

The Need for Financial Literacy Education for University Students in Indonesia

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Abstract:- The purpose of the financial literacy education program is to provide basic finance skills and increase the financial inclusion of the younger generation, especially Indonesian students. Financial training includes knowledge of inflation, numeracy and compound interest, and risk diversification. The objects of financial literacy training are students in Palembang from various universities, both public and private. The study finds that students' knowledge of numeracy and inflation is relatively higher than risk diversification. This training is also in line with the goal of the Indonesian government, which targets public financial literacy above 75%. In the future, students who have attended the training can apply basic financial knowledge in making financial planning and decision.

Keywords:- *Financial Literacy, Risk Diversification, Financial Decision.*

I. INTRODUCTION

Basic knowledge of financial literacy plays an essential role in the welfare of individuals in the future. Financial literacy provides an opportunity to make financial decisions, and it encourages people to have a better understanding related to risk and return. During the normal economic situation, financial literacy skills give benefit in the process of selection of financial assets based on the potential risk and return. Meanwhile, in crisis conditions, the understanding of financial literacy helps diversify risks. Financially literate people are less affected by the crisis than financially uneducated persons. (Klapper et al., 2013).

Understanding financial literacy is becoming increasingly important, especially in the era of the Covid-19 pandemic, which impacts people's welfare. The demand and supply shock due to the lockdown policy and restrictions on economic activity to suppress the spread of Covid-19 can reduce people's income. Therefore, knowledge of financial literacy can be an alternative to make the appropriate financial management strategy. According to [1] financial literacy variables that help the future of wealth accumulation include knowledge of numeration, compound interest, inflation, and risk diversification.

Empirical studies have witnessed that financial literacy provides many benefits, such as increasing household welfare [2], helping welfare equality or wealth inequality [3], improving the ability to make financial decisions [4] have an impact on future financial planning [5]. Furthermore, financial literacy should be considered as fundamental and

necessary skill for people at all levels of society, not only those with a specific level of wealth [1].

The study from [6] focus on financial literacy in Chile reveals that financially illiterate people with a lack of basic economic concepts will face difficulties computing compound interest and impact a suboptimal financial decision. Furthermore, [7] describe the importance of geography and socio-economic in increasing financial literacy levels for people in Japan. Čumurović and Hyll (2018) examine the correlation between financial literacy and self-employment; they reveal a significant and positive correlation between basic knowledge of finance and the possibility of being self-employed. In addition, [8] explain that an appropriate program from an early age needs to be done to improve the financial literacy level for society in Russia.

As the country with the largest economy in Southeast Asia, with a GDP reaching USD1.11 trillion, Indonesia still faces challenges related to public access to the financial sector. According to the Global Findex Database published by World Bank (2017), less than half of Indonesians have access to the formal financial industry. For example, Indonesia's young and elder population, which has access to the financial industry, is only 47% and 49%, respectively. According to [9] almost 60% of the Indonesian people, including the bankable population, do not have access to the banking sector. [10] state that an access to finance has an essential role in providing added value to the community, especially in increasing income and reducing poverty.

In the context of the ASEAN region, Singapore ranked first in terms of access to financial institutions, with 98% of the total population, followed by Malaysia and Thailand, with 85% and 82%, respectively. Indonesia is the fourth place in terms of access to the financial product in 2017 with 49%. The spread of financial access between the third and fourth is relatively high, between 82% and 49%. These data show that there are still opportunities for policymakers to increase financial accessibility by educating basic financial literacy skills such as inflation, numeracy, compound interest, and risk diversification to all Indonesian people, especially the young generation. The goal of financial literacy program is to increase the financial knowledge that will benefit society and government through the dynamic of the domestic economy for the people and corporations, which affects economic growth in Indonesia.

