The International Journal of Business Management and Technology, Volume 7 Issue 2 March-April 2023
ISSN: 2581-3889

Research Article Open Access

Risk Tolerance Analysis Based on Gender Differences in Generations X and Y on Asset Allocation

RR Diva PutriHasyyati[1*], Susilo Toto Rahardjo[2]
[1,2]Master of Management, Faculty of Economics and Business, Diponegoro University, Indonesia

ABSTRACT: This study aims to analyze and compare the level of risk tolerance based on gender differences in generations X and Y in asset allocation. This research method is *a mixed method* with *an explanatory sequential* approach. Data collection techniques in this study used closed questionnaires and in-depth interviews. Data were collected from the sampling population in generation X and Y individuals with a minimum investment funding of Rp. 2,000,000.00 and invested in at least 3 different instruments with a *non-probability sampling* method. The study had 202 respondents with 112 men and 90 women on the results of a closed questionnaire. After further study, as many as 8 respondents with 4 women and 4 men were the research sample with interview techniques. The data obtained is processed using SPSS software. The results of the interview are obtained by the stage of condensing data, displaying data, and drawing conclusions. Based on quantitative analysis with different tests *man nwhitney* test it was found that hypothesis 1 and hypothesis 2 were accepted. It is characterized by a different test that has a significant level of < 0.005 then, for generations X and Y both men and women have different levels of risk tolerance. Based on the qualitative analysis of generation X men have an aggressive risk tolerance towards moderate while women are conservative. In generation Y men have an aggressive risk tolerance whereas women are conservative. Risk management in men in generation X uses risk diversification and women in generation X are more conventional by saving and setting aside money. Generation Y in men uses risk management diversification risk and "cold" money while in women diversify risk and prioritize investment instrument assets. In generation X investment instruments the majority goes to gold, deposits, and bonds. Meanwhile, Generation Y is mostly for mutual funds, gold, deposits, and stocks.

Keywords: risk tolerance, gender, generational differences, investment instruments, asset allocation

I. INTRODUCTION

Asset allocation is an important part of developing owned assets. Good and proper asset allocation is the key to the long-term success of any investment portfolio. Optimal asset allocation can be done by determining the utility function of wealth or consumption and completing portfolio weights that can maximize lifetime utility (Bollen & Posavac, 2017). Each individual's asset allocation decisions are influenced by the ownership of investment funds, financial objectives, and different risk-taking and tolerance. Determining strategic asset allocation is the most important aspect of the investment process. Asset allocation decisions can refer to the process and outcome of determining long-term (strategic) exposure to the available asset classes (or risk factors) that make up an investor's set of opportunities. Asset allocation is the first and foremost step in translating individual circumstances, goals, and constraints into a portfolio appropriate to achieve individual goals in investor tolerance for risk. Risk-taking is a fundamental dimension that economists investigate to explain individual differences in the behavior of deciding asset allocation (Bucciol&Zarri, 2015). Risk tolerance itself shows the extent to which one is willing to take risks, plays an important role in portfolio decisions, and has implications for individuals and financial service providers (Hallahan, Faff, & McKenzie, 2004) as well as how individuals are willing to accept the level of discomfort while risking current wealth for future growth (Gibson, Michayluk, & Van de Venter, 2013). An individual's tendency to take risks affects how assets are allocated between savings and risky assets that might make a profit or result in a loss. High-risk tolerance tends to invest in assets with a greater level of risk, such as stocks, to obtain greater returns in the long run (Yao, Hanna, & Lindamood, 2004) and build greater wealth (Neelakantan, 2010).

The high and low-risk tolerance between individuals can be different and influenced by many factors, one of which is the *factor of gender* differencesbetween generations. There are differences between the data that say that women prefer low-risk investments to men and vice versa. Most studies show that women tend to avoid stocks, where the risks of investing in stocks include *moderate to high risk* despite the growth potential that comes with it.

Interestingly, other studies show that not only *gender*differences can affect high-risk tolerance, but generational differences are also a factor in an individual considering risk in asset allocation. In research related to risk tolerance, two generations highlighted the differences in behavior in this regard, namely generation X and generation Y or commonly called the millennial generation. A generation is a group of individuals who experienced the same events at the same time Generation X was born between 1961-1981 and generation Y was born between 1982-2005 (Howe and Strauss, 2007). They were named "Millennials" by Strauss and Howe. Researchers predict that Gen Y is more confident and optimistic about achieving what they want. Generation Y tends to be risk-averse, so that generation's risk tolerance tends to be lower in making asset allocation decisions. Compared to other studies that show that generation X is more courageous to take risks in line with expected*returns* (Investopedia, 2017).

Several scientific studies have already been carried out, for example, the research carried out by Patti J. Fisher and Rui Yao (2017) shows that gender differences in financial risk tolerance are explained by gender differences in individual determinants of financial risk tolerance, and differences do not result from gender itself. Another study conducted by Ben Jacobsen, et al (2014) yielded two alternative explanations for the empirical finding that women invest less in stocks. They are less optimistic than men about the future performance of the stock market and also believe that the stock market may be riskier. These gender differences remain after we control income, employment, wealth, education, and marital status and spread across countries. research conducted by Nicolas P.B. Bollen and Steven Posavac (2017) used a sample of finance students and professional wealth managers. As a result, male students chose a riskier allocation than female students, according to existing evidence of gender differences in risk tolerance. In contrast, male and female wealth managers select and recommend equal allocations, which suggests that male and female financial professionals have similar risk preferences. YlvaBaeckstr, et al (2020) put forward the results of their study that in a study sample consisting of independent and suggested investors, researchers got the result that women had a lower level of investment risk tolerance. Based on some of the results of these studies, research gaps were found between one another.

