

# Economic Learning Education and Financial Literacy Among Indonesian Students

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## ABSTRACT

This study investigates the effect of economics learning outcomes, parents' income, and students' origin on financial literacy among Indonesian high school students. Using random sampling, this research involved 206 students as respondents. The data was collected by providing tests to the students and documentation techniques. The data were analyzed by multiple linear regression with a dummy variable of students' origin. The analysis indicates that economics learning outcomes and parents' income have a positive effect on financial literacy. However, the students' origin does not have any impact on their financial literacy among Indonesian. The implications of these findings show an essential role of good economics learning in school. The better Economics learning students acquire in school will promote students' greater knowledge that can be proxied in financial literacy. Therefore, it can encourage a better formation of financial behaviors.

**Keywords:** Financial literacy, learning outcomes, parents' income, and students' origin.

## INTRODUCTION

The recent economic activity grows inevitably along with the development of technology. The sophistication of technology enables people to make their economic activities, i.e., buying, saving, trading, and investing remotely using the mobile phone. To deal with, having financial literacy is essential to make the economic decision either in short or in the long term. Some prior studies remarked that financial literacy allows individuals to manage assets by considering benefits and cost as well as an outcome from each decision (Hastings et al., 2013; Bosshardt & Walstad, 2014). Several studies also noted that financial literacy has beneficial for individual welfare (Nanda & Samata, 2018; Jiang et al., 2020; Li, 2020).

Considering these matters, the Indonesian Financial Services Authority surveyed the Indonesian's financial literacy in 2016 (OJK, 2016). The data showed that Indonesian financial literacy can be considered insufficient. An earlier study by Lusardi and Mitchell (2011) also noted that the Americans' financial literacy levels were in a low category and reported that people with low income, low education, and less wealth were prominently financial illiterate. Another study remarked that financial literacy had a positive correlation with wealth under the wealth distribution, it revealed that those who had basic financial knowledge had better personal saving attitudes (Jonubi & Abad, 2013). The finding of Abreu and Mendes (2010) documented a robust link between stock ownership and knowledge about diversification risk, both in the total sample and in the whole education group.

Some consensus in believing that financial literacy can be promoted by education. Bucciol and Veronesi (2014); Ozdemir and Uyanik (2021) stated the importance of improving financial literacy as early as possible in students' life. It is expected for education to produce human resources that are tough in facing many challenges and demands, including

financial management. However, the experimental condition of Economics learning in the school has not satisfied the students. Students have many tedious activities, such as doing an assignment from a student worksheet or merely having a discussion. Sriwahyuni (2016) discussed that student activities were still not maximized and integrated with technology. Such conditions make the students less interested in learning economics and drive inadequate learning motivation (Haryono, 2013).

In addition to education, some factors can predict students' financial literacy, including economic learning, gender, social-economic status, and parents' income. For Instance, Erner et al. (2016) analyzed factors that contributed to the level of financial literacy of senior high school students in Germany. The findings noted that basic financial literacy was determined by knowledge of Economic concepts, while complex financial literacy was determined by logic and mathematical skill. The Indonesian Financial Services Authority (OJK, 2016) considered factors such as occupation, age, gender, origin, education level, and outcome in conducting a national survey on financial literacy. Lusardi and Mitchell (2007) found

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differences between men and women in making a financial decision. Cordero et al. (2020) recommended introducing financial literacy as early as possible in an individual's life through the school curriculum.

Hubbard et al. (2016) observed the influence of learning media such as text, linear graphics, and volumetric graphics in understanding interest counting. The finding showed that those matters were more effective in improving students' understanding of interest counting. Indeed, Haryono (2013) revealed the effects of the learning process as a system and the relationship between social-economic status and senior high school students' literacy on the economy. The quality of the learning process seen from student involvement in planning, conducting, and scoring positively impacts students' literacy on the economy (Wulandari & Narmaditya, 2018). A similar result was proposed by Carlin and Robinson (2012) that practice on financial literacy determined someone's competence in making a financial decision. Lopus et al. (2019) observed the impact of training on financial literacy knowledge that was measured using a pre-test and post-test. The result of the study revealed that those who followed training with more knowledge also left the training with further additional knowledge.

