



Financial Literacy of Economics and Non-Economics Students

Ascaryan Rafinda^{1,2*}, Timea Gal³

¹University of Debrecen, Károly Ihrig Doctoral School of Management and Business, Hungary, ²Faculty of Economics and Business Universitas Jenderal Soedirman, Indonesia, ³University of Debrecen, Faculty of Economics and Business Institute of Marketing and Commerce, Hungary. *Email: ascaryan.rafinda@yahoo.com

Received: 14 November 2019

Accepted: 20 March 2020

DOI: <https://doi.org/10.32479/irmm.8974>

ABSTRACT

This research aims to identify the level of financial literacy of college students in economic faculties and non-economic faculties in Indonesia. This research was conducted to determine the understanding of students' financial literacy score in the economic and non-economic faculties. The survey was conducted to test the level of student financial literacy at various University in Indonesia. This survey used objective measures of financial literacy, and the student gets the question and gets the score based on the correct answer from participants. In total, there were 206 participants from students in Indonesia who participate in the survey. An independent sample t-test was conducted to determine differences in the level of understanding of students in the two groups. This research found that financial literacy score is differences between economic and non-economic students. Even the economics student has higher score compare to the non-economics student, but the score still below 70% for basic personal finance questions. This research implies that student on both study field needs to get personal finance courses on campus.

Keywords: Personal Finance, Financial Literacy, College Student

JEL Classification: G53

1. INTRODUCTION

The results of a financial literacy survey of the Indonesian in 2016 explain that the average financial literacy score from Indonesian was only 29.6% well literate. The capital city of Jakarta has the highest position with 40% of its population being well literate while the farthest province of West Papua has the lowest literacy rate, only 19.3% of its population being well literate (Otoritas Jasa Keuangan, 2017).

Financial knowledge can be learned from various sources. The surrounding environment such as family and friends is one of the source of financial knowledge (Bowen, 2002; Chen and Volpe, 2002; Norvilitis and MacLean, 2010; Shim et al., 2013; Xiao et al., 2011). The role of formal financial education also has a contribution to financial maturity and financial behaviour (Alsemgeest, 2015; Norvilitis and MacLean, 2010; Urban et al., 2018).

Various studies examine the level of financial literacy in tertiary institutions (Anthes, 2004; Godfrey, 2006; Murphy, 2005). Higher education is the highest formal educational institution in Indonesia, the majority of Indonesian will start working after graduating from higher education institutions. His makes universities the last opportunity to help the community in increasing their financial knowledge (Harrington and Smith, 2016). Because after work, no matter how to literate their financial knowledge, they have to deal with financial issues and decisions.

The issue regarding the low level of financial literacy of Indonesian generally occurs in tertiary institutions. Some research findings identify that students in Indonesia have low levels of financial literacy (Margaretha and Pambudhi, 2015; Mendari And Kewal, 2013). Previous studies have identified a positive relationship between financial education in tertiary institutions and the level of one's financial knowledge. The role of universities in increasing financial literacy in Indonesia needs to be explored further. The

strategic position of tertiary institutions in improving public financial literacy in Indonesia needs to be identified in current conditions and evaluated for future improvement.

This research identifies the current condition of student financial literacy in tertiary institutions to determine their current level of financial literacy. Universities that have various disciplines in this research will be classified into two groups, namely economic and business group and non-economic and business group. This is to facilitate the identification of gaps between the two of them and find out the current level of financial knowledge with today's curriculum in economics studies.

Research that examines the level of student financial literacy in university is necessary because it can determine the current conditions and the role of universities to improve financial literacy level in Indonesia.

2. LITERATURE REVIEW

Various studies have examined the impact of financial education on a person's life. Some interesting research results to study are as follows. Primary financial knowledge education is needed for day-to-day financial management, but investment and retirement can be left to professionals (Alsemgeest, 2015). The results of the research found that the cognitive aspects of financial education still lacked to improve one's financial knowledge. There is no one solution for all problems in financial education found (Alsemgeest, 2015).

