

The Influence of Financial Literacy and Income on Investment Decisions Mediated by Financial Behavior in Msme in Buleleng

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ARTICLE INFO

Article history:

Received Nov 30, 2024

Revised Des 08, 2024

Accepted Des 15, 2024

Keywords:

Financial Literacy
Income
Investment Decisions
Financial Behavior.

ABSTRACT

This study reveals that financial literacy and income positively and significantly influence investment decisions and financial behavior among MSME owners in Buleleng. Better financial literacy enhances both financial behavior and investment decisions, while higher income improves financial behavior and leads to increased investment decisions. Additionally, financial behavior serves as a mediating factor, amplifying the positive effects of financial literacy and income on investment decisions. This indicates that a combination of strong financial literacy, higher income, and good financial behavior contributes significantly to better investment decision-making among business owners.

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1. INTRODUCTION

In the Asian region, Indonesia is a developing country. Indonesia also experienced a significant financial crisis in 1998, and the sector that continues to face challenges is the Small and Medium Enterprises (SME) sector. As a developing country, Indonesia faces challenges with low financial literacy, making the government play a crucial role in providing government assistance, expanding financial development, and enhancing the financial security of its people. The presence of MSMEs creates intense competition among business actors, prompting MSME players to continuously improve by providing a workforce and products that meet market demands, including in Bali Province.

Bali Province plays a significant role in developing the travel industry and private enterprises, such as MSMEs, particularly in Buleleng Regency. As a hub for the travel industry, Bali hosts a variety of MSME sectors, including arts, culinary, photography, and other innovative businesses. Renja (2023) estimates that the entrepreneurship rate in Bali will rise to 9.57 percent in 2023, higher than the national average of 5 percent. Buleleng is one of the regions in Bali that also serves as a hub for MSME development. Based on data obtained from the Trade, Industry, and Cooperatives Office of Small and Medium Enterprises (SMEs) in Buleleng Regency for 2023, the number of MSMEs in Buleleng in 2022 totaled 66,368 business units. Below is a table showing the growth of MSMEs in Buleleng Regency from 2020 to 2022:

Table 1. Development of the Number of MSMEs in Buleleng Regency from 2020 to 2023

No	Classification of business types	Tahun			
		2020	2021	2022	2023
1	Trade	42,337	44,143	48,043	52,714
2	Industry	6,433	6,819	8,121	10,582
3	Agriculture and non-agriculture	2,866	3,063	3,754	467

No	Classification of business types	Tahun			
		2020	2021	2022	2023
4	Various services	2,853	3,191	6,45	11,504
	Total	54,489	57,216	66,368	75,267

Source : Department of Trade, Industry, and Cooperatives, Small and Medium Enterprises of Buleleng Regency, 2024.

Based on Table 1 above, it can be stated that there has been an increase in the number of MSMEs in recent years. The number of MSMEs reached 54,489 in 2020, with Micro Enterprises contributing the highest number compared to other types of businesses. In 2021, the number of MSMEs reached 57,216, an increase of 2,727 businesses. The largest increase in businesses occurred in 2022, with a total of 9,152 new MSMEs, bringing the total to 66,368. In 2023, there was another increase of 8,899 businesses. The decrease in the number of people with formal education and the growth of job opportunities have contributed to the rise in the number of MSMEs. Therefore, individuals are more dominant in starting their own businesses rather than applying for jobs, as they clearly expect money to fund their business ventures. When starting a micro, small, and medium enterprise (MSME), new entrepreneurs rarely consider the investments they need to make or the type of business they will run in order to compete with other businesses. The following information shows the number of MSMEs in each district of Buleleng from 2020 to 2023. It can be explained that from 2020 to 2023, the number of MSMEs per district in Buleleng consistently increased, especially in Buleleng District, which has the highest number of MSMEs compared to other districts. In 2020, there were 8,966 MSMEs, 9,269 in 2021, 10,521 MSMEs in 2022, and 11,510 in 2023. On the other hand, the district with the lowest number of MSMEs over the past four years is Kubutambahan, which had 4,862 MSMEs in 2020, 5,115 in 2021, 6,115 in 2022, and 7,104 in 2023. The reason for choosing MSMEs in Buleleng is that Buleleng District has the highest number of MSMEs compared to other districts. Therefore, the researcher is interested in using MSMEs in Buleleng District as the research location. Additionally, over the past three years, MSMEs in Buleleng District have had the highest numbers, with 6,951 MSMEs in 2020, 7,020 MSMEs in 2021, and 7,397 MSMEs in 2022. The increase and decrease in the number of MSMEs in each district of Buleleng are certainly influenced by the investment decisions made by each business owner.

