On the other hand, based on the survey of Stock Exchange of Thailand (SET) and the Securities and Exchange Commission (SEC), the study showed that millennials were the largest group of investors in mutual funds and stocks during the past four years. Investing in mutual funds and stocks were usually associated with investors' group with investment knowledge and above average risk appetite (SET & Research, 2019).

Mutual fund industrial plays an important role in financial industries and economy. In recent year net asset value rose to 90 billion (6% growth) with 25% of GDP (AIMC,2019) . However, there are a gap about limited information and conflict that researcher found during search for more information about Millennials investment in Thailand.

Recognizing this gap, this research aims to examine how investor knowledge (Nguyen, 2017), financial anxiety (also called fear of investing) (Baker & Ricciardi, 2014); risk-taking propensity (Baker & Ricciardi, 2014); and risk aversion (Hanna, Waller, & Finke, 2008) influenced choices of mutual fund among millennials in Bangkok Metropolitan areas. Establishing better understanding of influencing factors towards investment decision of millennials could provide insights for policy makers and practitioners.

Materials and Methods
Conceptual framework & Hypothesis
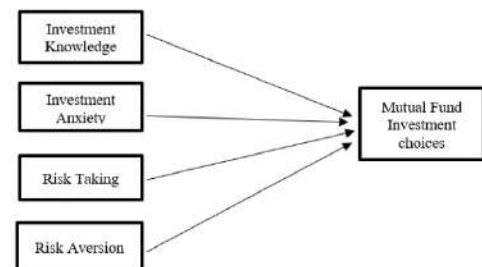
Hypotheses.
Hypothesis 1: Investment knowledge has an effect on mutual fund investment choice.
Hypothesis 2: Investment anxiety has an effect on mutual fund investment choice.
Hypothesis 3: Risk taking has an effect on mutual fund investment choice.
Hypothesis 4: Risk aversion has an effect on mutual fund investment choice.

Questionnaire and Pre-test
The questionnaires comprised 4 sections, with the first section, is screening questions selected only people who are invested in mutual funds. Second section, covering the statements of general investment behavior by check all that applies. In the third section, questions relating to Attitude towards

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investment and financial risk. For third sections, a five-point Likert-type scale ranging from5(strongly agree) to1 (strongly disagree)was used.The last section collected demographic information such as age, income level, genderand education.Thevalidity of the questionnaires test by the pilot test was performed among 45 respondents prior to the test period .

Sample Design and Data Collection

The survey questionnaire was targeted at residents of Bangkok Metropolitan. The questionnaire was distributed online during Nevember 2019 to February 2020 and using non-probability convenience sampling method. Target respondents were Millennial generations. In total, the questionnaires were done by 465 respondents. After screening the responses, only 427 responses could be used.

Data Analysis

Data analysis will be conducted in SPSS, which is a reliable tool for statistical analysis of quantitative datasets Firstly, Cronbach's Alpha was performed on the pilot questionnaires. Following by descriptive statistics to understand and categorized respondents. Main inferential statistic that will be used in the study is logistics regression (or logit regression). A binary logistic model has a dependent variable with two possible values, which is represented by an indicator variable, where the two values are labeled "0" and "1" which can apply to this research. It allows the researcher to make causal inferences about what factors may influence the choice (or non-choice) of a specific type of mutual fund investment, which was the main objective of the research.

Data Analysis
1.Variance inflation factor(VIF)

Collinearity Statistics				
	Investment Knowledge	Investment Anxiety	Risk Taking	Risk Aversion
Investment Knowledge		1.204	1.197	1.006
Investment Anxiety	1.471		1.426	1.052
Risk Taking	1.298	1.266		1.063
Risk Aversion	1.516	1.297	1.477	

All VIF of independent variables were less than 5 showing that there are no problem about multicollinearity.

2.Descriptive Analysis
Demographics
The final sample size was 427 members .There were more female respondents (52.2%) than male (47.8%)and more young millennials (age 23 to 33) (63.2%) than old millennials (age 34 to 39) (36.8%).

Figure 1 Demographic

Demographic	Frequency	Percentage
Gender		
Male	204	47.8
Female	223	52.2
Age		
23-33	270	63.2
34-39	157	36.8
Total	**427**	**100**

Preferred transaction method and source of mutual funds information
Most participants preferred to manage their mutual fund investments by mobile apps (46.4%) or bank branches (21.8%).

