

MILLENNIAL INVESTOR DECISION ANALYSIS AND ITS DETERMINANTS (AN ENDOGENEITY PERSPECTIVE)

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ABSTRACT

This study aims to analyze 1) The effect of Financial Literacy on the investment decisions of millennial investors in Padang and 2) The effect of Experience Regrets on the investment decisions of millennial investors in Padang. This type of research is causative research. The sample in this study was 96 respondents who were the Padang Millennial generation and were selected by the purposive sampling method. The type of data in this study is primary data collected by questionnaire. This study uses OLS regression analysis using Stata. Prerequisite analysis tests carried out included normality tests, heteroscedasticity tests, and multicollinearity tests. This study also examines endogeneity by using financial literacy as an endogenous variable and gender as an instrument variable. The results of this study indicate 1) Financial Literacy has a significant negative effect on the investment decisions of the millennial investor in Padang due to endogeneity. 2) Experience Regret has a significant positive effect on the investment decisions of the millennial investor in Padang.

Keyword: Financial Literacy, Experience Regre, Gender, Investmen Decision, Endogeneity

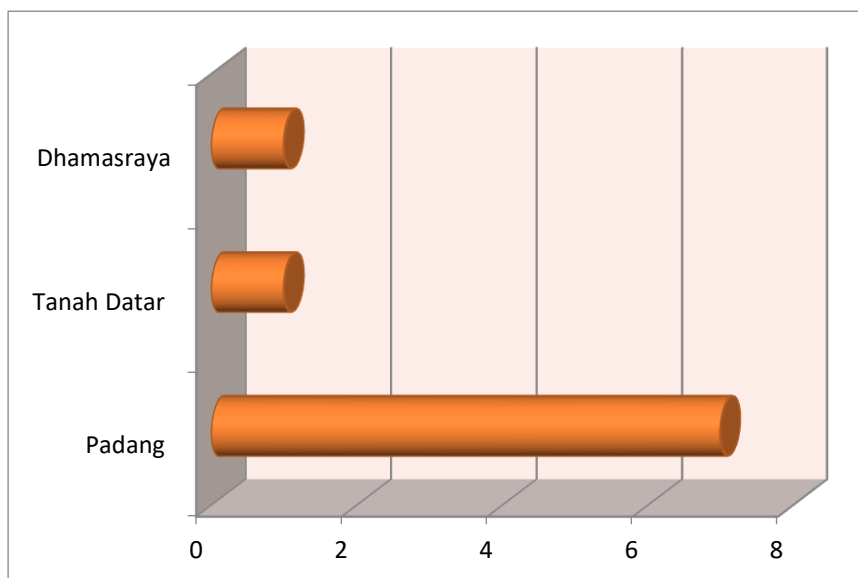
INTRODUCTION

The development of information technology has facilitated human activities in the world, one of which is investment. Investment is an activity to get profits in the future (Darmawan et al., 2019). The capital market is one option for investing that people are starting to pay attention to. The development of information technology makes access to the capital market more open so that more people invest in the capital market (Lee & Shin, 2018).

Stocks are one of the investment options in the capital market. Shares are proof of an investor's equity participation in a company (issuer). With this capital participation, it means that the investor owns the company and gets profits in the future (Tandelilin, 2010). The millennial generation is a group with great potential to become investors in

the capital market. In 2020, the millennial generation will make up 34% of the total population. The millennial generation is a productive and independent age group that wants to gain financial freedom, one of which is through investment (Sustainable, 2019).

The Indonesia Stock Exchange continues to increase potential investors to invest in the capital market. IDX conducted the 'Yuk Nabung Saham' program which invites various groups to invest in the capital market, including the millennial generation. One program that supports this is by establishing the Indonesian Stock Exchange Investment Gallery (GIBEI) at several universities in Indonesia, including in West Sumatra. The distribution of GIBEI in West Sumatra can be seen in Graph 1.



Source: IDX (data processed by the author, 2023)

Graph 1. Number of Indonesian Stock Exchange (IDX) Investment Galleries in West Sumatra)

Based on Graph 1 above, it can be seen that the highest number of galleries is in Padang. Meanwhile, Dhamasraya Regency and Tanah Datar Regency only have one gallery each. Padang has seven galleries in each tertiary institution, consisting of State Universities and Private Universities. State Universities consist of UIN Imam Bonjol, Padang State Polytechnic, Andalas University, and Padang State University. Meanwhile, private universities consist of Putra Indonesia University "YPTK" Padang, Dharma Andalas University, and Bung Hatta University.