The purpose of economics is to comprehend some economic concepts to link some economic problems to daily life (Suratno et al., 2021). In particular, the things happen in the individual environment, household, society, and nation. In general, the aims of economics in the Indonesian curriculum are to show curiosity on economic concepts needed to deepen the knowledge in economics. It forms a wise, rational, and responsible attitude by having knowledge and skill in economics, management, and accounting, which will benefit themselves, households, society, and nation. Lastly, it makes a responsible decision about the social-economic values in society, either on a national or international scale. To meet the demand for curriculum competence, students are obliged to learn Economics and accounting. Competency is knowledge, skill, and fundamental value reflected in the habits of thinking and acting. Consistently, these habits may make someone competent, in other words, having the skill, knowledge, and fundamental values to perform good economic acts (Wahyono et al., 2021).

One of the outcomes of economics learning is a behavior reflecting students' knowledge, attitude, and tendency to perform the economic activity. This follows learning outcome in general that includes students' knowledge, attitude, and skill. Good learning outcomes in economics will provide an excellent contribution to financial literacy since it covers students' knowledge of banking, financial information, stock market, and insurance, which are parts of economics materials. This learning outcome is not only on students' knowledge about economics materials that include basic

science of macroeconomics, microeconomics, and accounting but also the knowledge is hoped to underly students' mindset in performing daily economic activities. Therefore, this study aims to fill the gap of preliminary studies by investigating students' financial literacy by capturing economics learning outcomes, parents' income, and students' origin.

## METHOD

This study involved 12 graders of senior high school students in Malang (city and municipality) and Batu of East Java in Indonesia. Samples were taken by using multi-stage, considering city and municipality area. Random sampling was adopted to determine the respondents in each school. The first stage was deciding the schools based on the area, whether in the city or the municipality. The second stage was determining students from each school proportionally randomly. There were 206 students as the samples in this study. The data was collected by providing test and documentation to the respondents. The test was administered to measure the level of financial literacy. It had 32 questions covering banking, stock market, insurance, and financial information from Financial Services Authority (OJK, 2016). The data on economics learning outcomes, parents' income, and student' origins were taken by school documentation. To determine dominant factors, multiple linear regression analysis was incorporated with students' origins as the dummy variable (Gujarati, 2006).

$$\text{Regression model } Y = a_0 + a_1 D_1 + b_1 X_1 + b_2 X_2 + e$$

Y; the level of students' financial literacy

D1; origin 0 = rural 1 = urban,

X1; economics learning outcome

X2; parents' income

## FINDINGS

The findings on economics learning outcomes, parents' income, origins, and students' financial literacy are provided in this research. First, Table 1 shows the students' learning outcomes. From the Table, approximately 66.5% of the students' learning outcome was excellent. This aligns with the Indonesian government policy that implements the completed learning system. Students' achievements are completed when they have fulfilled the minimum criterion, which is 80. If this minimum criterion is achieved, then 33.07% of students were failed and needed a remedial. The students' average reached 80, with 9.16 standard deviations. This reveals that students' score was entirely various. Therefore, although the majority of students have passed, some others have not passed yet.

Based on Table 2, the average parents' income was IDR 2,214,077. Compared to the minimum wage of East Java province, which is IDR 1,630,000, the parents' income was above the minimum wage. However, 49,51% of parents had

**Table 1:** Students' Learning Outcome

<i>Class Intervals</i>	<i>Clarification</i>	<i>Frequency</i>	<i>Percentage</i>
1 – 54	Poor	0	0
55 – 69	Adequate	26	12.62
70 – 79	Good	43	20.87
80 – 100	Excellent	137	66.50
Total	-	206	100

