

Financial Literacy: Teachers' Public and Private School

Arief Yulianto✉

Universitas Negeri Semarang, Indonesia

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Abstract

The national curriculum at the Teacher Training Institute (LPTK) produces no difference in financial literacy competencies between teachers in public and private schools. In fact, financial literacy varies between students in private and public schools. The paper focuses on the analysis of teacher competence in public and private schools. The primary data were 22 private and public-school teachers, and were analyzed using the student test (t-test). The result of the research is that there is no difference in financial literacy between teachers in public and private schools. Teachers as a complement to students' financial literacy. As a result, if students are more social, economic, indifferent between public and private schools, and complemented, the teacher is more competent.

✉Correspondence Address: Universitas Negeri Semarang
Sekaran, Semarang, Indonesia
E-mail: ariefyulianto@mail.unnes.ac.id

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INTRODUCTION

Financial literacy is an important element in financial decision making, influencing individual behavior in budgeting, investing, and saving to retirement (Lusardi et al., 2012). The Indonesian Financial Services Authority (OJK) has programmed financial literacy in the curriculum from basic education to higher education, but in fact the program is not optimally implemented (Financial Services Authority, 2019). As a result, they are deviated about their experiences, attitudes and experiences about financial service providers.

This issue is more interesting, when business education (economics) teachers are required to be professional and qualified in implementing the financial literacy curriculum along with pedagogic competence (Sawatzki & Sullivan, 2017). In contrast, the field is dominated by program evaluations produced by the financial industry, research consultants, and academics with expertise in business and finance. School-based program evaluations typically focus on student engagement and assessment-based learning measures, with limited insight into teacher roles and skills

The presence of trained teachers makes students more competent in financial literacy, compared to untrained teachers. Loibl (2008) has related teacher competence and financial literacy for students. Teachers in Business Education teach students better financial literacy than the fields of family science, social research, mathematics, competitiveness, technology and agricultural science. Teachers who have practiced in their financial management, are more competent in teaching preparation, opinions and beliefs about the importance of financial literacy and are more willing to

participate in self-development (Sawatzki & Sullivan, 2017). Obviously, teachers in business education play an important role in producing students who are more competent in financial literacy through teacher competence, but previous research has only focused on financial literacy by students (Uddin, 2020).

The paper aims to analyze the literacy skills of teachers in business education in senior high schools, of public and private schools so that their teaching competence can be found (Mandell & Klein, 2009; Way & Holden, 2010). When teachers in elementary school are less competent in financial literacy than junior and senior high school and private schools with better socioeconomic conditions are more competent in financial literacy than public schools.

Teachers in business education are more competent in teaching financial literacy than non-business education backgrounds, because during their time in college they have been taught financial management along with pedagogic science. Since they have got financial management, they have the attitude, understanding and core concepts of personal finance, so they can teach better. Way & Holden, (2010) helps to understand why elementary school teachers teach better quality in financial literacy. They believe that teachers with an interdisciplinary approach produce more competent students than single-disciplinary ones. Contrast. Otter (2010) has concluded that teachers in senior high school are able to produce more competence in financial literacy. The purpose of the paper is to find out whether there are differences in financial literacy between teachers in private and public schools.

Indonesia is a bank-based system, where entrepreneurs are more dependent on the financial market than the capital market, for their funding (Warjiyo, 2015). This dependence makes the state provide more access to financial products and services for the people. When people have more access to various financial services for households, small, medium enterprises (SME's), they are more developed, have more opportunities and earn more. In fact, the financial inclusion program only increased by

about 10 percent from 63.5% in 2016 to 73.88% in 2019.

Financial literacy is related to the government's financial inclusion program. Financial literacy is an understanding of public information covering financial services, financial investment administration, and various perspectives that seem to be the most important in financial decisions, so that there is no asymmetric information problem related to various financial terms – namely interest rate risk, inflation (Rasool & Ullah, 2020). As a result, they use more financial products and services (financial inclusion).

The presence of more competent teachers together with differences in the school system produces variations in financial literacy competencies for students. Mandell & Klein, (2009) has explained the socio-economic differences of students between public and private schools. Students of senior high school from families with excess financial resources tend to have higher financial literacy than students from families with fewer financial resources. Students in different education sectors (public or private) have been exposed to different financial contexts and situations and, as a result, students may have developed different financial understandings, behaviors and attitudes. If differences are found in favor of private school students, it could indicate an educational gap that could increase the socioeconomic disparity between students studying in various sectors and even more.

Thus, the presence of competent teachers can reduce the difference in financial literacy competencies of students in families with high with low social economic resources. The situation gets worse when there are differences in teacher competence in the two types of schools, teachers are more competent in teaching students in schools with high social economics and teachers are less competent in teaching students in schools with low social economics. In fact, the curriculum at the Institute of Teachers' Education has been designed to be relatively homogeneous and adaptive to students of both types. So we hypothesize that there is no

difference in financial literacy competence by teachers between public and private schools.