The establishment of the Investment Gallery accommodates the millennial generation to increase their financial understanding of the capital market. It can be concluded that there are more investment galleries in Padang than in other cities/regencies, thus indicating a large number of millennial generations spread across Padang. This research only focuses on making stock investment decisions for the Padang millennial generation at State Universities. The data obtained states that investors only make transactions in stock securities, they do not make investment decisions in other financial instruments such as bond, and so on. This is based on research (Putri & Tasman, 2019) that students who make investment decisions are a generation that is literate in technology, or is called the millennial generation.

The millennial generation is a generation that has a range of 17-36 years. The millennial generation is now starting to be financially literate and utilize their funds in making investment decisions. Putri & Tasman (2019) states that the

millennial generation is the generation that develops and grows from the development of computers and the internet. This resulted in the millennial generation finding it easier to access and learn about finance and be able to make the right investment decisions.

Investment decision is a policy or decision taken to invest in one or more assets to gain profits in the future. Investment decisions are made through a planning process, setting goals and priorities, setting goals, and using certain criteria to select long-term assets (Mowen, 2014). Investment decisions will greatly affect the profit or loss obtained by an investor (Fahmi, 2011). Therefore, an investor needs to obtain relevant information before making an investment. This will be able to eliminate the worries of an investor in investing in the future. In fact, every investor has different behavior in investing. This results from investors' responses to financial statement information received with limited knowledge which results in naïve, irrational and unsophisticated decision making (Jain et al., 2022) ; (Madaan & Singh, 2019) dan (Ong'eta, 2021).

Irrational decisions are the result of low investment knowledge. In other words, high knowledge will assist investors in making rational investment decisions. Rational behavior makes investors able to maximize high returns and reduce the risk received (Tandelilin, 2010). The risks that investors will take are in accordance with their respective perceptions. Then investors' perceptions of different risks will influence their behavior

towards risky investment decisions (Sindhu & Kumar, 2014).

Based on previous research, there are several factors that influence investment decisions. These factors will focus on how investors interpret and act on the information to make investment decisions. The first factor influencing investment decisions is financial literacy. Financial literacy is an individual's ability to make decisions and manage funds, which starts with knowing, understanding, believing and being skilled in managing finances wisely so that they prosper in the future. Financial literacy can be used as a useful tool for individuals to manage so as to avoid financial problems. Financial literacy does not guarantee that the right decisions are made, financial literacy only makes a person able to make decisions based on relevant information. Investors who have a high level of literacy will certainly make the right investment decisions (Afiqah & Sabri, 2016).

There are several factors that can measure a person's financial literacy based on the Organization for Economic Cooperation and Development (OECD) framework : (1) knowledge and skills, (2) behavior, and (3) attitude. Knowledge and skills related to how one understands finances. Behavior is related to how a person manages basic finances, such as saving, consumption, and even investment. While attitude will measure someone in being responsible for the money.

In concept, investors who have good financial literacy, investors will be able to make the right investment decisions. This is supported by research conducted by (Prasad et al., 2021); (Wardani & Lutfi, 2019); (Putri & Rahyuda, 2017) and (Aini et al., 2016) which state that there is a positive relationship between financial literacy and investment decisions (Jain et al., 2022). The effect of financial literacy is directly proportional to the behavior of individual investment decisions, meaning that the higher a person's financial literacy, the better the behavior of individual investment decisions. This concept is not in line with the results of research conducted by (Pradikasari & Isbanah, 2018) which states that financial literacy has no influence on investment decisions.

The second factor that influences investment decisions is the experience of regrets. Experience regret is the experience of causing investors to be disappointed in making investment decisions or accepting the results of making investment decisions previously made. Experience regret arises because of mistakes in making

investment decisions in the past and this will affect future decision-making (Wulandari & Irama, 2015). The indicator of experience regret is losing experiences, having bad experiences, and having difficulty investing (Yohnson, 2008).

Experience Regret becomes a bad experience that makes investors disappointed with decisions taken in the past (Wulandari & Irama, 2015). Investors will be very regretful if they have taken high-risk investments. This regret will make an investor very careful in making investment decisions in the future. Thus, the more regretful an investor is in the past, the more careful the investor will be in making investment decisions in the future (M. Dewi et al., 2021).