Some financial literacy research at universities also found the effects of financial education on financial behaviour. Several researcher found the difference credit card behaviour and student attitude who has financial knowledge (Armstrong and Craven, 1993; Baum and O'Malley, 2003; Hayhoe et al., 2000; Hayhoe, 2002; Hayhoe et al., 1999; Joo et al., 2001; Lyons, 2004; 2007; Norvilitis et al., 2006; Staten and Barron, 2002; Xiao et al., 1995; Xiao et al., 1997).

Research on eight European countries (Estonia, Germany, Italy, Netherlands, Poland, Romania, Russia and Turkey) found that the mean of financial literacy level on Universities Student is 72,2% and classify as a medium level of financial literacy (Ergün, 2018).

Students on economics and business at universities get courses related to finance. Although not directly studying personal finance,

financial courses, in general, can provide financial perspectives that are quite important in financial decision making. Basic finance that they learn on universities such as financial management, budgeting, basic accounting, macroeconomics and analyses financial statement contribute to their financial knowledge. So students in the field of economics and business have a higher understanding of finance than students from non-economics and business. Based on these arguments, the hypothesis proposed in this research is that non-economic and business students have a lower understanding of the level of financial literacy than economics and business students.

3. RESEARCH METHOD

The data in this research were taken using a questionnaire. Online and paper-based questionnaires were distributed to higher education student in Indonesia. The questionnaire instrument was preceded by informed consent that explained the willingness to participate in this research. Respondents who are willing will proceed to the next question, who is not willing cannot proceed to the next question. The questions consist of 15 objective financial literacy measurement that consists of three main topics and three profile questions to collect participant gender, the field of study and kind of university.

The sample in this research focuses on undergraduate students on several universities in Indonesia. A total of 206 people participated in this research from public and private universities in Indonesia. This research takes 2 months to collect all the data. Three participants deleted from the data because they were not finished fill in all the questionnaire. The total participant that could be analysed in this research were 203 participants. This research classifies the sample into two groups, namely economic and business group and non-economic and business groups. The Participants from the economic and business study group were 116 people and from non-economic and business people 87 people. Majority of the participant in this research is female (71%), after that male (27%), and the rest did not disclose (2%). Some participants are from Public University (89%) and Private University (11%). The details of the participants in this research are shown in Table 1.

Descriptive statistics were analysed to examine more details about financial literacy score. The least score was 31, and the highest was 100 out of 100. Some people get a perfect financial score,

Table 1: Number of participants in this research

	Total Number of Participant	Participant by Gender	Participant by University
Participant fill the questionnaire	206		
Valid questionnaire	203	Male: 54 Female: 145 Not disclose: 4	Public Uni: 181 Private Uni: 22
Non Economics and Business	87	Male: 23 Female: 62 Not disclose: 2	Public Uni: 103 Private Uni: 13
Economics and Business	116	Male: 31 Female: 83 Not disclose: 2	Public Uni: 78 Private Uni: 9

Source: Based on the primary data research

and others only get 31 out of 100. Here is the result of descriptive statistics for all sample:

Table 2 explains the statistical descriptive of financial literacy score. The first group compare between economics and non-economics student. The lowest score comes from the non-economics group and the highest from the Economics group. The second group compare based on gender. Both male and female student could get the highest score of 100 out of 100. The third group compare public and private university. Private university highest score reach 86, and public university reaches 100 out of 100.

4. RESULTS

Independent sample unequal variance t-tests were performed to examine the differences test of financial literacy level. Unequal variance t-test was done because the two groups have different variances. The financial literacy instrument measure financial literacy in three areas, namely personal investment, credit transactions and personal financial management. A total of 15 multiple choice questions were given to participants to find out the level of financial literacy. Each participant in this research fills in the instrument within 10-20 min.

The results of the different tests show that there are statistically significant differences between the two groups. This research will compare financial literacy score on three categories; there is a field of study, gender and university. The first group compare financial literacy score between economics and no-economics student. The result of t-test shows that both groups have a significant difference. The second and third group found no significant difference. The following is a summary of the results of the statistical tests are presented in Table 3.