**Table 2:** Parents' Income

<i>Income</i>	<i>Frequency</i>	<i>Percentage</i>
IDR 1,000,000	26	12.62
IDR 1,500,000	76	36.89
IDR 2,000,000	8	3.88
IDR 2,500,000	31	15.05
IDR 3,500,000	28	13.59
IDR 4,000,000	37	17.96
Total	206	100

**Table 3:** Students' Financial Literacy Distribution

<i>Class Intervals</i>	<i>Clarification</i>	<i>Frequency</i>	<i>Percentage</i>
0 – 25	Poor	0	0
26 – 50	Adequate	36	17.48
51 – 75	Good	82	39.80
76 – 100	Excellent	88	42.72
Total	-	206	100

**Table 4:** The Result of Regression Analysis

		<i>Coefficients</i>				
		<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>		
<i>Model</i>		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>t</i>	<i>Sig.</i>
1	(Constant)	-16.156	5.571		-2.900	.004
	Learning Outcome	1.107	.069	.743	16.048	.000
	Parents' Income	1.382E-6	.000	.111	2.415	.017
	Students' Origins	-.504	.662	-.035	-.761	.448

Dependent Variable: Financial Literacy

R = 0.758

R<sup>2</sup> = 0.574 Adj R<sup>2</sup> = 0.568

F = 90.857 sig : 0.000

income below the minimum wage based on the income distribution. Students' origins were obtained from Malang city, Malang municipality, and Batu using balanced distribution. From 206 respondents, there were two clusters, 93 students or 45% of students were from the city, and 113 students or 55% of students were from the municipality. Students' financial description obtained from the test is displayed in Table 3.

Referring to Table 3, In general, about 42.72% of students had excellent financial literacy. The average score of 75.23 was on the "good" clarification limit. Compared to students' learning outcomes, the relationship seemed visible at a glance, in which the majority of students had excellent learning outcomes as well as excellent financial literacy. The results of the analysis of learning outcomes, parents' income, and students' origins to financial literacy are displayed in Table 4.

As can be seen on Table 4, the formula of regression equation is as follows:

$$Y = -16.16 - 0.504D1 + 1,107X1 + 0.0000138X2$$

## DISCUSSION

The statistical calculation in Table 4 shows that the coefficient of origins has a sig value of 0.448. It indicates that origins do not

influence students' financial literacy. This finding is opposite to the survey result of the Indonesian Financial Services Authority (OJK, 2016), which stated differences in some Indonesian regions. People from big cities, especially Java, had better financial literacy than people in rural areas. The difference occurred due to the distinct characteristics of the people who became the respondents. In this study, the respondents were more specific to senior high school students in grade 12 with a similar age range. Besides, the conditions of schools in Malang city, Batu, and Malang municipality are relatively the same since the schools implement the same standard and curriculum determined by the Ministry of Education and Culture. Another fundamental reason schools in the city or the municipality have a similar learning process is that economics teachers join an organization called The Deliberation of Subject Teachers. The active involvement of the teachers in the organization has an impact on the similarity of the learning process both in the city and in the municipality area.

The coefficient of economics learning outcome has sig. value of 0.000, meaning that there is an influence on the economics learning outcome of students' financial literacy. It implies that the better the economics learning outcome

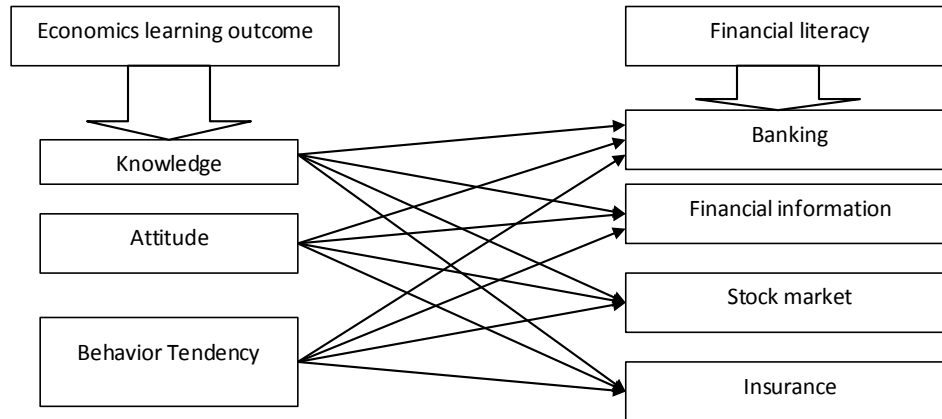


Fig. 1: The Relationship between Economics Learning Outcome and Financial Literacy