Figure 2 Preferred transaction methods

Preferred transaction methods on Mutual Funds	Frequency	Percentage
Mobile Application	198	46.4
Web portal	75	17.6
Bank Branches	93	21.8
Call canters of Asset Management Companies	16	3.7
Automatic monthly investment plan	37	8.7
Through Financial Advisors	8	1.9
Total	**427**	**100**

Figure 6 Attitude toward Risk

Attitude towards risk	Mean	S.D.	Interpretation
9. I considered myself as a risk lover.	3.04	0.989	Neutral
10. I will trade-off between financial risk and higher returns.	3.26	0.855	Neutral
11. I like a speculative investment style.	3.22	0.948	Neutral
12. Economics slowdown or shocks are my opportunity to make mutual funds investment.	3.27	0.856	Neutral
13. Losing money from mutual funds investment is just a normal issue, I can accept it.	3.29	0.957	Neutral
14. I allocate the money in various types of mutual funds.	3.52	0.878	Agree
15. I do not want any excitements. Just little amount of returns is fine to me.	2.99	0.919	Neutral
16. I am not willing to accept any risk, even though there is a chance of getting higher returns	2.89	0.97	Neutral
17. Security of my money is more important than the returns.	3.13	0.954	Neutral

Popular source of information for old millennials is Asset Management Company website while, Longtunman is popular among young millennials.

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Figure 3 Top 3 online media by age

Online Media	Longtunman	Finnomena	Thai Mutualfund
Young Millennials	116	66	56
	21%	12%	10%

Online Media	Asset Management Company website	aomMoney	Finnomena
Old Millennials	76	35	24
	28%	13%	9%

Risk and investment knowledge

The participants were generally risk-averse. Most of the participants agreed that they wanted little loss of principal, even if they did have the opportunity to receive a higher return (55.5%) and willing to accept moderate risk (53.6%)

Figure 4 Consider loss of principal and risk tolerance

Consider of principal and Risk tolerance	Frequency	Percentage
Little loss of principal is acceptable	237	55.5
Loss of principal is acceptable	104	24.4
It is desirous to have a high return	58	13.6
Loss of principal is totally unacceptable	28	6.6
Risk tolerance		
Moderate	229	53.6
Some risk is acceptable	133	31.1
Least	33	7.7
Most	32	7.5
Total	**427**	**100**

Mean participant investment knowledge ranged from 3.21 to 3.63 (out of 5), which indicates neutral to good investment knowledge. Mean attitude toward risk, ranging from 2.89 to 3.52, was also neutral to good.

Figure 5 Investment Knowledge

Investment Knowledge	Mean	S.D.	Interpretation
1. I have a good knowledge and understanding of mutual funds investment	3.48	0.82	Agree
2. I can categorize a level of financial risk attached to each type of mutual fund I invest in.	3.46	0.719	Agree
3. I surely explain the relationship between risk and returns from mutual fund investment.	3.34	0.828	Neutral
4. I go into detail to study articles and related documents before making any investment in mutual funds.	3.57	0.829	Agree
5. I am very satisfied with my current mutual fund investment.	3.63	0.704	Agree
6. My current mutual funds investment can answer all of my financial goals.	3.58	0.719	Agree
7. I am confident with my current mutual fund investment.	3.53	0.761	Agree
8. I allow financial expert to be responsible for all of my mutual fund investment.	3.21	0.91	Neutral

Results and Discussion

Figure 7 Logistic Regression Analysis

The findings were consistent with what was expected from the literature, which did predict that investment knowledge (Choi, Laibson, & Madrian, 2010); (Pellinen, 2011), investment anxiety (Eisenbach & Schmalz, 2016), risk taking (Eisenbach & Schmalz, 2016) and risk aversion (Kapteyn & Teppa, 2011) would potentially have an influence on the selection of different types of mutual fund investments. These findings showed that each of these investor characteristics influenced at least one type of mutual fund selection. Thus, all of the hypotheses, which were proposed in line with the literature could be accepted. Each of these four investor characteristics tended to lead investors toward one or more types of investment, while it had little effect on the choice of other investments.

Risk-taking propensity had a negative effect on the choice of money market funds and positively effect on equity fund which mean that risk taker less likely to invest in money market funds but, likely to invest in equity fund due to they will seeking higher risk for generate higher return. It is consistence with another research found that investors who have a high appetite for risk will seeking for higher risk instruments (Bailey W. K., 2011) Secondly, investment anxiety negatively influenced the choice of fixed income funds which mean that those who are anxious about investment less likely to fixed income fund. Interestingly, equity fund were influenced by investment knowledge (positive) and risk-taking propensity (positive) and risk aversion (negative). In the other words, investment knowledge and risk taking characteristic have effect to decision making in equity fund investment in the same direction while, risk aversion characteristic is oppose, those who are risk aversion less likely to invest in equity fund. Similarly to study result from Bailey, Kumar, & Ng shows that investors who score high on behavioral biases as risk taker tend to invest in funds with higher risk and return (Bailey W. K., 2011).