In the investment decision process, there is an opportunity for bias to arise. This is caused by the existence of endogeneity problems in research. The problem of endogeneity becomes a novelty in this study, where opportunities for endogeneity arise because of financial literacy which is triggered by several things such as gender, education, and experience. This study uses gender as a trigger for the emergence of endogeneity. In examining the issue of endogeneity, this research will analyze the influence of gender on financial literacy which will ultimately influence the investment decisions of millennial investors.

Several researchers have suggested that there are other factors that affect financial literacy. determinants of financial literacy include the level of formal education obtained through schools (Potrich et al., 2016). Gender also affects financial literacy. Men's financial literacy is increasing faster than women's. In addition, women generally have a lower level of financial literacy than men (Lusardi et al., 2020). In general, women find it more difficult to do financial calculations and have a lower level of financial knowledge, which makes financial literacy difficult. Rameeza (2020) reveals that most Indian women have certain financial knowledge, but they are not financially literate. Most researchers report that gender affects financial literacy.

Men have a higher level of financial literacy than women (Vladasel et al., 2021); (Lusardi et al., 2020); (Lusardi & Mitchell, 2011) and (Laibson et al., 2007). Women tend to avoid risks (Neelakantan, 2010). Men focus on higher returns. Financial literacy will help in the right decisions.

RESEARCH METHODS

This type of research is causative, in this study there is a problem of causality that occurs in

many research variables used in the model, so it is suspected that one of the variables that form the analytical model framework used contains endogeneity problems (Hair et al., 2019). This research was conducted on millennial investors who came from the general public, such as students, government employees, and the private sector in Padang. The number of respondents used was 96 people. The data used are primary data that is obtained through distributing questionnaires. The sample selection technique is purposive sampling. The criteria used to select the sample are investors who are investing in securities for the first time, through an application or an official securities service in Padang.

In this study the variables used can be grouped into several variables, namely the dependent variable in the form of investment decisions, the independent variable in the form of financial literacy and experience regret, the endogenous variable in the form of financial literacy, and the instrument variable in the form of gender. The measurement of research variables was carried out using a Likert Scale of 5. The analytical method used to answer the truth of the hypothesis was using simultaneous analysis of 2-step least squares. The equation model that is guided by this research is:

$$Kep_Invest = a + \beta_1 Fin_Literacy + \beta_2 Exp_Regret + \dots \dots \dots \text{Equation 1}$$

$$Fin_Literacy = a + Z_1 Gender + e \dots \dots \dots \text{Equation 2}$$

$$Kep_Invest = a + Exp_Regret (Fin Literacy = Gender \dots \dots \dots \text{Equation 3}$$

when:

$$Kept_Invest = Investment$$

Decision

	Fin_Lite	=	Financial
Literacy			
	Exp_Regret	=	Experience
Regret			
	Gender	=	Gender

The test procedure is carried out by testing deviations from the classical assumptions which consist of testing for normality. Normality testing is done by Skewness analysis. Normally each variable is determined from $P < 0.05$ (Hair et al., 2019). The second classic assumption procedure used is the multicollinearity test which is performed using the Variance Influence Factor (VIF). Each independent variable will be free from multicollinearity deviation when it has a $VIF < 10$. Next is the autocorrelation test performed using the Durbin-Watson test, the regression model will be free from autocorrelation deviation if it has a coefficient value that meets the notation $-2 \leq 2 \leq 2$ (Santoso, 2010). Next is the heteroscedasticity test using the Breusch Pagan / Cook-Weisberg Test, the regression model to be analyzed will be free from heteroscedasticity deviation if it has $P > 0.0$ (Hair et al., 2019).

RESULTS AND DISCUSSION

This study aims to analyze the effect of financial literacy and experience regret on the investment decisions of millennial investors in Padang. This research will also prove that there is an endogeneity problem that will affect the research results. In this study, the endogenous variable is financial literacy. The sample in this study was 96 respondents who were millennial investors in Padang who had just started investing in the capital market. Based on data processing, the demographic characteristics of the respondents are shown in Table 1.