Some of the above studies have not been based on generational differences. Research conducted by Richardson, et al (2001) explains that generation X is more willing to make risky investments than generation Y or commonly called millennials.

II. LITERATURE REVIEW AND RESEARCH MODEL DEVELOPMENT

REVIEW THE LIBRARY

a. Asset Allocation

Asset allocation is a choice among broad asset classes as examples of cash, interest on securities, property, equity, and decisions on how many portfolios to place in each asset option (Bodie et al, 2011). Generally, an investment made, it consists of two categories in it, which are also included in the things that an investor will consider in allocating his main assets (Tallo, 2015). Related to this, the first group is investments whose assets are tangible and investments whose assets are in the form of money. In this case, investments made with tangible assets are usually assets that can be seen by the eye, for example, such as houses, land, gold, and other goods. Although the goods used as assets are included in the tangible ones, in the process of returning them later their value will tend to decrease. This is different from investing in assets in the form of money. Furthermore, it can be seen that investments that use these financial assets are included in investments where the assets have an unmeasurable value, such as mutual funds, deposits, bonds, and stocks. However, the risks of investing using this type of asset tend to be very large if compared with real tangible assets. This is due to the acquisition obtained by the investor only in the form of correspondence, certificates, or records as the party holding the shares.

1. Strategic Asset Allocation

   According to Rother et al (2020), the core framework of strategic asset allocation (SAA) is to target the expected rate of return on a portfolio and rely on long-term expectations of risk and return on assets. SAA strives for it to provide an underlying strategic position of the asset over the horizon of a long-term investment, generally five to ten years.

2. Tactical Asset Allocation

   According to Anson (2004), tactical asset allocation is intended to take advantage of opportunities in financial markets when certain markets seem off track. Tactical asset allocation is designed to facilitate long-term goals by seeking added value

b. Risk Tolerance

Risk-taking is a fundamental dimension that economists investigate to explain individual differences in behavior (Bucciol&Zarri, 2015). Risk tolerance, which indicates the extent to which one is willing to take risks, plays an important role in household portfolio decisions (Sung & Hanna, 1996) and has implications for individuals and financial service providers (Hallahan, Faff, & McKenzie, 2004). Financial risk tolerance is the level of inconvenience an individual is willing to accept while risking current wealth for future growth (Gibson, Michayluk, & Van de Venter, 2013). In an efficient market, investors can expect higher returns for a higher level of risk. Thus, investors with a higher level. Risk tolerance tends to invest in assets with a greater level of risk, such as stocks, to obtain greater returns in the long run (Yao, Hanna, & Lindamood, 2004) and build greater wealth (Neelakantan, 2010). An investor with a lower risk tolerance needs additional compensation for accepting uncertainty when faced with an investment that has variable payouts (Hanna,Waller, & Finke, 2008).

c. Gender Differences

The concept of gender became a common language during the early 1970s. The concept is used as an analytical category to place a demarcation line between biological sex differences and this way is used to inform behavior and competence, which is then established as "masculine" or "feminine" between men and women (Pilcher&Whelehan, 2016). It can be known that gender is included in the role possessed by an individual where its formation is carried out by society and is also included in the behavior that has existed by going through processes in the social field related to gender, be it male or female. Biologically, of course, there is something that distinguishes a man from a woman. However, when viewed from the interpretation of culture, these different biological traits are only used in socializing to determine their appropriateness in acting, and related to gender is also an interesting topic of conversation in the field of economics. Especially related to the behavior applied by an individual in undergoing all the risks he faces in the investment process.

D. Generation Differences

As stated by Kupperschmidt (2000) it is known that generations belong to a group of individuals who have some similarities, especially in terms of their birth year, location, age, and experience or various experiences experienced by the individual concerned and have similarities in their influence. So that knowledge is gained that this generation belongs to the group of individuals who live an event simultaneously in the same period as well.

Generation X is a generation born between 1961-1981. The majority of generation X are independent, adaptable, and very pragmatic. Furthermore, Gen Xers prefer honest, punctual, and direct communication (Shoba&Kumar, 2020).