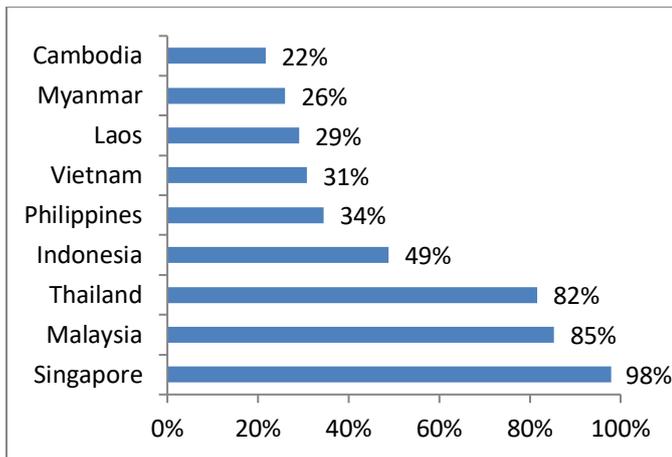


Fig 1. Access to Financial Institution in South-Eastern Asia in 2017

Source: World Bank (2017)

The low level of financial literacy of the Indonesian people has the potential negative impact on the individual's future finance. Therefore the training on financial literacy is considered essential to be conducted. The results of this training are expected to increase public financial literacy and inclusion, especially in the younger generation. Early education of financial literacy will provide long-term benefits for the community. The following section will describe the literature review methodology and, followed by results and discussion. Finally, the last section will conclude the research with implications, limitations, and recommendations for future research.

II. LITERATURE REVIEW

The need for basic finance knowledge plays a pivotal role in individual future finance. Both government and society need to have developed a program to increase financial literacy. Financial literacy becomes essential since people need to plan their financial goals in the future. Individuals with a better understanding of financial literacy have more options for doing asset allocation through several investing platforms. Financial literacy knowledge is also linked to other variables such as good health, higher education, and better occupation [11].

Mastering financial literacy also encourages individuals to have proper financial behavior and benefit wealth accumulation, participation in capital markets, portfolio diversification, pension fund management, and responsibility for financial preparation in the future. Furthermore, the people's participation in financial service, for example invests in financial market, will increase the financial sector activity and promotes economic growth.

At a country level, [12] argue that financial literacy is essential for improving economic performance in Russia, particularly the knowledge of fiscal and monetary skills. The authors recommend policymakers improve people's financial literacy, increase confidence and active involvement in the financial system, decrease financial risks for financial service consumers, and improve society's welfare.

The essential skill of financial knowledge covers the understanding of numeracy, inflation, and risk diversification (Lusardi, 2019). Cokely et al. (2012) explain numeracy as processing basic numerical concepts, including estimates, probabilities, and ratios. Financial literacy integrates with several main components, such as emotional attitudes towards numbers [13]. A study by [14] reveals that numeracy is more importance to health and income than the ability to read and write.

Inflation and risk diversification are two other pivotal variables in shaping financial literacy knowledge. Inflation is defined as the increasing price of goods and services in a certain period. An increase in the price of goods will reduce purchasing power or the real value of money. Therefore, investment play pivotal role to keep the purchasing power of money remains the same or increases compared to the past period. Indonesia's average annual inflation has ranged from 3% to 4% per year for the last ten years. In other words, people need financial literacy knowledge to manage their money properly; including looking for investment instruments with provides return above inflation with measurable risks.

Knowledge of risk management is becoming increasingly crucial amidst the complexity and integration between financial assets. Investors need to know the individual risk profile and financial assets characteristic before making financial decision on investment. Long-term investment goals with a risk-taking profile can consider investing in the capital market, such as stocks. Meanwhile, investors who tend to be risk-averse and long-term investments are advised to invest in instruments with a lower risk level, such as save deposits and bonds. The selection of financial assets as an investment vehicle is crucial because it impacts on risks and potential returns in the future.

In contrast, the lack of financial literacy creates several drawbacks, especially for the young generation, which the government has actively targeted to promote economic activity in the formal financial sector. In addition, Lusardi and Mitchell (2014) describe that financial illiteracy will impact the lack of saving behavior and the ability to manage the liabilities. A further study posits how financial ignorance affects wealth during unprecedented situations, such as the subprime mortgage crisis [15].