By reviewing the studies above, it is clear that the presence of competent teachers can reduce asymmetric information for students in understanding financial terms. As a result, they can make financial decisions for a better future.

METHOD

Primary data were collected from 22 business education teachers of senior high school in the city of Semarang. The financial literacy test uses an interval scale with a total score of 100. Data analysis uses a student test to determine the differences in financial literacy competencies between public and private school teachers. Indicators using models(OECD, 2013)are division, time value of money, inflation, risk and return.

RESULTS AND DISCUSSIONS

Financial literacy competence was found to be no different between public and private school teachers. In beginner, it has been speculated that there are differences in the financial literacy competencies of students in public and private schools. Several studies have shown that high school students from families with excess financial resources tend to have better financial literacy than students from families with fewer financial resources.

Table 1. Data Analysis Result

	Private	Public	All
Panel A			
mean	55.556	56.944	56.061
median	55.556	55.556	55.556
Std Dev	15.097	17.252	15.517
Q1	44.444	44.444	44.444
median	55.556	55.556	55.556
Q3	63.889	66.667	66.667
Panel B			
Mean difference	1.389		
p-value	0.846		
Sig	No		

In Table 1, Panel A, explains that teacher competence in financial literacy is relatively homogeneous and panel B explains that there is no difference in teacher competence between public and private schools. Obviously, while students in different Education sectors have been exposed to different financial contexts and situations and as a result students may have developed different financial understandings, behaviors and attitudes; not caused by teacher competence. Panel B explains that the score of teachers' financial literacy in private schools is 56,994 and exceeds 1,389 of teachers' scores in public schools, but not significant.

The problem of financial literacy is division, time value of money, inflation, risk and return. Imagine that five brothers are given a gift of \$1000. If the brothers have to share the money equally how much does each one get? (200). Our finding is that 18 teachers (81.81%) answered correctly, which is 200. The concept of division in financial literacy is the basis of the time value of money. Time value of money is an important concept of financial literacy. Financial literacy explains the concept of simple interest, and compound interest in present and future values. When teachers invest in an instrument, they must compare real, nominal interest. Suppose you need to borrow 100 US dollars. Which is the lower repayment amount: 105 US dollars or 100 US dollars plus three percent? (100 plus 3 percent). This is a future value comparison, when the debt issue in year 0 is 100, the lower payment amount is 100 dollars plus 3 percent compared to 105 dollars. It was found that 19 teachers answered correctly (86.36%). Comparing simple and compound interest, what is compounding? What's the difference between simple interest and compound interest? What would the future value of \$100 be after 5 years at 10% compound interest? at 10% simple interest? It was found that 13 teachers (59.09%) had answered correctly. From all percentages, this point is lower than the others, teachers still have difficulty comparing simple and compound interest in future values. The concept of savings using compound interest and bonds using simple interest.

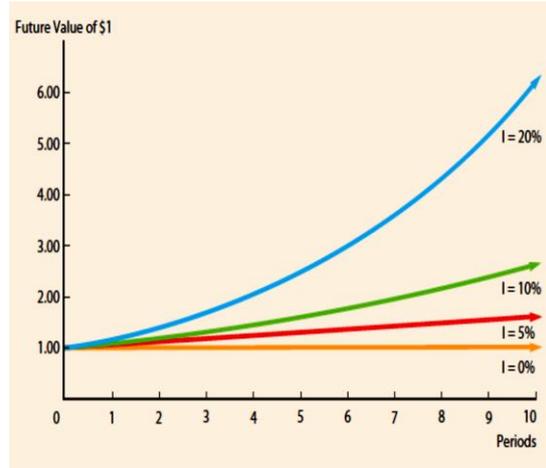


Figure 1. Value in the Future

Comparing different interests and different years in present value, how much would \$1,000,000 due in 100 years be worth today if the discount rate was 5%? if the discount rate was 20%? Most teachers can calculate the difference between 5% and 20%.

The concept of time value of money has been explained (Brigham & Houston, 2016) in figure 1. In the same time period, greater interest produces more future value, on the contrary less present value. In Table 3 indicate that the concept of the time value of money is very important to determine the level of welfare in the future.

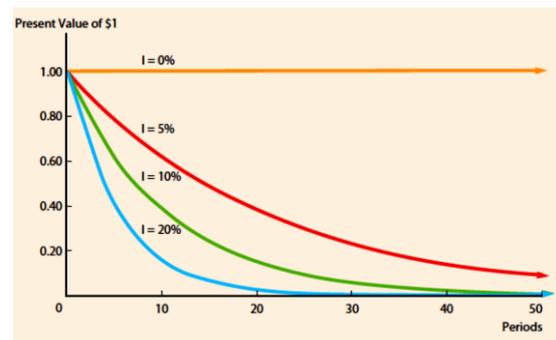


Figure 2. Value in The Present

Suppose a person put money in the bank for two years. The bank agrees to add 15 percent per year to your account. Will the bank add more money to your account the second year than it did the first year, or will it add the same amount

of money both years? This question is about the concept of compound interest, according to geometric series in mathematics. Of course, the bank adds the same interest, but the amount of interest in rupiah is higher in the second year.