Generation Y was born between 1982-2005. They were given the name "Millennials" by Strauss and Howe (2000). The term "Millennial" refers to a generation that will have an important influence on the labor market, financial markets, and entire economies around the world (Hauber et al, 2015). Balaji and Devi (2015) predict that Gen Y is more team-oriented, protected, and confident in achieving goals. They are also very overconfident (Gursoy et al.,2008)

DEVELOPMENT OF RESEARCH MODELS

Relationship between gender differences in generation X and asset allocation risk tolerance levels

Asset allocation is closely related to the consequences of the risks to be taken. Based on previous studies, there is a gap between men and women in the level of risk tolerance, one such study shows that gender differences in financial risk tolerance are explained to be no differences from gender but the individual himself (Fisher&Yao, 2017). In contrast to the results of other studies where men chose a more at-risk allocation than women, according to existing evidence on gender differences in risk tolerance (Bollen&Posavac,2018). The difference in the results of the study has not been with the generation factors that can influence, as previous studies stated that generation X has a higher risk tolerance level than women

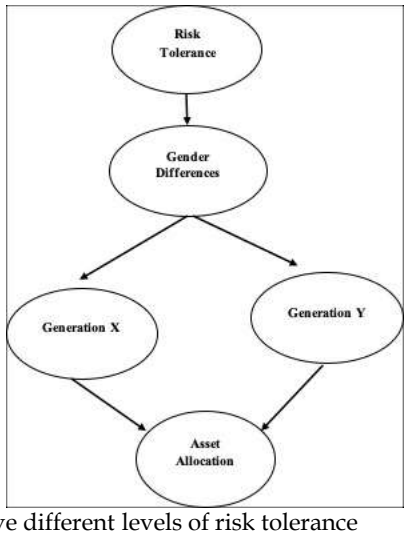
H1: Women and men in generation X have different levels of risk tolerance

The relationship between gender differences in generation Y and the level of risk tolerance of asset allocation

Based on previous research, there are differences between generations in investment management. Particularly highlighted is the difference between generations X and Y where some studies have shown a gap between generations X and Y in terms of tolerance levels. One of the studies states that generation Y has a low-risk tolerance compared to generation X. Generation differences are not necessarily a factor, many factors can influence it, one of which is gender differences. There is a gap between men and women in risk tolerance levels, one such study showed that gender differences in risk tolerance disappeared closer to retirement age (Mandal&Brady, 2019). In contrast, the results of another study conducted by Tobias Meylla and Thomas Pauls (2018) state that men are more likely to take risks

H2: Women and men in generation Y have different levels of risk tolerance

Draw 1
Research Models



H1: Women and men in generation X have different levels of risk tolerance
H2: Women and men in generation Y have different levels of risk tolerance

III. RESEARCH METHODS

A mixed method is a method used in this study. This research is a study that combines two types of research, namely quantitative and qualitative research. According to Creswell (2014), mixed-method research is a research approach that combines quantitative and qualitative forms. Philosophical assumptions, the application of quantitative and qualitative approaches, and the mixing of the two approaches into one study are part of the mixed method. According to Creswell (2014), mixed method research has important aspects in designing procedures, namely: *Timing, Weighting, Mixing,* Theory, and transformation perspectives which will be the main foundation for the entire research process. This mixed-method research uses an *explanatory sequential* approach.*The mixed method explanatory sequential* consists of two different phases, namely quantitative research followed by qualitative research (Creswell et al, 2014).

The research variables used in this study are independent because this study will test the comparison between women and men where both stand independently.

Free variables are variables that affect the incidence of bound variables. The free variables in this study are risk tolerance, gender differences, generational differentiation, and asset allocation.

Sample

The population specified in this study is generation X and generation Y individuals with a minimum investment funding of IDR 2,000,000.00. In this study, quantitative and qualitative approaches used *non-probability sampling* techniques.*Purposive* samplingis a type of*non-probability sampling* technique that the study used in this studyThe criteria set out in this study are generation X and generation Y individuals with a minimum investment funding of IDR 2,000,000.00 and making investments of at least 3 different investment instruments. The quantitative data that has been obtained will be processed using the SPSS program. Data analysis was carried out in two stages, namely normality testing and the second using an independent sample t-test.

Analysis Methods

In this study, data collection took place in two different stages with strict quantitative sampling in the first stage and with sampling aimed at the second stage, namely the qualitative stage. Qualitative data collection is built directly on the results of quantitative data. Quantitative results are then used as a basis such as comparison results or significant or insignificant. The first stage is quantitative data collection by distributing questionnaires or questionnaires through google forms using shortlinks which will be distributed freely and obtained by 202 respondents. In the second phase, from all respondents to the questionnaire, 8 people consisting of 4 women and 4 men will be selected for in-depth interviews. Qualitative data in the form of in-depth interview results that have been obtained will be processed in three stages, namely condensing data, displaying data, and drawing conclusions or verification (Miles&Huberman, 2014).

IV. RESULTS AND DISCUSSION

Respondents' Overview

Table 1
Respondents' Overview

Characteristic	Category	Generation X		Generation Y		Total
		n	%	n	%	
Gender	Man	49	24.3%	63	31.2%	112
	Woman	31	15.3%	59	29.2%	90
Age	17 - 28 Years Old	0	0.0%	76	37.6%	76
	29 - 40 Years	0	0.0%	46	22.8%	46
	41 - 50 Years	45	22.3%	0	0.0%	45
	51 - 60 Years	35	17.3%	0	0.0%	35
Work	Students	0	0.0%	24	11.9%	24
	State Officer	12	5.9%	13	6.4%	25
	Private Employees	13	6.4%	24	11.9%	37
	BUMN/BUMND employees	26	12.9%	36	17.8%	62
	Self-employed	17	8.4%	14	6.9%	31
	Other	12	5.9%	11	5.4%	23
Investment funding	2 - 5 Million	34	16.8%	92	45.5%	126
	5 - 8 Million	19	9.4%	18	8.9%	37
	8 - 10 Million	10	5.0%	5	2.5%	15
	> 10 Million	17	8.4%	7	3.5%	24
Total		80	39.6%	122	60.4%	202

Source: Data processed,2022

Based on the results of the descriptive analysis of the characteristics of the respondents in the table above, the following analysis results were obtained:

(1) Respondent's Gender

Based on the gender of the respondents, of the 202 respondents studied in this study, 112 respondents were male, while the other 90 respondents were female. Of the 112 male respondents, 63 respondents were generation X while the remaining 49 respondents were generation Y respondents. Furthermore, of the 90 female respondents studied, 59 respondents were generation X while the remaining 31 respondents were generation Y respondents.