From a broader perspective, lower levels of financial literacy contribute to unstable economic conditions. Individuals will only invest in one financial asset due to the limitation of financial information to investment products. For example, investors fail to diversify their financial assets' through portfolio management. The potential loss of investing in financial assets can be mitigated by allocating money to other investment instruments with low risk during the financial turmoil.

The study is conducted to contribute to the financial literacy for young people in Indonesia, particularly in Sumatera region including students in public and private university. The financial literacy skills consist of several

essential aspect of basic finance such as numeracy and compound interest, inflation and risk diversification.

III. METHODS

A questionnaire is used to determine the level of knowledge of participants in the financial literacy education program. This will be the first part of the program's implementation. The questionnaire consists of several questions to measure the basic understanding of financial management, such as numeration and compound interest, inflation, and risk diversification. Respondents who filled out the questionnaire completely were 253 people consisting of various public and private universities in Palembang. The results of the initial questionnaire can be seen in Figure 2.

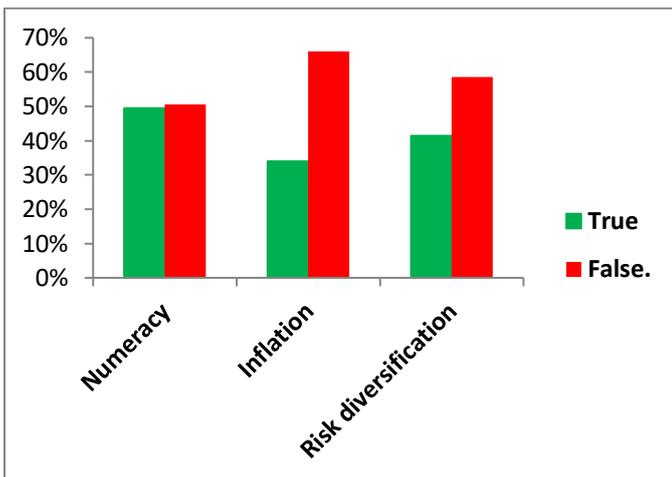


Fig 2. Financial Literacy Survey Data
Source: Survey and author elaboration based on questionnaire data

Respondents' correct answers to all basic financial management questions are below 50%. Respondents correctly answered questions about numeracy as much as 49%, followed by questions about risk diversification and inflation, respectively at 42% and 34%. The low number of correct answers indicates that the younger generation lacks knowledge about financial literacy. The preliminary data plays an essential role in defining the method and approach during the education program. Based on the first survey, we will create financial literacy material with the basic finance skills and provide with simple example so that it will be easy to implement in daily activities, especially in making a financial decision.

After getting the initial data, the next step is to cluster the problem and develop a strategy to conduct the training of financial literacy education. The next step is creating an agreement with all parties, both speakers and respondents who will participate in the training. After that, preparation for training in the form of modules and presentation materials was prepared and closed with the activity evaluation process.

The financial literacy training project is undertaken online, as the government continues to restrict activities due to the Covid-19 pandemic. Furthermore, the online

presentation is intended to reach a wider audience, and all participants will still have access to the recorded videos. In this approach, it is hoped that all participants get the benefit from the training and they can implement in the process of financial decision in their daily life. The flow of financial literacy program is shown in Figure 3.