Table 2: Descriptive statistics

Classification Subject	Financial literacy score					n
	Min.	Max.	Ave	SD	Variance	
Economics	32,00	100,00	69,44	16,21	262,67	116
Non-Economics	31,00	87,00	61,26	13,27	176,10	87
Economics Gender						
Male	35,00	100,00	66,74	2,04	224,42	54
Female	31,00	100,00	65,75	15,61	243,70	145
University						
Public University	31,00	100,00	66,51	15,86	251,40	181
Private University	32,00	86,00	61,18	11,68	136,44	22

Source: Based on the primary research

Table 3: The result of the t-test independent sample

Difference t-test Independent sample unequal variance	df	t-Stat.	P (T≤t) one tail	P (T≤t) two-tail
Economics and Non-Economics	199,00	-3,94774	0,00005	0,00011
Male and Female	99,00	0,41	0,34	0,68
Public and Private University	31,00	-1,94	0,03	0,06

Source: Based on the primary research

Based on the data taken and tested with statistics, the data from economics and non-economics student shows that the average of the first group (economics) was 69,44 and the average of the second group (non-economics) was 61,26. The results of the unequal variance t-test show that there are significant differences between the two groups with score 0,00005. This significant difference shows that the first group has a lower financial literacy than the second group.

The second comparison is to examine the gender difference in financial literacy score. The male group have a mean 66,74 and female mean 65,75. The result of the unequal variance t-test shows that there was no significant difference between male and female on financial literacy score. This research found different result than the most common finding that male student has higher financial literacy score than female (Atkinson and Messy, 2012; Ergün, 2018; Klapper et al., 2013; Lusardi et al., 2010).

Further, this research examines the difference result of financial literacy score between public and private universities in Indonesia. This research found there is no difference between the two groups.

5. CONCLUSION

Students from the economic and business study group have higher financial literacy scores compared to the non-economic and business study group. Although these students do not get formal courses on personal finance, they have sufficient basic financial knowledge in three fields (investment, credit and personal finance). Optimizing students' financial knowledge could be done by giving specialized courses in the form of personal finance. So, students can be having higher personal finance knowledge. Another interesting finding is that there is no difference in financial literacy scores at the gender level and public-private universities.

This research limits financial literacy to only three areas (investment, credit and personal finance) so it does not measure financial knowledge in other fields. Further research could be optimized by measuring other fields in personal finance to make it more comprehensive.

6. ACKNOWLEDGMENTS

The publication of this study was supported by the EU-funded Hungarian grant EFOP-3.6.3.-VEKOP-16-2017-00007, for the project entitled "From Talent to Young Researchers" – Supporting the Career-developing Activities of Researchers in Higher Education.

REFERENCES

- Alsemgeest, L. (2015), Arguments for and against financial literacy education: Where to go from here? *International Journal of Consumer Studies*, 39(2), 155-161.
- Anthes, W.L. (2004), Financial illiteracy in America: A perfect storm, a perfect opportunity. *Journal of Financial Service Professionals*, 58(6), 49-60.
- Armstrong, C.J., Craven, M.J. (1993), *Credit Card Use and Payment*