(2) Respondent's Age

The results of the analysis in Table 4.1 shows that most respondents were generation Y respondents aged 17 – 28 years (76 respondents), while the rest were respondents aged 29 – 40 years (46 respondents), respondents aged 41 – 50 years (45 respondents) and respondents aged 51 – 60 years (35 respondent).

(3) Respondent's Work

Based on the type of respondent's work, most of the respondents of generation X were employees of BUMD / BUMN (26 respondents), while generation Y was dominated by respondents of BUMD / BUMN employees, students/students, and private employees. The proportion of students and employees in generation Y is more because generation Y respondents are respondents who are still at an active working / productive age so most of them work as employees and also students/students.

(4) Respondent's Monthly Income

Based on the number of respondents' monthly income, generation X is dominated by respondents with an income of 2-5 million per month (34 respondents), while the remaining 19 respondents earn 5-8 million per month, 10 respondents earn 8-10 million per month and 17 respondents earn > 10 million. Likewise, in generation Y, the highest proportion is respondents with a monthly income of 2-5 million (92 respondents), while the remaining 18 respondents earn 5-8 million per month, as many as 5 respondents earn 8-10 million and only as many as 7 respondents earn > 10 million per month.

(5) Respondent's Investment Funding

Based on the size of respondents' investment funding, the results of the analysis showed that most respondents made investment funding of 2-5 million (92 respondents), as well as in generation Y respondents, the highest proportion were respondents with investment funding of 2-5 million. Meanwhile, respondents with high funding >10 million were dominated by respondents with Geenerasi X (17 respondents), while generation X respondents with high funding were only 7 respondents. In a survey conducted by the Katadata Insight Center (KIC), it was found that the main reason Millennials (Y) invest is for the future, while, Gen Xers (39-54 years old) invest in pension funds.

V. DISCUSSION OF RESEARCH RESULTS

In this study, a test of the research instrument was first carried out before conducting multiple linear regression analysis, namely the normality test and the difference test

Quantitative Data Results

Research Instrument Test Results

Data Validity Test

In this study, the validity test was carried out using the R Calculate validity test which can be seen from the value of the corrected item-total correlation in each instrument

Table 2

Research Instrument Validity Test Results

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item_1	42.3667	88.792	0.493	0.855
Item_2	42.7667	87.564	0.522	0.852
Item_3	42.0667	85.099	0.576	0.844
Item_4	42.4667	81.568	0.726	0.822
Item_5	41.8333	80.902	0.780	0.815
Item_6	41.7000	80.010	0.768	0.816
Item_7	41.2000	88.648	0.518	0.852

Source: Primary data processed, 2022

The results of the analysis in the table above show that all items are valid because they have a calculated R-value of > 0.361. The entire item can be used to measure research variables.

Data Reliability Test

The reliability test is tested using Cronbach Alpha (), where if > 0.70 then the questionnaire is said to be cosistenable or reliable. The data processing gives the results as presented in table αα3 below:

Table 3

Reliability Test Results

Reliability Statistics	
Cronbach's Alpha	N of Items
0.857	7

Source: Primary data processed, 2022

The reliability test results in the table above show that the risk tolerance instrument is reliable because it has a Cronbach alpha value of > 0.7.

Description of Generation X and Generation Y Risk Tolerance

In this study, risk tolerance was measured with 7 question items using a measurement scale of 1 – 10, so that the respondent's total answer score on the risk tolerance variable would have the lowest value of 7 and the highest value of 70. Based on the lowest and highest values, the data range = 70 - 7 = 63 was obtained so that the respondent's answer score on the risk tolerance variable can be categorized into 3 categories (low, medium, and high) with the following criteria:

TABLE 4
Generation X and Y Risk Tolerance Based on Results

Category	Interval	Generation X		Generation Y		Total	
		n	%	n	%	n	%
• Low	Shoes 7 - 21	1	0.5	0	0	1	0.5
• Keep	Shoes 21 - 49	35	17.3	50	24.8	85	41.2
• Tall	Shoes 49 - 70	44	21.8	72	35.6	116	57.3
Average Score		53,29		52,05		52,80	

Source: Data processed,2022

Respondents in this study had a risk tolerance in the high category (57.3%), while the remaining 41.2% of respondents had a risk tolerance in the medium category and as many as 0.5% of respondents had a low category risk tolerance.