Suppose a person have 100 US dollars in a savings account and the bank adds ten percent per year to the account. How much money would you have in the account after five years if you did not remove any money from the account? According to the geometric series, the addition is 1.1^5 . The longer the year saved, the larger the number of accounts. Suppose you put \$100 into a savings account with a guaranteed interest rate of 2% per year. You don't make any further payments into this account and you don't withdraw any money. How much would be in the account at the end of the first year, once the interest payment is made. This is a concept not an annuity, there is no addition in a certain period. Most teachers can count not annuities

Inflation can be caused by cost push and demand-pull inflation, or a combination of both. Inflation will reduce the value of money, so teachers must invest to maintain the value of money. Supposed over the next ten years the prices of the things you buy double. If your income also doubles, will you be able to buy less than you can buy today, the same as you can buy today, or more than you can buy today? Teacher income does not increase, but inflation increases, resulting in a decrease in the purchasing power of money (internal value). In Senior High School, the method for calculating inflation was explained, namely the consumer prices index and the gross domestic product deflator.

The questions of risk and return were answered correctly by 100 percent of the teachers. Risk can be diversified through a portfolio. The higher the investment risk, the less concentrated the funds in an investment instrument. Thus, the financial literacy competence of teachers is not the cause of differences in student literacy competencies from variations in socio-economic conditions. Way & Holden (2010) have concluded that in public and private schools have been able to teach financial literacy of individuals. Teachers are competent in

their personal financial management, perceived level of financial literacy, preparation for teaching financial literacy, opinions and beliefs about the importance of teaching financial literacy and willingness to participate in professional development in their field are not determined by the type of school. They found that the difference in teacher literacy in delivering financial literacy material was determined by their educational background. Teachers with mathematical, social, and vocational education backgrounds are better qualified and more likely to teach financial literacy education.

The national curriculum in LPTKs has produced financial literacy skills that are no different. Students are more competent from financial literacy due to differences in parental status and occupation. Students from entrepreneur parents produce students who are more competent in financial literacy than students from non-entrepreneur parents.

CONCLUSION

Financial literacy is not determined among teachers in public with private schools. Their competence does not differ in understanding division, time value of money, inflation, risk and return so as to reduce asymmetric information for students in understanding financial material. As result, students from low social economics understand more and high social economics understand more about financial literacy.

REFERENCES

- Brigham, EF, & Houston, JF (2016). *Fundamentals of Financial Management*. Massachusetts: South-Western Cengage Learning.
- Loibl, C. (2008). Survey of Financial Education in Ohio's Schools: Assessment of Teachers, Programs, and Legislative Efforts. *Research Report*, 15(2), 1-68.
- Lusardi, A., Michaud, P.-C., & Mitchell, OS (2012). Optimal Financial Literacy and

- Saving for Retirement. *SSRN Electronic Journal*, 5, 1-41.
- Mandell, L., & Klein, LS (2009). The Impact of Financial Literacy Education on Subsequent Financial Behavior. *Journal of Financial Counseling and Planning*, 20(1), 15–24.
- OECD. (2013). Financial Literacy and Inclusion. *National Center for Financial Literacy, Mumbai* (Issue June).
- Financial Services Authority. (2019). National Survey of Financial Literacy and Inclusion 2019. *Otoritas Jasa Keuangan*.
- Otter, D. (2010). *Teaching Financial Literacy in K–12 Schools: A Survey of Teacher Beliefs and Knowledge*. The University of New Mexico.
- Rasool, N., & Ullah, S. (2020). Financial Literacy and Behavioral Biases of Individual Investors: Empirical Evidence of Pakistan Stock Exchange. *Journal of Economics, Finance and Administrative Science*, 25(50), 261–278.
- Sawatzki, C., & Sullivan, P. (2017). Teachers' Perceptions of Financial Literacy and The Implications for Professional Learning. *Australian Journal of Teacher Education*, 42(5), 51–65.
- Uddin, M. A. (2020). Impact of Financial Literacy on Individual Saving: A Study in the Omani Context. *Research in World Economy*, 11(5), 123-128.
- Warjiyo, P. (2015). Indonesia: Changing Patterns of Financial Intermediation and Their Implications for Central Bank Policy. *BIS Paper*, 83, 1-12.
- Way, W. L., & Holden, K. C. (2009). Teachers' Background and Capacity to Teach Personal Finance: Results of a National Study. *Journal of Financial Counseling and Planning*, 20(2), 64-78.