- Practices Among College Students. Arlington, VA: In Proceedings of the 6th Annual Conference of the Association for Financial Counseling and Planning Education.
- Atkinson, A., Messy, F. (2012), *Measuring Financial Literacy: Results of the Oecd Info Pilot Study*. Paris, France: OECD Publishing. p15.
- Baum, S., O'Malley, M. (2003), College on credit: How borrowers perceive their education debt. *Journal of Student Financial Aid*, 33(3), 7-19.
- Bowen, C.F. (2002), Financial knowledge of teens and their parents. *Financial Counseling and Planning*, 13(2), 93-102.
- Chen, H., Volpe, R.P. (2002), Gender differences in personal financial literacy among college students. *Financial Services Review*, 11(3), 289-307.
- Ergün, K. (2018), Financial literacy among university students: A study in eight European countries. *International Journal of Consumer Studies*, 42(1), 2-15.
- Godfrey, N.S. (2006), Making our students smart about money. *Education Digest*, 71(7), 21-26.
- Harrington, C., Smith, W. (2016), College student interest in personal finance education. *Financial Service Review*, 25, 351-372.
- Hayhoe, C.R. (2002), Comparison of affective credit attitude scores and credit use of college student at two points in time. *Journal of Family and Consumer Science*, 94, 71-77.
- Hayhoe, C.R., Leach, L., Turner, P.R. (1999), Discriminating the number of credit cards held by college students using credit and money attitudes. *Journal of Economic Psychology*, 20, 643-656.
- Hayhoe, C.R., Leach, L.J., Turner, P.R., Bruin, M.J., Lawrence, F.C. (2000), Differences in spending habits and credit card use of college students. *The Journal of Consumer Affairs*, 34(1), 113-133.
- Joo, S., Grable, J., Bagwell, D.C. (2001), *College Students and Credit Cards*. Denver, Co: In Proceedings of the Association for Financial Counseling and Planning Education. p8-15.
- Klapper, L., Lusardi, A., Panos, G.A. (2013), Financial literacy and the financial crisis: Evidence from Russia. *Journal of Banking and Finance*, 37(10), 3904-3923.
- Lusardi, A., Mitchell, O.S., Curto, V. (2010), Financial literacy among the young. *Journal of Consumer Affairs*, 44(2), 358-380.
- Lyons, A. (2004), A profile of financially at-risk college students. *The Journal of Consumer Affairs*, 38(1), 56-80.
- Lyons, A. (2007), *Credit Practices and Financial Education Needs of Midwest College Students*. Indianapolis, IN: Networks Financial Institute Working Paper No. 2007-WP-23.
- Margaretha, F., Pambudhi, R.A. (2015), Tingkat literasi keuangan pada mahasiswa S-1 fakultas ekonomi. *Jurnal Manajemen Dan Kewirausahaan*, 17(1), 76-85.
- Mendari, A.S., Kewal, S.S. (2013), Tingkat literasi keuangan di kalangan mahasiswa STIE MUSI. *Jurnal Economia*, 9(2), 130-140.
- Murphy, A.J. (2005), Money, money, money: An exploratory study on the financial literacy of black college students. *College Student Journal*, 39(3), 478.
- Norvilitis, J.M., MacLean, M.G. (2010), The role of parents in college students' financial behaviors and attitudes. *Journal of Economic Psychology*, 31(1), 55-63.
- Norvilitis, J.M., Osberg, T.M., Young, P., Merwin, M.M., Roehling, P.V., Kamas, M.M. (2006), Personality factors, money attitudes, financial knowledge, and credit-card debt in college students. *Journal of Applied Social Psychology*, 36(6), 1395-1413.
- Otoritas Jasa Keuangan. (2017), *Strategi Nasional Literasi Keuangan Indonesia*. Jakarta, Indonesia: Otoritas Jasa Keuangan.
- Shim, S., Serido, J., Bosch, L., Tang, C. (2013), Financial identity-processing styles among young adults: A longitudinal study of socialization factors and consequences for financial capabilities. *Journal of Consumer Affairs*, 47(1), 128-152.
- Staten, M., Barron, J. (2002), *College Student Credit Card Usage*. United States: Credit Research Center, Working Paper, 65.
- Urban, C., Schmeiser, M., Collins, J.M., Brown, A. (2018), The effects of high school personal financial education policies on financial behavior. *Economics of Education Review*.
- Xiao, J.J., Noring, F.E., Anderson, J.G. (1995), College students' attitudes toward credit cards. *Journal of Consumer Studies and Home Economics*, 19, 155-174.
- Xiao, J.J., Noring, F.E., Anderson, J.G. (1997), College students and credit cards: Do attitudes affect behavior? *Journal of Consumer Education*, 15, 25-35.
- Xiao, J.J., Tang, C., Serido, J., Shim, S. (2011), Antecedents and consequences of risky credit behavior among college students: Application and extension of the theory of planned behavior. *Journal of Public Policy and Marketing*, 30(2), 239-245.