The Role of Financial Knowledge and Fintech on the Financial Behavior

Rofi Puspitaningtias [1], Ekaningtyas Widiastuti [2*], Sulistyandari [3]

[12*] Economics and Business Faculty Jenderal Soedirman University, Indonesia
[3] Student of Finance Department,College of Management, National Yunlin University of Science and Technology Taiwan
*widtyas@gmail.com

ABSTRACT

This research is focused on Faculty of Economics and Business students at Jenderal Soedirman University. It analyzed the effectiveness of financial behavior through increasing financial knowledge and technology. The data collection method in this study was a questionnaire. The sampling technique was convenience sampling, and there were 104 respondents obtained. The data analysis tool was OLS (Ordinary Least Square). The results showed that demographic factors had no effect on financial behavior. On the other hand, financial knowledge and financial technology had positive effect on financial behavior. The results simultaneously showed that demographic factors, financial knowledge and financial technology affected financial behavior. Financial knowledge which obtained appropriately and supported by adequate financial technology will affect better financial behavior. Students will be able to act effectively and efficiently in managing and solving problems in financial-related decision making.

Keywords: demographics, financial knowledge, financial technology, financial behavior

1. Introduction

In the current time, information technology is rapidly developing and Indonesian people are required to be able to quickly adapt to the technological changes. The use financial services such as mobile banking and online investation through available technology are examples of technology combination with the financial system to make easier access in financial services. Financial technology or known as Fintech is an information technology that is now widely used by financial sector services to serve and to provide convenience to the public in accessing financial products, simplifying transactions, and increasing financial literacy (Finansialku.com).

University students as the young millenial generation cannot be separated from technology and they have dependence in all aspects including financial aspect. Most university students have taken advantage of and have used the available digital financial services, but some of them do not have good enough knowledge and understanding in using these financial products and services. Based on OJK (Financial Authority Service) data, the financial literacy index in 2019 reached 38.03%, it is higher than in 2016. For students and university students, the level of financial literacy is 23.4%. This is still quite low. It is needed to increase financial literacy to avoid financial problems that will occur

[1]Corresponding Author: Rofi Puspitaningtias, E-mail: rofipuspitaningtias@gmail.com

along with the rapid development of financial technology. Financial literacy is also an important implication for financial behavior.

Financial literacy is defined as a person’s financial knowledge about financial products and the concept of skills in managing finances. Financial knowledge and understanding will influence a person's behavior in making decisions related to finance, such as saving, planning, and managing finances. Financial knowledge and individual finance management skill are important in everyday life. Someone who has good financial literacy will have a small risk of financial problems (Krishna, Rofaida & Sari, 2010). In addition, demographic factors such as age, gender, education, and income can also influence financial behavior, in line with the research results found by Bianchi (2018) and Margaretha and Pambudhi (2015).

Several supporting studies, including research by Akben-Selcuk Elif (2015) which was conducted among university students in Turkey, found that financial knowledge has a significant positive effect on financial behavior. In line with Humaidi's research, Ahmad et., Al. (2020), which showed the results that financial technology and financial literacy have a significant positive effect on financial management behavior in the productive age population in Surabaya. M. Husni Mubarok (2017) in Puspitaningtias (2020) found different results that first, demographic factors, financial knowledge, and personality traits had no effect on family financial management behavior.

This study aimed to determine the effect of socio-demographic factors, financial knowledge, and financial technology on student financial behavior. How students can plan and manage their personal finances and how sudents can change their mindset so that they can act appropriately in managing their finances. This research was focused on Faculty of Economics and Business students at Jenderal Soedirman University Purwokerto. In this study, the researcher wanted to know how the students’ social demographics, financial knowledge, and financial technology affect their finacial behavior.

2. Literature Review

2.1 Social Demographics

Social demography is the study of the population of an area, especially regarding the number, structure or composition of the population, and its development from time to time. Gender differences can significantly influence financial behavior (Hayhoe et al., 2000). The higher the level of people’s education, the more careful they are in making decisions so that they are more protected from losses and the more positive their financial behavior (Kiran and Rao, 2004). Income has a positive relationship with responsible financial management behavior (John et al 2009).

2.2 Financial Knowledge

Financial knowledge is knowledge to manage finances in financial decision making (Chen and Volpe, 1998). Individual knowledge and understanding of finances are very important and necessary in order to be able to apply financial instruments appropriately and wisely so that financial problems cann be avoided. Individual knowledge has an important part in coordinating all aspects of financial literacy in shaping individual financial behavior (Agarwalla et al, 2013). Experts also generally agree that financial knowledge has a direct influence on financial behavior (Hilgert et al, 2003). Advance financial knowledge possessed by each individual can lead to active participation in financial activities, as well as better financial behavior for each individual.

2.3 Financial Technology

Financial technology (Fintech) in Indonesia is developing very rapidly due to customers' mindset change, especially the millennial generation, who prefer personal, more effective, and efficient access in meeting financial needs. Financial technology is a new financial service model developed through information technology innovation (Hsueh, 2017). The use of financial technology that is often used by university students are services from Gojek and Grab which are used as transportation services. In addition, there is also OVO which can replace cash as a means of payment.