Table 1 Respondent Demographics

Information	N	%
Sex		
Male	28	29.17
Female	68	70.83
Investment Experience		
< 6 Month	45	46.87
7 – 12 Month	33	34.38
> 12 Month	18	18.75
Total	96	100

Based on gender, the number of female investors was more, namely 68 respondents (70.83%) while male investors amounted to 28

respondents (29.17). These millennial investors invest in the capital market in three-time variations, namely less than 6 months, 7 to 12 months, and more than 12 months. 45 investors

(45.87%) have invested for less than 6 months, 33 investors (34.38%) have invested for 7-12 months and 18 investors (18.75%) have invested for more than 12 months.

Before conducting an OLS regression analysis, it is necessary to test the classical assumptions on the processed data. The classical

assumption tests carried out included tests for normality, multicollinearity, autocorrelation, and heteroscedasticity. The normality test was carried out to find out whether the data distribution was normal or not. Based on Table 2, it can be seen that all data has been normally distributed using the Skewness Test.

Table 2. Skewness Normality Test Results

	Obs	Prob > Chi ²	Cut Off	Conclusion
Investment Decision	96	0.83975	0.05	Normal
Financial Literacy	96	0.50530	0.05	Normal
Experience Regret	96	0.11362	0.05	Normal
Gender	96	0.45657	0.05	Normal

Table 2 shows that all variables consisting of investment decisions, financial literacy, and experience regret are normally distributed with a probability value of ≥ 0.05 . With these results, the next classical assumption test can be continued.

The next testing stage is multicollinearity testing. This test was conducted to see whether there is a correlation between the independent variables in the OLS regression model. The results of the multicollinearity test can be explained in Table 3.

Table 3 Multicollinearity Test Results

	VIF	1/VIF	Conclusion
Financial Literacy	1.01	0.98978	No Multicollinearity
Experience Regret	1.02	0.98978	No Multicollinearity
Gender	2.01	0.98978	No Multicollinearity

In Table 3 it can be seen that each variable, namely Financial Literacy, Experience Regret, and Gender, has a VIF value ≤ 10 which means that there is no correlation between the independent variables so that it can be concluded that the OLS regression model does not have symptoms of multicollinearity. With these results, testing the

classical assumptions at a later stage can be carried out.

The next classical assumption test is the autocorrelation test to test serial correlations over time. To carry out the test, the Durbin Watson (DW) test was used. The test results are in Table 4.

Table 4 Durbin Watson Autocorrelation Test Results

Lag (P)	Chi ²	df	Prob > Chi ²	Conclusion
1	0.912	1	2.23	No Autocorrelation

The probability value obtained from the test results is $2.23 > 0.05$. This means that the multiple regression model has no autocorrelation deviations. Thus, data processing can be continued at the next stage.

The next classic assumption test is the heteroscedasticity test using the Breusch Pagan/Cook-Weisberg Test. The test results can be seen in Table 5. In accordance with the results of data processing, the following results are obtained.

Table 5 Breusch-Pagan Heteroscedasticity Test Results

Model	Chi ²	Prob > Chi ²	Cut Off	Conclusion
1	3.9611	0.3495	0.05	No Heteroscedasticity

The results of the heteroscedasticity test are in the form of a probability value of $0.3495 > 0.05$. This means that the variables used in the multiple regression equation do not have heteroscedasticity deviations. With these results, the data processing stage can be carried out.

Classical assumption testing has been fulfilled, therefore data processing using OLS regression analysis can be performed. In Table 6, there are the results of data processing using OLS regression analysis.

Table 6. Multiple Regression Equation Testing Results (OLS)

Dependent Variable: Investment Decision

	Coef	Prob	Cut Off	Conclusion
Financial Literacy	0.409	0.000	0.001***	Significant
Experience Regret	0.378	0.000	0.001***	Significant
(Constanta)	-0.662	0.000	0.05**	Significant
	R ²	0.395		
	F-prob	0.000		

Table 6 shows the OLS regression model using the independent variables in the form of financial literacy and experience regret, while the dependent variable is investment decisions. The model shows that financial literacy and experience regret have a positive and significant effect on investment decisions at an error rate of 0.01. The results showed that the coefficient of determination (R-square) was 0.395 and the results of the F-statistic test were significant ($P < 0.05$).

In the OLS regression equation model, it can be stated that the role of financial literacy as an endogenous variable has a significant effect on

investment decisions for millennial investors. The role of financial literacy as an endogenous variable is triggered by gender. Several previous studies have proven that men have better financial literacy than women. In this study, the number of female millennial investors exceeds the number of male millennial investors, therefore, it can be assumed that the majority of respondents have lower financial literacy. The influence of gender as an instrument variable on financial literacy as an endogenous variable can be seen in stage 2 testing before the simultaneous test. The results can be seen in Table 7.