In Generation X, the results of the analysis show that most generation X respondents have a high-risk tolerance (21.8%) while the remaining 0.5% of generation X respondents have a low-risk tolerance and as many as 35% of generation X respondents have a moderate risk tolerance. The results of the analysis in generation Y also showed corresponding results, where the highest proportion of respondents were Y generation respondents with high-risk tolerance (35.6%), while the remaining 24.8% were generation Y with moderate risk tolerance.

Based on the results of the calculation of the average value of the respondent's answer score, the overall average score of respondents was 52.80, while more specifically, the average value of generation X tolerance was 52.05 and the average value of generation Y risk tolerance was 53.29 which means that on average, generation Y risk tolerance is higher than generation X's risk tolerance.where generation X thinks more about sustainability while generation Y doesn't think much about sustainability.

Normality Test

Normality testing was carried out using the Kolmogorov-Smirnov test as follows:

Table 5
Normality Test
Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Itself.	Statistic	df	Itself.
Toleransi_GenY	.114	80	.012	.930	80	.000
Toleransi_GenX	.135	80	.001	.926	80	.000

Source: Data processed,2022

Based on the normality test results of Kolmogorov Smirnov in Table 5, the results of the analysis showed that the Generation Y risk tolerance data were not normally distributed, indicated by a p-value of 0.012 < 0.05, a normally distributed generation X risk tolerance data, indicated by a significance value of 0.001 >0.05.

Test Difference

Gender-based Risk Tolerance in Generation X

The different risk tolerance test in generation X was performed using the Mann-Whitney difference test

Table 6
Generation X Risk Tolerance Difference Test Results
Test Statistics

	Toleransi_GenX
Mann-Whitney U	480.500

Wilcoxon W	1561.500
With	-2.953
Asymp. Sig. (2-tailed)	.003

a. Grouping Variable: Jenis_kelamin

Source: Data processed,2022

Based on the results of the Mann-Whitney difference test in the table above, the significance value of the test result was obtained by 0.003, because the significance value obtained < 0.05, Ho was rejected and concluded that there was a difference in risk tolerance in generation X who were male and generation X who were female.

Comparison of Risk Tolerance of Generation X who are male and Generation X who are female

Different tests Comparison of Risk Tolerance of Generation X who are males and Generation X who are females using the Mann-Whitney difference test

Table 7

Comparison of Risk Tolerance of Generation X who are male and Generation X who are female

Group Statistics

	Jenis_kelamin	N	Mean	Std. Deviation	Std. Error Mean
GenX Tolerance	Man	34	57.2059	15.02075	2.57604
	Woman	46	48.2391	10.74179	1.58379

Source: Data Processed, 2022

Based on the average value of the risk tolerance score of generation X respondents in Table 7 above, it was found that the average value of the generation X risk tolerance score of the male sex was 57.2059, while the average risk tolerance value of generation X who are female is 48.2391, this means that the risk tolerance of generation X who are male is higher than the risk tolerance of generation X who are female.

Gender-based Risk Tolerance in Generation Y

The different risk tolerance test in generation Y was carried out using the Mann-Whitney difference test

Table 8

Generation Y Risk Tolerance Difference Test Results

Test Statistics

	Toleransi_GenY
Mann-Whitney U	1169.000
Wilcoxon W	3380.000
With	-3.522
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Jenis_kelamin

Source: Data processed,2022

Based on the results of the Mann-Whitney difference test in the table above, a significance value of the test result was obtained of 0.000, because the significance value obtained < 0.05, Ho was rejected and concluded that there was a difference in risk tolerance in generation Y who were male and generation Y who were female.

Comparison of Risk Tolerance of Generation Y who are male and Generation X who are female

Different tests Comparison of Risk Tolerance of Generation Y who are males and Generation X females using the Mann-Whitney difference test.

Table 9

Comparison of Risk Tolerance of Generation Y who are male and Generation X who are female

Group Statistics

	Jenis_kelamin	N	Mean	Std. Deviation	Std. Error Mean
Toleransi_GenY	Man	56	58.2321	12.39500	1.65635
	Woman	66	49.0909	13.00382	1.60066

Source: Data Processed, 2022

Based on the average value of the risk tolerance score of generation Y respondents in Table 4.4 above, it was found that the average value of the generation Y risk tolerance score of the male sex was 58.2321, while the average risk tolerance value of generation Y who were female was 49.0909, this means that the risk tolerance of generation Y who are male is higher than the risk tolerance of generation Y who are female.

Hypothesis Testing

Hypothesis Test 1

Hypothesis 1 in this study states that there is a difference in the risk tolerance of generation X who are male and the risk tolerance of generation X who are female. The results of the different tests using the Whitney mann difference test showed a significance value of 0.003 < 0.05 which means that with a confidence level of 95%, it can be proven that there is a significant difference between the risk tolerance of generation X who is male and the risk tolerance of generation X who is female. The results of this analysis support hypothesis 1 in the study so that Hypothesis 1 is accepted.

Hypothesis Test 2

Hypothesis 2 in this study states that there is a difference in the risk tolerance of generation Y who are male and the risk tolerance of generation Y who are female. The results of the different tests using the Mann-Whitney difference test showed a significance value of 0.000 < 0.05 which means that with a confidence level of 95%, it can be proven that there is a significant difference between the risk tolerance of generation Y which is male and the risk tolerance of female generation Y. The results of this analysis support hypothesis 2 in the study so that Hypothesis 2 is accepted.