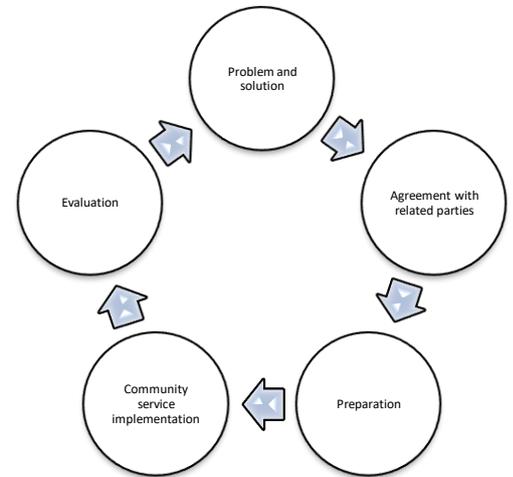


Fig 3. Financial Literacy Program Schedule
Source: Author elaboration

Participants in financial literacy education are the younger generation in Indonesia, especially in the city of Palembang. Media promotion for this activity is accomplished by the publication of posters via social media in order to reach a larger audience. The purpose of financial literacy education is for participants to know the importance of basic knowledge of financial management, including numeration and compound interest, inflation, and risk diversification. In addition, this program is expected to encourage financial inclusion in Indonesia, especially for the younger generation.

IV. RESULT

The financial literacy education process is done by integrating theory and practice to ensure that participants have a sufficient understanding of the basic principles of financial management and have the ability to apply this knowledge whenever making financial decisions. The first discussion of the financial literacy education program is inflation. In the first stage, we present historical data on Indonesian inflation to illustrate a decline in purchasing power caused by the rising prices of goods and services over a certain period. After that, it is continued with material on compound interest and risk diversification.

A. Inflation

The inflation trend in Indonesia continues to decline. The highest inflation in Indonesia in the last 20 years reached 12.55% in 2001. Inflation of 12.55% indicates that goods and services in Indonesia have experienced an average price increase of 12.55%. In other words, there has been a decline in the purchasing power of people's money. For example, if we keep Rp.1.000.000 in year 2000 and do not invest the

money, then the purchasing power of that money will decrease to Rp.874.500 in 2001.

If we save the money until 2020, then the cumulative purchasing power of Rp.1.000.000 in 2000 becomes Rp.262.436 or there has been a decrease of 74% over 20 years. Inflation data for Indonesia has proven the importance of financial literacy knowledge to provide information on keeping the value of money.

Table 1. Inflation and Decreasing Purchasing Power from 2001 to 2020

Year	Inflation	Value of Money (Rp.1.000.000)
2001	12,55%	874.500
2002	10,03%	786.788
2003	5,16%	746.189
2004	6,40%	698.433
2005	17,11%	578.931
2006	6,60%	540.722
2007	6,59%	505.088
2008	11,06%	449.226
2009	2,78%	436.737
2010	6,96%	406.340
2011	3,79%	390.940
2012	4,30%	374.129
2013	8,36%	342.852
2014	8,36%	314.190
2015	3,35%	303.664
2016	3,02%	294.494
2017	3,61%	283.863
2018	3,13%	274.978
2019	2,93%	266.921
2020	1,68%	262.436

Source: Bank Indonesia (Author’s elaboration)

In general, Table 1 explains that the purchasing power of Rp.1.000.000 which we had in 2000 has decreased to Rp.262.436 in 2020, in other words, the purchasing power of the money has decreased by 74% in 20 years. The economist argues that inflation is a thief of money for people who do not know financial literacy.

B. Compound Interest

The material on compound interest is expected to provide information about the benefit of an investment. Compound interest can provide a return for the principal so that the amount of money to be held continues to increase from year to year, along with the interest rate or yield generated by the investment value.

Table 2 illustrates how Rp.1.000.000 is invested in the capital market. In this example, we use the Jakarta Composite Index (JCI) in Indonesia by looking at the annual return from 2001 to 2019. JCI is a stock index that is often used as a reference for capital market performance in Indonesia.