According to Sun & Lestari (2022) and Hadita *et al.* (2021), investment decisions are actions taken in the present to allocate existing funds with the expectation of generating greater profits in the future compared to the initial investment. Investment decisions are when an individual with capital invests it either directly or indirectly with the expectation of receiving a certain amount of money within a specified period (Pasek, 2022). With well-considered investments to support future success, business owners will find it easier to focus on their businesses, enabling them to compete more effectively in the future by paying closer attention to financial literacy. Investment decisions play a crucial role in the development of a region. This is in line with the assessment by Arianti (2020) and Sari *et al.* (2020)

in her research, which states that financial literacy influences investment decisions. This suggests that financial literacy directly impacts investment decisions. Business owners who are able to manage their finances effectively will be able to improve their investment decisions. Financial literacy is closely related to government support for individuals, enabling them to anticipate financial issues. Business owners will be able to manage their personal finances with the help of financial literacy or knowledge, allowing them to maximize value, time, and resources. As a result, increased profits will improve their standard of living. The expectation of reduced financial information can lead to losses due to financial growth, decline, and adjustments, making it difficult for an individual to move forward. In addition to financial literacy, the income of each MSME owner also impacts the knowledge involved in making investment decisions in Buleleng.

According to Safitri (2021) and Christian & Pratiwi (2022) research, the higher an individual's income, the greater the likelihood that they will make an effort to better understand how to manage their finances through financial knowledge. This helps them in making investment decisions due to the differences in income from each business and the types of businesses they own. To support business choices, it is expected that there will be good financial behavior, such as managing deadlines, making well-considered decisions in handling assets, with the ultimate goal of helping MSME owners expand their financial knowledge, supported by the salaries they have earned in a

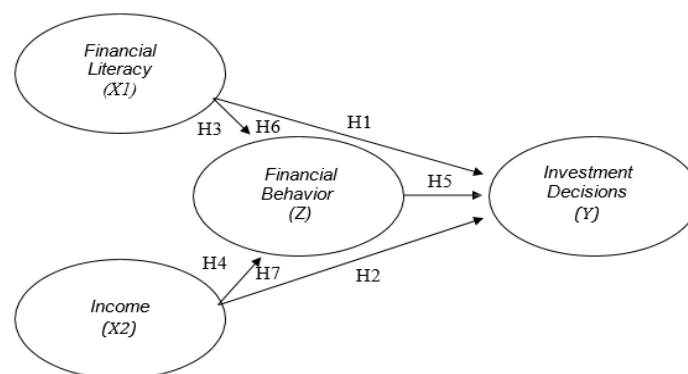
company over a certain period. To understand this, it is important to recognize the role of financial behavior among MSME owners in Buleleng, with the aim of strengthening the financial literacy they possess when running their businesses, enabling them to make wise investment decisions.

Financial behavior refers to how individuals manage their financial resources (money) to make decisions about how to use them, how to seek sources of funds, and how to plan for retirement (Landang *et al*, 2021). This is supported by Putri (2021) and Nirmala *et al* (2022) research, which shows that financial literacy, when directed towards financial behavior, essentially influences business choices. A good financial ability promotes proper financial behavior, as individuals with strong financial literacy are more likely to pay close attention to their finances. So, you truly need to understand what you require and desire, as this can help you determine the right business choice for yourself. This aligns with Arianti (2020) research, which found that financial behavior has a positive impact on investment decisions. This is demonstrated by the discipline of business owners, who are willing to continually improve their understanding of the businesses they run in order to develop and grow their enterprises. The strong desire of an individual to meet their life needs according to their income leads to the emergence of financial behavior. To successfully make investment decisions, financial literacy, financial behavior, and income are necessary. An individual's knowledge of managing personal accounting records is a central point in determining investment decisions.