will lead to the students' greater financial literacy. This result follows some previous studies such as Carlin and Robinson (2012); Hubbard et al. (2016); Erner et al. (2016). Their findings stated that a good learning process that provided a fundamental discussion on Economics would help students have functional financial literacy. Furthermore, Carlin and Robinson (2012) revealed that practice on financial literacy would benefit someone in making a financial decision.

The relationship of economics learning outcome with financial literacy is perceivable because fundamental financial literacy concepts are a part of economics learning (Basic Competence of Economics SMA/MA K-2013). The concept of the relationship between economics learning outcome and financial literacy can be depicted in Figure 1.

There is a belief that a school has good quality when the graduates have excellent academic and non-academic qualities. The examples of academic merits are: good score in a test, good score in the final exam, and the total and the quality of the accomplished competitions. Meanwhile, non-academic merits are kinds of achievements in an extracurricular activity. The tendency to measure a school's success by looking at their academic achievements, especially the cognitive ones, has encouraged the school management to chase the achievement by all means. The schools boost the students' cognitive skills by administering extra lessons and drilling them to make them reach excellent scores in subjects included in the national exam. This condition is highly supported by parents who do not want to see their children fail a national exam.

In senior high school, the economics subject is one of the subjects included in the national exam in which most of the questions only measure students' cognitive skills. As a result, students focus more on understanding the theories rather than applying what they know in daily life. Consequently, students cannot implement their economic knowledge in real life. The banking concept and financial institution are parts of competence that ten graders must comprehend. For economic and financial information on a macro level, such as interest

rates and inflation, as well as the stock market, are parts of competence that 11 graders must comprehend. Financial information, which is more specific to financial analysis and accounting, is part of competence for 12 graders.

The underlying rationale is that the outcome of economics learning positively impacts students' financial literacy. In addition to the relationship between economics materials and financial literacy, Haryono (2013) stated that the learning process influences learning outcomes. Thus, financial literacy as a result of learning outcomes is performed by the process and the result of learning economics. Dewanti and Isbanah (2018), who observed factors that affect financial literacy, stated that income positively impacted financial literacy. Students' parents who have high incomes will have better financial literacy. Hence, they can provide an example of functional financial literacy to their children.

## CONCLUSION

This study explores Indonesian students' financial literacy by capturing Economics learning achievement, parents' income, and students' origin. The findings conclude that Economics learning outcomes impact Indonesian students' financial literacy, indicating that learning accomplishment will promote financial literacy. The implication for this study is to involve economics learning by elaborating contextual issues that enable students to understand the complex issues and help them make great decisions. Thus, the learning outcome will positively impact students' financial literacy. The learning process in schools should be appropriately provided to boost students' interest in economics learning. In addition, this study noted that parents' income positively impacts students' financial literacy, meaning that the higher the parents' income, the higher the students' literacy. This is because parents who have high incomes can provide knowledge and examples to their children about attitude and behavior in financial institutions such as banks or insurance. However, there is no difference in students' financial literacy when captured from

the origins since the learning condition either in the city or in the district is relatively the same. Therefore, students' financial literacy is at a similar level.

## SUGGESTION

Further studies can consider a broader population to reach a better understanding of this matter. Also, it is invited to compare the financial literacy of students between the region and investigate the driving factors.

## LIMITATION

Like other studies, this study has some limitations. First, it involves only some predicted variables that may influence many predictors in explaining students' financial literacy. Additionally, this study lies in the geographical studies in East Java of Indonesia.

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