2.4 Financial Behavior

Financial behavior is a determining dimension of financial literacy and it is one of the most important elements in financial literacy (OECD, 2012). Financial behavior can be defined as human behavior that is relevant to money management (Xiao, 2008). Good financial behavior is shown by good financial planning, management, and control activities. Theory Planned Behavior (TPB) has been widely applied to understand individual behavior and individual reactions. This theory is a social psychology theory that predicts human behavior.

Financial behavior is an individual action such as creating cashflow by recording income and expensses, investing, taking insurance, calculating, predicting, and having the courage to face the risks of decisions that are made related to finance. Good financial knowledge can encourage people to have positive financial behavior (Hilgert, et al., 2003). Xiao (2008) explained that financial behavior has a high influence on financial decision making, which can affect personal finances as a whole.

3. Research Methodology

This research used a quantitative approach with descriptive research type. This study which was conducted at the Faculty of Economics and Business, Henderal Soedirman University analyzed student's financial behavior patterns. Data were collected by distributing questionnaires to 104 students.

The independent variable (X) in this study was social demography (X1). Indicators included age, gender, education, and income (Agarwalla, 2013). The measurement scale used a score. Financial knowledge (X2) with some indicators such as Ownership, Saving, Insurance, Investment (Sakinah, 2018). Financial technology (X3) with several indicators such as Online transaction, Card payment, and Account Receivable (Ansori, 2019). The measurement scale used Likert scale: strongly agree - agree - neutral - disagree - strongly disagree.

The dependent variable (Y) in this research was financial behavior, a study that studied how psychological phenomena affected financial behavior that was practiced in financial decision making. Financial behavior variables were measured using Likert scale: strongly agree - agree - neutral - disagree - strongly disagree.

3.1 Regression equation model:

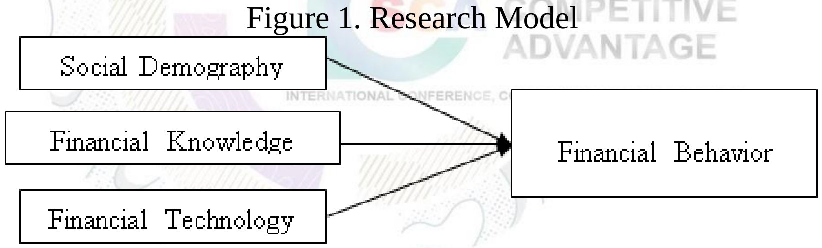
$$Y = a+b1X1+b2X2+ b3X3+e$$

Information:

Y	: Financial behavior
a	: The constant of the regression equation
b1, b2, b3	: Regression coefficients of variables X1, X2, and X3
X1	: Social Demography
X2	: Financial Knowledge
X3	: Fintech

3.2 Illustrations

Figure 1. Research Model



4. Results

4.1 Research Sample

Table 1. Research Sample

Year	Management	Accounting	Economic Development	Economic Education	Total
2016	43	9	4	0	56
2017	22	9	3	1	35
2018	7	0	1	0	8
2019	4	1	0	0	5
Total	76	19	8	1	104

Based on table 1, it showed that 66.34% were female respondents and 33.65% were male respondents. The largest number of respondents was students majoring in Management, there were 76 respondents out of 104 respondents in total.

4.2 Multiple Regression Analysis

Multiple Regression Analysis was tested to determine the effect of the independent variable on the dependent variable.

Table 2. Results of Multiple Regression Analysis

No.	Independent Variables	Regression Coefficient	T-Count	T-table	Sig
1.	Social demography (X_1)	0,001	1,421	1,985	0,158
2.	Financial Knowledge (X_2)	0,542	7,496	1,985	0,000
3.	Financual Technology (X_3)	0,016	0,396	1,985	0,693
Constat		: 0,008			
Determination Coefficient		: 0,445			
F-Count		: 28,554			

Based on the tests done, the following equation results are obtained:

$$Y = 0.008 + 0.001X1 + 0.542X2 + 0.016X3$$

4.2.1 Coefficient of Determination (R2)

Based on table 2, it can be seen that the coefficient of determination (Adjusted R2) is 0.445 and shows a goodness of fit. The value of 44.5% indicates that the regression equation model in this study is able to explain the relationship between the dependent variable (financial behavior) and the independent variable (social demography, financial knowledge, and fintech) by 44.5%. While the remaining 55.5% is influenced and explained by other factors outside the model that were not tested in this study.

4.2.2 Simultaneous Testing (Test F)

The results of the calculated F value are known with a significance value (0.000) ≤ α (0.05), which means that the regression equation model formed has model accuracy (goodness of fit) or it can be said that the independent variables (social demography, financial knowledge, and fintech) simultaneously affect financial behavior.