2. RESEARCH METHOD

This research is conducted on MSMEs in Buleleng, specifically in the Buleleng District area. The reason the researcher chose this location is that Buleleng has the highest number of MSMEs compared to other districts. Over the past three years, MSMEs in Buleleng have had the largest numbers, with 6,951 MSMEs in 2020, 7,020 MSMEs in 2021, and 7,397 MSMEs in 2022. Therefore, the researcher is interested in using MSMEs in Buleleng District as the research location. In 2020, the number of MSMEs was 54,489, with Micro Enterprises dominating the total number compared to other types of businesses. In 2021, the number of MSMEs increased to 57,216, showing a growth of 2,727 businesses. The highest increase in the number of businesses occurred in 2022, with an addition of 9,152, bringing the total to 66,368 MSMEs. This growth is attributed to the decrease in available job vacancies and the qualifications held by the public.

The type of research in this thesis is quantitative, using quantitative data, which is then analyzed using the SmartPLS version 3.0 application. The population is selected based on the development of MSMEs per district in Buleleng Regency in 2022, with a total of 7,397 MSMEs. The sample consists of 99 MSME owners, determined using the Slovin formula. The sample was selected using proportional random sampling. The reason for using the Slovin formula in this study is due to the large number of MSME types in Buleleng Regency. Therefore, the researcher applied the Slovin formula to determine the sample size, considering the time limitations for conducting the research. The data collection technique for this research involves the use of questionnaires or surveys, supported by documentation that was completed prior to distributing the questionnaires. The conceptual framework for this study can be constructed using a literature review and the relationships between variables, as illustrated in the following figure:



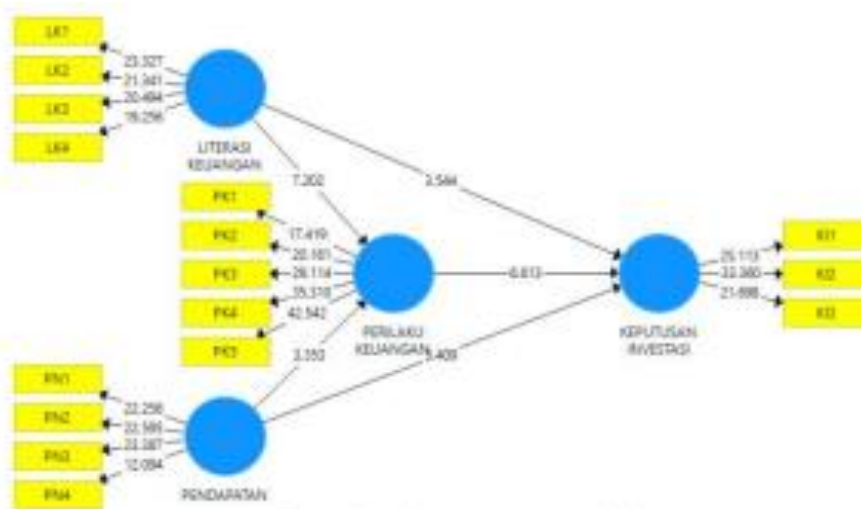
Gambar 1. Kerangka Pemikiran

3. RESULTS AND DISCUSSIONS

Based on the research conducted, with a sample of 99 MSME owners in Buleleng, the MSME owners were selected using the Slovin formula from a total population of 7,397 MSME owners in Buleleng. It is known that to determine the outer loading in research, the value for each indicator should be greater than 0.70. This value is obtained from the standard loading factor value using SmartPLS 3.0. The outer loading values for each variable are as follows: for the financial literacy variable with four indicators, LK1, LK2, LK3, and LK4, the values based on the PLS Algorithm output are 0.818, 0.817, 0.821, and 0.804, respectively. The income variable, with four indicators PN1, PN2, PN3, and PN4, received values based on the PLS Algorithm output of 0.802, 0.810, 0.832, and 0.736, respectively. The financial behavior variable, with five indicators PK1, PK2, PK3, PK4, and PK5, received values based on the PLS Algorithm output of 0.761, 0.792, 0.853, 0.886, and 0.899, respectively. The investment decision variable, with three indicators KI1, KI2, and KI3, received values based on the PLS Algorithm output of 0.828, 0.865, and 0.833, respectively. Based on the PLS Algorithm output, it is evident that all variables have values greater than 0.70 for their outer loading.

Based on the discriminant validity values for each research variable, it is known that all variables have values above 0.70. The values are as follows: Financial literacy 0.81, Financial literacy on investment decisions 0.902, Financial literacy on financial behavior, 0.882, Income 0.796, Income on financial behavior 0.823, Income on investment decisions: 0.853, Financial behavior 0.840, Financial behavior on investment decisions 0.932 and Investment decisions 0.842.