Table 2. Compound Interest of JCI and Gold Return from 2001 to 2019

Year	Return JCI	Value of Money (Rp.1.000.000)	Return Gold	Value of Money (Rp.1.000.000)
2001	- 41,42%	585.825	2,56%	1.025.551
2002	-6,52%	547.627	24,77%	1.279.596
2003	6,69%	584.282	19,37%	1.527.390
2004	72,20%	1.006.112	5,54%	1.611.949
2005	42,07%	1.429.379	17,92%	1.900.735
2006	17,07%	1.673.349	23,15%	2.340.809
2007	56,74%	2.622.783	30,94%	3.065.074
2008	48,73%	3.900.938	5,80%	3.242.831
2009	- 47,38%	2.052.701	24,37%	4.033.015
2010	81,26%	3.720.666	29,57%	5.225.735
2011	43,08%	5.323.366	10,10%	5.753.346
2012	2,19%	5.439.934	7,06%	6.159.375
2013	14,11%	6.207.317	-28,28%	4.417.794
2014	-0,44%	6.179.883	-1,44%	4.354.301
2015	21,16%	7.487.338	-10,41%	3.901.103
2016	-	6.463.586	8,14%	4.218.750
2017	16,57%	7.534.755	13,53%	4.789.706
2018	20,15%	9.053.235	-1,56%	4.715.037
2019	-0,63%	8.995.770	18,31%	5.578.199

Source: Bank Indonesia, Yahoo Finance (Author’s elaboration)

Table 2 explains that the people can grow their money through investment in the capital market and commodity markets. For example, investment in the Indonesian capital market provided an average annual return of 17% and gold 10% for the period 2001 to 2019. JCI generally gave positive returns except in 2001, 2002, 2009, 2014, 2016, and 2019. JCI largest dropped (-47%) occurred in 2009 when subprime mortgages in America triggered a global financial crisis. Cumulatively, investment in the Indonesian capital market still provides positive returns. As an illustration, if we invested Rp.1.000.000 in the Indonesian stock market since 2001, the money will grow to Rp.8.995.770 in 2019.

Other potential investments can also be made through the commodity market. In this financial literacy education program, we use gold as an example because most participants are familiar with gold as one of investment instrument and hedge when there is economic uncertainty. In contrast to JCI's return which experienced -47% during the global crisis in 2009, gold gave a positive return of 24% in the same year. Therefore, risk diversification is also an important variable related to information about financial literacy.

C. Risk Diversification

Risk diversification is a strategy to reduce risk by allocating money to several financial assets. For example, we can diversify risk by spreading the investment portion to

stocks, gold, deposits, and other investment instruments. This diversification process is carried out as a form of risk mitigation so that the investor is able to minimize the risk during the uncertain time.

An example of risk diversification can be explained by looking at the returns from stocks and gold during the global crisis in 2009. If we have Rp.1.000.000 in 2009 and we allocate all of that money to investing in the Indonesian capital market, while the Jakarta Composite Index (JCI) falls by 47%, the investor will lose Rp.470.000.

Meanwhile, if investors diversify by dividing the money of Rp.1.000.000 to Rp.500.000 for JCI and Rp.500.000 invest in gold, the investment risk will decrease to Rp.230.000 instead of Rp.470.000. This results can be calculated by Rp.500.000 multiplied by the return on shares (-47%) and added to the return on gold investment (+24%).

V. CONCLUSION

This study examines the financial literacy needs of Indonesian youth. The education is conducted by introducing basic financial literacy concepts, such as inflation, numeracy, and compound interest, as well as risk diversification. The preliminary questionnaire shows that more than half of respondent neither can nor answer the financial literacy questions correctly. Respondent correctly answer the question related to numeracy as of 49%, followed by risk diversification and inflation at the level of 42% and 34%.

This program is hopefully can give benefit to the participants and contribute in increasing financial inclusion in Indonesia. The understanding of basic financial skills play pivotal role for the future finance, especially in the situation of Covid-19 pandemic which impact on the individual's finance. The ability to master basic finance skills will mitigate the risk during the unprecedented and uncertain situation.

The limitation of this program is only capturing the participants in Palembang city. Financial literacy training with wider participants is needed, involving respondents from several regions in Indonesia to give more comprehensive information. In addition, the variable to measure financial literacy skill can be developed by referring to the organization for economic co-operation and development (OECD, 2015).

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