Qualitative Data Results

Respondent Profile

Based on interviews that have been conducted with generation X and generation y investor speakers where each investor has a background that tends to be diverse. The following is the profile of the respondent:

TABLE 10

Respondent Profile

NAME	AGE	GENDER	WORK
Generation X 1 Investors	49 Years	Man	Private Employees (Palm Oil Industry)
Generation X 2 Investors	56 Years	Man	BUMD Employees (Bankers)
Generation X 3 Investors	61 Years	Woman	Civil Servant (Lecturer)
Generation X 4 Investors	53 Years	Woman	Civil Servants (Local Government)
Generation Y 5 Investors	32 Years	Man	BUMD Employees (Bankers)
Generation Y 6 Investors	25 Years	Woman	Graduate Student, Entrepreneur
Generation Y 7 Investors	28 Years	Man	Private Employees (Start-ups)
Generation Y 8 Investors	35 Years	Woman	Accountant

Investment instruments owned by generation X and generation Y investors

Investors 1,2,3,4,6,and 8 have deposit instruments. In generation X, both men and women have deposit investment instruments (investors 1,2,3, and 4) while in generation Y only women have deposit investment instruments (investors 6&8). This is in line with the research of Nicolas P. B Bollen & Steven Posavac (2018) that their respondents invested in existing deposit pads.

Gold investment instruments are owned by investors 1,3,4,6 & 8. In generation X only 1 man has gold investment instruments and women have gold investment instruments (investors 1,3, and 4). Interestingly, in generation Y only women have gold investment instruments (investors 6 & 8). This is in line with Marya Hillesland's (2019) research that their respondents invested in existing gold

Other investment instruments, namely Bonds, are owned by investors 1,2,3,4, and 7. If dissected back in generation X, both men, and women all have investment instruments in the form of Bonds (investors 1,2,3 and 4) Another thing found is that in generation Y only 1 respondent with male gender has a bond investment instrument (investor 7). This is in line with Bidisha Mandal And Michael P. Brady (2019) that their respondents invested in existing Bonds

Other investment instruments, namely Shares, are owned by investors 2,5, and 7. If dissected from the interview results, only 1 respondent from generation X with the male gender has a stock investment instrument (investor 2) while in generation Y only the male gender has a stock investment instrument (investors 5 and 7). This is in

line with the research of Nicolas P. B Bollen & Steven Posavac (2018) that their respondents invested in existing stocks.

The last majority instrument owned by respondents was mutual funds. Mutual funds are owned by generation Y investors with 2 male genders (investors 5 and 7) and 1 female gender (investor 8). This is in line with the research of Nicolas P. B Bollen & Steven Posavac (2018) that their respondents invested in existing mutual funds.

Overview of the risks involved in investing in generation X and generation Y investors

In generation X of the male sex (investor 1), 1 respondent has a risk picture by managing the risk of existing investment instruments. In contrast to investors in 1 man and 2 women in generation X (investors 2,3 and 4) they tend to minimize risk by choosing safer and more stable investments so that they are less likely to be exposed to risk.

Generation Y with male and female genders (investors 5, 6, and 7) have an overview of risk, namely understanding the risks that exist both by analyzing the risks of each investment instrument and with fundamental and technical techniques so that they are better prepared to face the existing risks, while the other 1 investor, namely in the female sex, the risk picture is carried out by staying away from the existing risks and not wanting to take too many risks even thoughunderstand that every investment instrument comes with risks. This is in line with Yao, Sharpe, and Wang (2011) who stated that the role of generational differences is inconsistent with existing hypotheses so that it does not have an impact on risk tolerance. This is evidenced by both generation X and Y mostly using diversification techniques for both assets and risks.

Risk Tolerance Preference in investing in generation X and generation Y investors

In generation X with the male sex, the risk tolerance preference is more aggressive towards moderate. This is due to the experience that these investors have experienced so their risk tolerance preference of aggressively tends to be moderate. Meanwhile, generation X with the female gender is more conservative. This is based on the personality of these investors who tend to be afraid of risk.

In generation Y for the male sex their risk tolerance preference tends to be aggressive. It can be seen from the investments made in stock investment instruments and their personalities that tend to reduce risk by analyzing risks both with fundamental/technical techniques. Meanwhile, in women, risk tolerance tends to be conservative. This can be seen from the personality of those who tend to avoid existing risks. This is in line with the research of Tobias Meylla and Thomas Pauls (2018) that men tend to take risks more than women, so women's risk tolerance is lower than that of men.

Alternative investments in generation X and generation Y investors

In generation X for the male gender, they choose to do alternative property investment while for the female gender, they prefer SBN and Gold for alternative investment. This is in line with research conducted by Kathleen et al (2010) that women avoid risks in asset allocation more than men. So in this case the alternative investment in generation X women is more of a gold instrument.

In generation Y for the male and female sexes choose gold as the investment alternative chosen by them. This is in line with the research of Philip L & JoNell S (2013) that both men and women have the same tolerance. Seen in generation Y both genders both choose gold as an alternative investment

Risk management and strategy in generation X and generation Y investors

In generation X for the male sex, their risk management is more about diversifying risks (investors 1 and 2), placing investments with low to high risks so that risks can be minimized, while in women they tend to be conservative by setting aside and saving from existing income (investors 3 and 4).