Table 7 Testing the Effect of Instrumental Variables on Endogenous Variables

Dependent Variable: Financial Literacy

	Coef	Prob	Cut Off	Conclusion
Gender	-0.322	0.000	0.001***	Significant
(Constanta)	83.145	0.000		
	R ²	0.200		

Based on the results, it can be seen that gender is proven to be an instrument variable because it affects the financial literacy of millennial investors. This can be proven based on the coefficient value of -0.322 with a significance level of $P < 0.05$. Gender has a negative effect on the financial literacy of millennial investors

because the majority of respondents are women, who are just starting to invest and are profit-oriented.

The next stage in this research is endogeneity testing and simultaneous analysis. In this study, two-step least squares were used in data processing. The results can be seen in Table 8.

Table 8 Two Step Least Square Test Results

Dependent Variable: Investment Decision

	Coef	Prob	Cut Off	Conclusion
Financial Literacy	-0.768	0.000	0.01*	Significant
Experience Regret	0.481	0.000	0.01**	Significant
(Constanta)	92.450	0.777		
	R ²	0.200		
	F-prob	0.000		
Instrumented:	Financial Literacy			
Instruments:	Experience Regret, Gender			

In accordance with the results of the two-step least squares ivregress test, it can be seen that the financial literacy coefficient has a different coefficient from the OLS test, namely 0.409 corrected to -0.758, plus a constant value in the OLS analysis which is negative and changes to a positive sign. The results of the financial literacy test and experience regret have $P < 0.05$ so it can be concluded that each variable has a significant

effect on the investment decisions of millennial investors in Padang. The final stage of endogeneity testing is to test whether the financial literacy variable is influenced by the instrument variable, namely gender so that it becomes a reference in decision-making investment. The test is carried out by conducting an endogenous test. the results obtained are described in Table 9 below:

Table 9. Endogenous Platform Test Results

Model	Coef	Prob	
Durbin (Score) χ^2 (1)	3.268	0.0000	Variable are Endogenous
Wu-Hausman F (1.154)	3.258	0.0000	

Based on Table 9, from the two endogenous test procedures it can be seen that the Durbin probability value (score) χ^2 is 0.0000, as well as the results of the Wu-Hausman F test. The value obtained shows $P < 0.05$ so the decision is to reject H_0 , thus it is proven that financial literacy is an endogenous variable. This shows that gender is a trigger for financial literacy for millennial investors in Padang.

DISCUSSION

The Effect of Financial Literacy on Investment Decisions

In this study, the first hypothesis is that financial literacy has a positive and significant effect on investment decisions. The first hypothesis can be accepted based on hypothesis testing. Millennial investors who have good financial literacy will be able to carry out good financial planning and management because they are supported by good financial knowledge. Millennial investors who have good financial literacy will be able to make good investment decisions. In this case, having good financial knowledge, attitudes, and behavior will guide millennial investors in making the right investment decisions (Prasad et al., 2021); (Tamara et al., 2022); (M. Dewi et al., 2021) and (Budiarto, 2017).

Effect of Experience Regret on Investment Decisions

The second hypothesis in this study is that the experience of regret has a positive effect on the investment decisions of millennial investors in Padang. The second hypothesis is acceptable, based on the results of hypothesis testing. Experience regret is an unpleasant experience in investing that causes regret. The regret felt by millennial investors will make them more careful in making investment decisions so that the quality

of investment decisions made by the millennial generation is getting better (M. Dewi et al., 2021); (Budiarto, 2017) dan (A. S. D. Dewi, 2016).

Endogeneity problems in Financial Literacy that affect investment decisions

To test the endogeneity problem in this study, it is necessary to carry out a two-step least square analysis. The results state that financial literacy causes endogeneity that influences the investment decisions of millennial investors in Padang. The existence of financial literacy as an endogenous variable is triggered by the instrument variable in the form of gender. Previous research has proven that male investors have better financial literacy than female investors (Vladasel et al., 2021); (Lusardi et al., 2020); (Lusardi & Mitchell, 2011) dan (Laibson et al., 2007). In this study, female investors are the dominant number, so the majority of investors have lower financial literacy. Most female investors have certain financial knowledge, but they are not financially literate (Rameeza, 2020). Endogeneity test results show that gender harms financial literacy so financial literacy has a negative effect on the investment decisions of investors millennial. This is caused by several causes, including the tendency for female investors not to have strong financial literacy, but are forced to decide to invest. Furthermore, female investors invest because of profit-oriented and speculative actions.