The AVE values for each research variable were found to be above 0.50. The AVE values are as follows: Financial literacy: 0.664 (from the PLS Algorithm output), Income 0.634 (from the PLS Algorithm output), Financial behavior: 0.706 (from the PLS Algorithm output), Investment decisions: 0.709 (from the PLS Algorithm output). Based on these AVE values, it can be concluded that the research variables have AVE values above 0.50.



Gambar 2. Inner Model

Based on the image above, the significance values or p-values for the research variables can be interpreted. The R-Square values that can be explained are as follows: For the financial behavior variable, the R-Square value is 0.809 and For the investment decision variable, the R-Square value is 0.908. The R-Square values as percentages are: For financial behavior: 80.9% and For investment decisions: 90.8%.

Table 2. Path Coefficients Results

Variables	Original Sample (O)	TStatistics (O/STDEV)	P Values
Financial Literacy > Investment Decision	0,283	3,544	0,000
Financial Literacy > Financial Behavior	0,632	7,202	0,000
Income > Investment Decision	0,182	3,409	0,001
Income > Financial Behavior	0,305	3,353	0,001
Financial Behavior > Investment Decision	0,533	6,613	0,000

Source: output PLS 3.0

Based on the results of the path coefficients test for partial significance (t-test), it is known that all research variables have t-values greater than the table value of 1.96. Each independent variable has a highly significant effect on financial behavior or investment decisions, such as the financial literacy variable on investment decisions, with a t-value of 3.544 and a p-value of 0.000. Next, financial literacy on financial behavior has a t-value of 7.202 and a p-value of 0.000. The second independent variable, income on investment decisions, has a t-statistic of 7.202 and a p-value of 0.001, followed by income on financial behavior with a t-statistic of 3.353 and a p-value of 0.001. The final variable, financial behavior, has a t-statistic of 6.613 and a p-value of 0.000. From these results, it can be concluded that each research variable has a significant impact on financial behavior as an intervening variable or investment decisions as a dependent variable, as shown by the p-values being less than 0.050.

Table 3. Results of Indirect Effect Test

Mediation of the Financial Behavior variable in the relationship	Original Sample (O)	T Statistics (O/STDEV)	P Values
Financial Literacy > Investment Decision	0,337	6,012	0,000
Income > Investment Decision	0,163	2,657	0,008

Source: output PLS 3.0

The results of the significant indirect effect test for each research variable used are as follows: financial literacy on investment decisions with financial behavior as the intervening variable, with a value of 6.012 and a P-value of 0.000. Income on investment decisions with financial behavior as the intervening variable, with a value of 2.657 and a P-value of 0.008. These indirect effect results exceed the standard T-statistics for the research, which is 1.96, with a significance level of 0.050 or 5%.

DISCUSSION

The Influence of Financial Literacy on Investment Decisions

Based on the path coefficients table, the results of the research analysis show that financial literacy has a positive and significant effect on investment decisions. The original sample value is 0.283, and the t-statistic value is 3.544, which is greater than the t-table value of 1.96, with a p-value of 0.000, which is less than 0.050. These results support the first hypothesis, which states that the better the financial literacy, the greater the investment decisions in SMEs in Buleleng.

According to the research findings, it can be concluded that financial literacy influences the business choices made by SME owners in Buleleng. The way money is used in investment activities is certainly influenced by the understanding of the importance of financial literacy for SME owners. This ensures that investment decisions can be executed as effectively as possible.

The Influence of Income on Investment Decisions

Based on the testing results explained in the path coefficients table, it can be seen that the impact of income on investment decisions is positive and significant. The original sample value is 0.182, and the t-statistic value is 3.409, which is greater than the t-table value of 1.96, with a p-value of 0.001,

which is less than 0.050. This indicates that the second hypothesis, which states that the higher the income, the greater the investment decisions in SMEs in Buleleng, is supported. Based on the research results above, it can be said that income affects the investment decisions made by SME owners in Buleleng. When a business generates more money, it certainly impacts how the business owners manage their finances or choose investments. With more money, SME owners will be more cautious and think twice before making an investment. They will be able to develop their business in the future if they make investment decisions supported by the income they earn over a certain period of time.