In generation Y for the male gender (investors 5 and 7) risk management and strategy are skewed towards existing asset allocation. 1 female respondent had an asset management answer (investor 6) while the others went into risk diversification (investor 8). This is in line with the research of Patti J Fisher & Rui Yao (2017) which states that differences or no differences from financial tolerance are explained by financial risk tolerance itself and gender differences do not determine whether there is a difference or not. This can be seen from the answers related to risk management and strategies, each individual has his views

Responding to Investor Risk tolerance in generation X and generation Y

In generation X for the male sex based on existing experiences ultimately their risk tolerance starts from aggressive and slowly towards moderate or even conservative, according to existing preferences. They tend to be cautious about making investments because of their experience. Women, are afraid to take risks or suffer losses, even from their preference that conservatives prefer safe and stable investments.

Generation Y for the male sex both have an aggressive response to risk tolerance. Investor 5 dares to take risks

and likes challenges whereas investor 7, although aggressive, has a focus on investing in the long term as well as sharpening investment literacy. Women in a generation, Y prefer to be safe and stable. This is in line with previous research by Mandal & Roe (2013) which stated that the older the risk tolerance of individuals tends to decrease. In generation X males, risk tolerance begins to change from aggressive to moderate and even conservative, while generation Y in men because they are very young, it is more eager to face risks.

VI. CONCLUSION

Hypothesis 1 in this study was proven and concluded that there was a significant difference between the risk tolerance of generation X who were male and the risk tolerance of generation X who were female. Hypothesis 2 in this study was proven and concluded that there is a difference in the risk tolerance of generation Y who are male and the risk tolerance of generation Y who are female. Generation X for the male sex has investment instruments Deposits, Gold, Bonds, and Stocks. The risk picture of generation X is more about managing existing risks according to experience. They are more likely to have an aggressive risk tolerance towards moderate assembled investment instruments. Risk management carried out is risk diversification with alternative investments, namely property. Their response is more about a change in tolerance from initially aggressive to moderate because they have experience of having experienced losses and have many obligations that need to be fulfilled. Slowly with age, they will progress towards conservative risk tolerance. Unlike generation X, which is female. Investment instruments used deposits, gold, bonds, and land. The picture of risk in generation X women they prefer instruments with little risk. Generation X's preference for women is more conservative who are unwilling to risk the harm that needs to be borne. The investment alternatives used are more gold and SBN. They also manage their investments by setting aside money from income and collecting these funds for investment. Their personalities refer more to conservatives. These results show that there is a difference in risk tolerance in generation X for the male and female sexes. In generation Y, the male gender has Deposits, Gold, Stocks, Bonds, Mutual Funds, and Risk picture generation Y men is more focused on risk analysis both fundamentally and technically and understand and seek information about existing investment risks so that they are better prepared to face existing risks. Risk tolerance preference for the male sex in generation Y is more aggressive The investment alternative they choose is gold and risk management the strategy used is to diversify risk by allocating assets from low to high risk and adjusting existing funds to the desired asset allocation. The form of tolerance in the male sex for generation Y is more aggressive because it dares to take risks and increase literacy and focus on the long term. In generation Y for the female sex has deposit and gold investment instruments. The picture of risk in women in generation Y is more cautious about the risks that exist in each investment instrument. When viewed from the existing results, their risk tolerance preference is more conservative Their investment alternative also tends to be the conservative one, namely gold. Their strategy in managing investments is more about diversifying risks and focusing on investment instruments that have stable and safe risks. When viewed from the results of their personality, they refer more to conservatives where asset management is more of an instrument that has little risk. This also shows that in generation Y men and women have different risk tolerances.

RESEARCH LIMITATIONS

The sample in the study includes generations X and Y who actively invest for 3 years with a minimum investment funding of 2,000,000 excluding generations X and Y who invest under 3 years or investment funding below 2,000,000
At the time of data taking, the information provided by existing respondents sometimes does not show the actual answer from the respondent. This can be influenced by differences in existing definitions or different understandings of each respondent

UPCOMING RESEARCH AGENDA

Populations and samples can be expanded back in generations X and Y with smaller or larger assets and focus on just a few investment instruments. Future research can add variables of investment instruments such as mutual funds, stocks, or deposits

BIBLIOGRAPHY

[1.] Arano, K., Parker, C., & Terry, R. (2010). Gender-based risk aversion and retirement asset allocation. Economic Inquiry, 48, 147–155. https://doi.org/10.111/j.1465-7295.2008.00201.x
[2.] Baeckström, Y., Marsh, I. W., & Silvester, J. (2021). Financial advice and gender: Wealthy individual investors in the UK. Journal of Corporate Finance, September 2019, 101882. https://doi.org/10.1016/j.jcorpfin.2021.101882
[3.] Bollen, N. P. B., & Posavac, S. (2017). Gender, risk tolerance, and false consensus in asset allocation recommendations. Journal of Banking and Finance, 87, 304–317. https://doi.org/10.1016/j.jbankfin.2017.10.016

[4.] Brooks, C., Sangiorgi, I., Hillenbrand, C., & Money, K. (2019). Experience wears the trousers: Exploring gender and attitude to financial risk. Journal of Economic Behavior and Organization, 163, 483–515. https://doi.org/10.1016/j.jebo.2019.04.026

[5.] Chen, J. (2005). Gender Differences in Risk Taking: Are Women More Risk Averse? University Van Tilburg.