CONCLUSION

In testing the investment decision model of millennial investors in Padang, two independent variables were used, namely financial literacy and experience regret. There is an assumption that endogeneity occurs due to financial literacy variables so it will cause a bias in the test results. After testing the endogeneity using 2SLS it was concluded that there is indeed endogeneity in this

model which is triggered by the instrument variable in the form of gender. In this study, the number of female investors is greater than that of male investors. In accordance with some of the results of previous studies which stated that female investors have a lower level of financial literacy than male investors. Endogeneity test results show that financial literacy has a negative effect on investment decisions because there is a tendency for female investors not to have strong financial literacy, but are forced to decide to invest. Furthermore, female investors invest because of profit-oriented speculative actions. Meanwhile, experience regret has a positive effect on investment decisions. Thus it can be concluded that this research model contains endogeneity so that it creates a bias for the behavior of millennial investors in Padang.

REFERENCE

- Afiqah, N., & Sabri, A. (2016). The relationship between the level of financial literacy and investment decision-making millennials in Malaysia. *Business Review*, 6(August), 39–47.
- Aini, N., Syafitri, L., & Wijaya, T. (2016). Pengaruh Literasi Keuangan dan Faktor Demografi Terhadap Keputusan Investasi Di Pasar Modal. *Jurnal Ilmu Manajemen*, 1–12. <http://eprints.mdp.ac.id/id/eprint/2098>
- Budiarto, A. (2017). Pengaruh Financial Literacy, Overconfidence, Regret Aversion Bias, Dan Risk Tolerance Terhadap Keputusan Investasi (Studi pada investor PT. Sucorinvest Central Gani Galeri Investasi BEI Universitas Negeri Surabaya). *Jurnal Ilmu Manajemen (JIM)*, 5(2), 1–9.
- Darmawan, A., Kurnia, K., & Rejeki, S. (2019). Pengetahuan Investasi, Motivasi Investasi, Literasi Keuangan Dan Lingkungan Keluarga Pengaruhnya Terhadap Minat Investasi Di Pasar Modal. *Jurnal Ilmiah Akuntansi Dan Keuangan*, 8(2), 44–56. <https://doi.org/10.32639/jiak.v8i2.297>
- Dewi, A. S. D. (2016). Experienced Regret , Dan Risk Tolerance Pada Pemilihan Jenis Investasi. *Journal of Business and Banking*, 5. <https://doi.org/10.14414/jbb.v5i2.548>
- Dewi, M., Hamidah, H., & Buchdadi, A. D. (2021). The Influence of Financial Literacy, Experienced Regret, Framing Effect and Mental Accounting on Millennial Generation Investment Decisions in DKI Jakarta with Risk Tolerance as Intervening Variables. *International Journal on Advanced Science, Education, and Religion*, 4(3), 147–163. <https://doi.org/10.33648/ijoaser.v4i3.155>
- Hair, Black, W. C., Babin, B. J., Anderson, R. E., Black, W. C., & Anderson, R. E. (2019). *Multivariate Data Analysis*. <https://doi.org/10.1002/9781119409137.ch4>
- Jain, R., Sharma, D., Behl, A., & Tiwari, A. K. (2022). Investor personality as a predictor of investment intention – mediating role of overconfidence bias and financial literacy. *International Journal of Emerging Markets*, 1979. <https://doi.org/10.1108/IJOEM-12-2021-1885>
- Laibson, D., Gabaix, X., Driscoll, J., & Agarwal, S. (2007). The Age of Reason: Financial Decisions Over the Lifecycle. *American Law & Economics Association Papers*, 1–52.
- Lee, I., & Shin, Y. J. (2018). Fintech: Ecosystem, business models, investment decisions, and challenges. *Business Horizons*, 61(1), 35–46. <https://doi.org/10.1016/j.bushor.2017.09.003>
- Lusardi, A., & Mitchell, O. S. (2011). Financial literacy and retirement planning in the United States. *Journal of Pension Economics and Finance*, 10(4), 509–525. <https://doi.org/10.1017/S147474721100045X>
- Lusardi, A., Mitchell, O. S., & Oggero, N. (2020). Debt and Financial Vulnerability on the Verge of Retirement. *Journal of Money, Credit and Banking*, 52(5), 1005–1034. <https://doi.org/10.1111/jmcb.12671>
- Madaan, G., & Singh, S. (2019). An analysis of behavioral biases in investment decision-making. *International Journal of Financial Research*, 10(4), 55–67. <https://doi.org/10.5430/ijfr.v10n4p55>
- Neelakantan, U. (2010). Estimation and impact of gender differences in risk tolerance. *Economic Inquiry*, 48(1), 228–233. <https://doi.org/10.1111/j.1465-7295.2009.00251.x>
- Ong'eta, J. O. (2021). The controlling effect of investment decisions on the behavioral factors influencing investment performance of individual investors in nairobi security exchange. *International Journal of Research and Advances Studies*, 8(11), 2394–4404. www.ijiras.com
- Potrich, A. C. G., Vieira, K. M., & Mendes-Da-Silva, W. (2016). Development of a financial literacy model for university students. *Management Research Review*, 39(3), 356–376. <https://doi.org/10.1108/MRR-06-2014-0143>
- Pradikasari, E., & Isbanah, Y. (2018). Pengaruh Financial Literacy, Illusion of Control, Overconfidence, Risk Tolerance, Dan risk