The Effect of Financial Literacy on Financial Behavior

Based on the results of the test explained in the path coefficients table, it can be seen that the impact of financial literacy on financial behavior is positive and significant, with an original sample value of 0.632 and a t-value of 7.202 > t-table of 1.96, with p-values of 0.000 < 0.050. This indicates that the third hypothesis, stating that the better the financial literacy, the better the financial behavior of SMEs in Buleleng, is supported. Based on the results of the research above, it can be concluded that financial literacy has an impact on the financial behavior of SME owners in Buleleng. With good financial literacy supported by a solid understanding of financial literacy, SME owners will be able to manage their finances better, ensuring that their businesses remain sustainable and able to compete with other businesses.

The Effect of Income on Financial Behavior

Based on the results of the testing explained in the path coefficients table, it can be seen that the impact of income on financial behavior is positive and significant, with an original sample value of 0.305 and a t-value of 3.353, which is greater than the t-table value of 1.96, with a p-value of 0.001, which is less than 0.050. This shows that the fourth hypothesis, which states that the higher the income, the higher the financial behavior of SMEs in Buleleng, is supported. Based on the results of the research explained previously, it can be concluded that income has a positive and significant impact on the financial behavior of SME owners in Buleleng. The income earned by SME owners over a specified period will affect how they manage their finances, and higher income will certainly impact the financial behavior of each SME owner. Having a higher income from the business, combined with good financial management practices, will make it easier for business owners to develop their business.

The Effect of Financial Behavior on Investment Decisions

Based on the testing results explained in the path coefficients table, it can be seen that the impact of financial behavior on investment decisions is positive and significant, with an original sample value of 0.533 and a t-value of 6.613, which is greater than the t-table value of 1.96, with a p-value of 0.000, which is less than 0.050. This indicates that the fifth hypothesis, which states that the better the financial behavior, the greater the investment decision of SME owners in Buleleng, is supported. Based on previous research, the investment decisions of SME owners in Buleleng are positively and significantly influenced by their financial behavior. In making investment decisions in the future, the financial behavior of SME owners will certainly impact how they act in managing the results of their business. It is known that the better their financial behavior, the better the decisions they will make.

The Effect of Financial Literacy on Investment Decisions Through Financial Behavior

Based on the results of the indirect effect test, it shows that financial literacy has a positive and significant impact on investment decisions made by SMEs in Buleleng through financial behavior. The original sample value is 0.337, and the t-value is 6.012, which is greater than the t-table value of 1.96, with a p-value of 0.000, which is less than 0.050. This indicates that the sixth hypothesis, which states that financial literacy improves investment decisions made by SMEs through financial behavior, is accepted.

Considering the impact of the research above, it can be inferred that financial literacy influences investment choices, supported by the financial behavior of SME owners. In Buleleng, understanding the importance of financial literacy for micro, small, and medium enterprise (MSME) owners will certainly impact how they maximize the use of their money. This will ensure that the

decision-making process in investing can proceed smoothly, supported by good financial behavior in business operations.

The Effect of Income on Investment Decisions Through Financial Behavior

Based on the results of the indirect effect test presented in the table, it can be seen that the impact of income on investment decisions through financial behavior is positive and significant. The original sample value for the income variable is 0.163, and the t-statistic is 2.657, which is greater than the t-table value of 1.96, with a p-value of 0.008, which is less than 0.050. This indicates that the seventh hypothesis, which states that the higher the income, the greater the investment decisions of SME owners in Buleleng through financial behavior, is accepted.

It can be concluded that the financial behavior of SME owners in Buleleng, influenced by business income, has a positive and significant effect on investment decisions. Having high income and good financial behavior in managing money will certainly affect how SME owners make investment decisions. With high income, aligned with good financial behavior from SME owners, it will impact their investment decisions in managing and utilizing their funds.

4. CONCLUSION

Based on the results and discussion of the research presented, the following conclusions can be drawn Financial literacy and income significantly influence investment decisions and financial behavior among SME owners in Buleleng. Better financial literacy enhances both financial behavior and investment decisions, while higher business income positively impacts financial behavior and leads to greater investment decisions. Additionally, financial behavior plays a crucial role in shaping investment decisions, and financial literacy indirectly impacts investment outcomes through improved financial behavior. These findings highlight the interconnected roles of financial literacy, income, and financial behavior in driving investment decisions.

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