[6.] Creswell, J. (2013). Qualitative Inquiry & Research Design: Choosing Among Five Approaches. SAGE Publications (Vol. 11).

[7.] Cresswell. (2013). Reserachmdesing 5Thmedition. In Journal of Chemical Information and Modeling (Vol. 53, Issue 9).

[8.] Dent, A. (2017,December 5). The next generation: Millennials out-invest Gen X and Baby Boomers. Retrieved from The Bonhill Network: https://www.growthbusiness.co.uk/millennials-invest-gen-x-2553142/

[9.] Diane, K., & Drecnik, D. (2003). Generation X : Understanding their risk tolerance and investment behavior. Journal of Financial Planning, 19(9), 58–63.

[10.] Fisher, P. J., & Yao, R. (2017). Gender differences in financial risk tolerance. Journal of Economic Psychology, 61, 191–202. https://doi.org/10.1016/j.joep.2017.03.006

[11.] Halko, M. L., Kaustia, M., & Alanko, E. (2012). The gender effect in risky asset holdings. Journal of Economic Behavior and Organization, 83(1), 66–81. https://doi.org/10.1016/j.jebo.2011.06.011

[12.] Hsu, Y. L., Chen, H. L., Huang, P. K., & Lin, W. Y. (2020). Does financial literacy mitigate gender differences in investment behavioral bias? Finance Research Letters, October, 101789. https://doi.org/10.1016/j.frl.2020.101789

[13.] Hillesland, M. (2019). Gender differences in risk behavior: An analysis of asset allocation decisions in Ghana. World Development, 117, 127–137. https://doi.org/10.1016/j.worlddev.2019.01.001

[14.] Howe, N., & Strauss, W. (2007). Helicopter parents in the workplace. Syndicated Research Project, NGenera, (November). Retrieved from http://www.wikinomics.com/blog/uploads/helicopter-parents-in-the-workplace.pdf

[15.] Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using Mixed-Methods Sequential Explanatory Design: From Theory to Practice. Field Methods, 18(1), 3–20. https://doi.org/10.1177/1525822X05282260

[16.] Jacobsen, B., Lee, J. B., Marquering, W., & Zhang, C. Y. (2014). Gender differences in optimism and asset allocation. Journal of Economic Behavior and Organization, 107, 630–651. https://doi.org/10.1016/j.jebo.2014.03.007

[17.] Kathuria, L., & Singhania, K. (2012). Investment Decision Making: A Gender-Based Study of Private Sector Bank Employees. The IUP Journal of Behavioral Finance, 9, 45–56. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2152811

[18.] Kupperschmidt. (2000). Multigenerational employee. Health Care Manager, Vol. 1, pp. 65–76.

[19.] Lascu, D. N., Babb, H. W., & Phillips, R. W. (1997). Gender and investment: The influence of gender on investment preferences and practices. Managerial Finance, 23(10), 69–83. https://doi.org/10.1108/eb018652

[20.] Lemaster, P., & Strough, J. N. (2014). Beyond Mars and Venus: Understanding gender differences in financial risk tolerance. Journal of Economic Psychology, 42, 148–160. https://doi.org/10.1016/j.joep.2013.11.001

[21.] Mandal, B., & Brady, M. P. (2020). The Roles of Gender and Marital Status on Risky Asset Allocation Decisions. Journal of Consumer Affairs, 54(1), 177–197. https://doi.org/10.1111/joca.12261

[22.] Papadovasilaki, D., Guerrero, F., &Sundali, J. (2018). The effect of early and salient investment experiences on subsequent asset allocations—An experimental study. Journal of Behavioral and Experimental Finance, 19, 1–19. https://doi.org/10.1016/j.jbef.2018.03.002

[23.] Santacruz, L. (2016). Asset allocation theory and practice in Australian investment management: Reasons for the dichotomy. Journal of Wealth Management, 19(3), 31–48. https://doi.org/10.3905/jwm.2016.19.3.031

[24.] Shobha, T. S., & Kumar, K. M. S. (2020). Financial behaviors of Generation X and Generation Y. SCMS Journal of Indian Management, 17(1), 123–139.

[25.] Watson, J., & McNaughton, M. (2007). Gender differences in risk aversion and expected retirement benefits. Financial Analysts Journal, 63(4), 52–62. https://doi.org/10.2469/faj.v63.n4.4749

[26.] Wang, A. (2011). Younger generations' investing behaviors in mutual funds: Does gender matter? Journal of Wealth Management, 13(4), 13–23. https://doi.org/10.3905/jwm.2011.13.4.013

[27.] Wang, A. (2012). The effects of knowledge, gender, and age on the comprehension of investment disclosures. Journal of Wealth Management, 15(3), 9–19. https://doi.org/10.3905/jwm.2012.15.3.009

[28.] Zhang, A. C., Fang, J., Jacobsen, B., & Marshall, B. R. (2018). Peer effects, personal characteristics, and asset allocation. Journal of Banking and Finance, 90, 76–95. https://doi.org/10.1016/j.jbankfin.2018.03.001