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There were some unanswered questions resulting from this analysis. For example, it is not clear why the effect of investment knowledge on the selection of Commodity was negative, rather than positive as would have been expected given that these are higher-risk and more advanced mutual fund types (Ratanabanchuen & Saengchote, 2018) which therefore would have been more attractive to more knowledgeable investors.One possible reason for this difference from what was expected could be that the investors choosing Commodity was attracted by relatively high returns without considering the risk, which might be the case for investors with lower knowledge. Finally, none of the factors had an influence on REIT, balanced funds and FIF. There were some unanswered questions resulting from this analysis. For example, why none of the investor characteristics had a significant effect on decision making in investment in REIT, Balanced fund and FIF which therefore would have been more attractive to knowledgeable and risk taking investors (Nguyen, 2017).

Conclusions
1. Descriptive statistics
The final sample size was 427 members . the most frequent respondent to this survey was young female millennial (age 23 to 33), single and holding a Bachelor degree, working as a corporate employee for a salary of under 50,000 baht/month. The most frequent choices of investment were stocks. Most important investment objectives included return on investment and tax benefits. They did not invest a lot of money on average in non-mutual fund investments, more than half invested 30,000 baht or under.

For mutual fund investment average 2 type of funds as equity funds and money market fund. While, commodities and foreign investment funds were the least popular mutual fund choices. They usually invest one to two years' investment period with investment amount around 30,000 baht or less and 50,000-70,000 baht respectively. The participants were generally risk-averse. They wanted little loss of principal, even if they did have the opportunity to receive a higher return and moderate risk-taking. Participants investment knowledge and attitude toward risk indicates neutral to good.

Analysis of descriptive statistics showed that millennial investors in Bangkok were relying on online social media for investment related information. Most frequent sources of information is online media and most popular sites for young and old millennials are difference. Popular media in young millennials are ลงทุนแมน , finnomena and Thai mutual fund. While popular media in old millennials are asset management website, aomMoney and Finnomena. This is consistent with their digital preference in information search, media viewing behavior and online banking (Jennifer Brodmann, 2018)

2. Logistic Regression Analysis
Binomial logistic regression was used to determine what effect these characteristics had on the choice of seven different investment types. Risk-taking propensity had a negative effect on the choice of money market funds and positively effect on equity fund which mean that risk taker less likely to invest in money market funds but, likely to invest in equity fund. Secondly, those who are anxious about investment less likely to invest in fixed income fund. Almost all of investor characteristics effect to equity fund. Investors who have investment knowledge and risk taker likely to invest in these fund. but, risk aversion people less likely to invest in it. Finally, none of the factors had an influence on REIT, balanced funds and FIF.

In conclusion, investor characteristics like investor knowledge, investor anxiety, risk-taking propensity, and risk aversion do have an effect on the choice of specific types of mutual funds for Millennial investors. These characteristics either attract investors to specific types of funds or act as aversions, making them less likely to invest in these funds. In some cases,this results in interesting conflicts.For example, the fact that high-knowledge investors were less likely to invest in fixed income funds and no effect on complex funds as FIF or commodities. Thus, it could not be assumed that these factors are the only influences on the choice of mutual funds for investment. However, this study can be used for future research into investor characteristics and their influence on mutual fund choice.

Limitation of study
1. The study relied on self-reporting of investor characteristics as previous studies have established that individual investors may not be fully aware of their own risk tolerances, and they may over-report knowledge.
2. The study did not address concerns like convenience, familiarity or availability, which are also known to influence the choice of mutual funds. There are plenty of opportunities for additional research in this area, since this is a topic that has not been investigated.

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Future study suggestions

1. Investigating investor choice for REIT, balanced funds and FIF since these appear to be different from other types of funds.
2. Identifying what other characteristics could influence the choice of specific mutual funds, for example knowledge, availability, or other fund and investor characteristics.
3. Increase number of sample size in order to get more information to enhance more accuracy of the study.
4. Compared age group between Millennials and Gen Z due to there are more populations similar to Millennials.

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