- Perception terhadap P Keputusan Investasi Pada Mahasiswa Di Kota Surabaya. *Jurnal Ilmu Manajemen Universitas Negeri Surabaya*, 4(2), 424–434.
- Prasad, S., Kiran, R., & Sharma, R. K. (2021). Behavioural, Socio-economic Factors, Financial Literacy and Investment Decisions: Are Men More Rational and Women More Emotional? *The Indian Economic Journal*, 69(1), 66–87.
<https://doi.org/10.1177/0019466220987023>
- Putri, N. M. D. R., & Rahyuda, H. (2017). Pengaruh Tingkat Financial Literacy dan Faktor Sosiodemografi terhadap Perilaku Keputusan Investasi Individu. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 6(9), 3407–3434.
- Putri, & Tasman, A. (2019). Pengaruh Financial Literacy dan Income terhadap Personal Financial Management Behavior pada Generasi Millennial Kota Padang. *Jurnal Kajian Manajemen Dan Wirausaha*, 01(1), 151–160.
- Rameeza, K. (2020). *a Study of Financial Literacy Among Women in Mumbai*. 40(4), 731–738.
<https://lens.org/123-017-000-122-595>
- Santoso, S. (2010). *Statistik Parametrik*. Salemba Empat.
- Sindhu, K., & Kumar, S. R. (2014). Influence of Risk Perception of Investors on Investment Decisions. *Journal of Finance and Accounting*, 2(2), 15–25.
- Tamara, D., Yudo Arianto, A., & Marzuki, E. (2022). The Effect of Financial Literacy, Herding Behavior and Risk Tolerance on Investment Decisions. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 5(4), 30259–30271.
<https://doi.org/10.33258/birci.v5i4.7184>
- Vladasel, T., Lindquist, M. J., Sol, J., & van Praag, M. (2021). On the origins of entrepreneurship: Evidence from sibling correlations. *Journal of Business Venturing*, 36(5), 106017.
<https://doi.org/10.1016/j.jbusvent.2020.106017>
- Wardani, A. K., & Lutfi, L. (2019). Pengaruh literasi keuangan, experienced regret, risk tolerance, dan motivasi pada keputusan investasi keluarga dalam perspektif masyarakat Bali. *Journal of Business & Banking*, 6(2), 195–214.
<https://doi.org/10.14414/jbb.v6i2.996>
- Wulandari, & Irama. (2015). Studi Experienced Regret, Risk Tolerance, Overconfidence Dan Risk Perception Pada Pengambilan Keputusan Investasi. *Journal of Business and Banking*, 4(1), 55.
<https://doi.org/10.14414/jbb.v4i1.293>
- Yohnson. (2008). Regret Aversion Bias dan Risk Tolerance Investor Muda Jakarta dan Surabaya. *Jurnal Manajemen Dan Kewirausahaan*, 10(2), pp.163-168.
<http://puslit2.petra.ac.id/ejournal/index.php/man/article/view/17042>