4.2.3 Partial Testing (t test)

Based on the partial test results shown in table 2, the significance value of the social demographic variable is 0.158> α (0.05), financial knowledge is 0.000 ≤ α (0.05), and fintech is 0.693> α (0.05), this means that social demography and fintech do not partially affect financial behavior. Meanwhile, the variable of financial knowledge has a significant positive effect on financial behavior.

5. Discussion

5.1 Social Demographic Influence on Financial Behavior

Based on the test results, it shows that Social Demography has no effect on Financial Behavior. This result is not in line with the research of John et al. (2009), which found that there was a positive relationship between income and responsible financial management behavior. The better the income, the more responsible financial behavior. Likewise, the results of research by Rahmawati and Asandimitra (2018), found that the greater the amount of income will affect the amount of allocated funds for saving.

Therefore, although the results of this study state that social demography has no effect on financial behavior, this is perhaps because people are more consumptive and do not think to increase their income which can be set aside for investing or saving. Age, education and gender also do not affect how they manage their finances and how they make decisions related to finances to achieve a prosperous life both now and in the future. Most students can apply good financial behavior such as saving, making transactions, making payments, or other good financial behavior activities.

5.2 Financial Knowledge on Financial Behavior

Financial knowledge has a significant positive effect on financial behavior, it means that the higher and better a person's financial knowledge is, the better his financial behavior will be. Most students at Economics and Business Faculty of Unsoed already knew and understood the basic knowledge of financial management such as how to save properly, how to have savings and ATMs, and how to do financial transactions. They have studied financial management from social media or the internet, and learned financial management from financial experts through seminars. The results of this study support the theory of financial behavior that uses cognitive processes in managing and solving problems in decision making. The higher the knowledge of one's finances, the better the management and problem solving in making investment decisions, the better the financial behavior will be. These results support the statement emphasized by Gutter (2008) that financial knowledge is the main prediction in shaping financial behavior. This result is also in line with the research of Potrich et al (2014) which found that financial knowledge and financial attitudes have a positive effect on financial behavior.

5.3 The Influence of Fintech on Financial Behavior

The results of the analysis show that fintech has no effect on financial behavior. Most students in Purwokerto have taken advantage of the available technology-based financial service facilities. They can use digital services for transactions through fintech products, in the form of Go-pay, OVO, T-cash, and Dana. However, in reality, not everyone can understand fintech products well, so that they have not done what they should do, such as be able to secure their financial position by using them for saving and managing finances properly. As a result, the existing financial technology cannot influence students to behave appropriately in relation to their finances. They have not been able to make the right decisions in managing their finances. This indicates that the availability of financial services must be supported by good financial literacy in order to avoid irresponsible financial behavior.

6. Conclusion

After reviewing and analyzing the influence of fintech and financial literacy on financial behavior among students at universities in Purwokerto area, it can be concluded that:

a. Social demographics have no effect on financial behavior. It means that gender, age, education level, and income do not affect students' behavior related to their finances.
b. Financial knowledge has a positive effect on financial behavior. It means that the better the financial knowledge they get, the more appropriate the financial behavior they have.
c. Financial technology has no effect on financial behavior. The use of technology-based financial service facilities cannot affect financial behavior.

References

Agarwalla et al (2015). Financial Literacy among Working Young in Urban India. Vol.67 , issue C, 101-109.

Ajzen, I. (1991). The Theory of Planned Behavior. Organizational Behavior and Human Decision Processes, 179-211.

Atkinson, A., and Messy, F.-A. (2012). Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study. OECD Working Papers on Finance, Insurance and Private Pensions, 15.

Bianchi, M. (2018). Financial Literacy and Portfolio Dynamics. Journal of Finance.

Chen, H. and Volpe, R.P. (1998), “An analysis of personal financial literacy among college students”, Financial Services Review, Vol. 7 No. 2, pp. 107-28.

Hilgert, M.A., Hogarth,. J.M.,& Beverly, S.G. (2003). Household Financial Management : The connection between knowledge and behavior. Federal Reserve Bulletin, 309-322.

Mandell, L., and Klein, L. S. (2009). The Impact of Financial Literacy Education on Subsequent Financial Behavior. Journal of Financial Counseling and Planning, 20(1).

Margaretha, F., and Pambudhi, R. A. (2015). Tingkat Literasi Keuangan pada Mahasiswa S-1 Fakultas Ekonomi. Jurnal Manajemen dan Kewirausahaan, 17(1), 76-85.

Otoritas Jasa Keuangan. (2016). Survei Nasional Literasi dan Inklusi Keuangan 2016.

Potrich, A. C., Vieira, K. M., and Kirch, G. (2014). Determinants of Financial Literacy: Analysis of the Influence of Socioeconomic and Demographic Variables. 38th AnPAD Meeting.

Rahmawati, D., dan Asandimitra, N.(2018). The Influence of Demography, Social Environment and Financial Self-Efficacy toward Saving Behavior. Advance in Social Science, Education and Humanities Research, vol.222 2nd Social Science, Humanities, and Education Conference (SoSHEC 2018).

Xiao, J. J. (2008). Applying Behavior Theories to Financial Behavior. Handbook of Consumer Finance Research.