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The Influence of Financial Literacy and Financial Inclusion on Saving and

Investment Behaviour for Millennial Generation in DKI Jakarta

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Abstract

Background: In 2019, financial literacy level in Indonesia was only 38,03%, while the financial inclusion rate was 76,19%. Financial literacy and inclusion levels related to saving that are identical to the banking sector have the highest values, with 36,12% and 73,88%, while investment in capital market has the second lowest values, at 4,92% and 1,55%. However, the ratio of gross savings to gross domestic product in Indonesia was reported only at 31,01%, while several other Asian countries reached more than 40%.

Objective: This study aims to measure the level of financial literacy and inclusion of millennial generations in DKI Jakarta. It analyses the influence of financial literacy and inclusion on saving and investment behaviour, the influence of financial literacy on financial inclusion, and the influence of saving behaviour on investment behaviour.

Method: The data analysis used descriptive and SEM-PLS analyses.

Results: The results show that the financial literacy rates and the average of inclusion rates of millennial generation in DKI Jakarta are 50% and 60% respectively. Financial literacy and inclusion have an influence on saving and investment behaviour. Also, financial literacy affects financial inclusion, while the saving behaviour does not influence investment behaviour.

Conclusion: Financial literacy and inclusion have a positive and significant effect on saving behaviour and investment behaviour. Financial literacy also has a positive and significant effect on financial inclusion. However, saving behaviour does not have a significant effect on investment behaviour.

Keywords: financial inclusion; financial literacy; investment behaviour; millennial generation; saving behaviour

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1. Introduction

A country can be said to be financially capable and prosperous from its economic growth. Qualified human resources are one of the factors that influence economic growth (OJK, 2017). Improving the quality of human resources can be done by strengthening competencies, especially in the economic field, one of which is financial literacy (LIPI, 2013). According to the Organization for Economic Co-operation and Development (OECD, 2017), financial literacy is not only knowledge and understanding of financial concepts and risks, but also the skills, motivation, and confidence to apply this knowledge and understanding to make effective financial decisions, to improve individual and community financial well-being, and to participate in the economy.



Figure 1. Indonesian financial literacy and inclusion index

In Otoritas Jasa Keuangan survey presented in Figure 1, it is known that there has been an increase in national financial literacy in the last decade, where the results of the last national financial literacy survey in 2019 showed that 38.03% of the Indonesian population had a good level of financial literacy. Despite the increase compared to the previous survey results in 2013 and 2016 which only amounted to 21.84% and 29.7%, Indonesia's financial literacy index is still relatively low. The percentage indicates that only 38 out of every 100 Indonesians are well literate.

According to OJK (2017), community financial literacy will be followed by community financial inclusion. This is supported by Sari and Kautsar's research (2020) which shows that financial literacy has a positive correlation with financial inclusion. Financial inclusion itself refers to efforts to make financial products and services accessible and affordable to all individuals (OJK 2016). However, in reality there is a considerable gap between the level of financial literacy and inclusion in Indonesia. In 2019, the financial inclusion rate reached 76.19% (OJK, 2019). Even the level of financial inclusion in 2019 has exceeded the government's target of 75% as stipulated in presidential regulation number 82 of 2016 concerning the National Financial Inclusion Strategy (SNKI). It can be assumed that many people have been able to access and use financial products or services even though they do not fully understand and have good knowledge of these financial products and services. This is considered quite worrying because without adequate financial literacy, individuals are potentially exposed to financial fraud (OECD, 2006) or mistakes in financial decision making (Lusardi and Mitchell, 2014).

In relation to saving and investment, there is also a considerable gap in the understanding and use of products in the banking sector and capital market among Indonesians (OJK, 2019). Saving, which is identical to the banking sector, occupies the highest position with a financial literacy index of 36.12% and financial inclusion of 73.88%. Meanwhile, the financial literacy and financial inclusion indexes related to investing in the capital market are the second lowest, at 4.92% and 1.55%. It can be interpreted that people in Indonesia tend to be more able to access banking products that are identical to saving activities rather than investing in the capital market.

However, Otoritas Jasa Keuangan states that the culture of saving and investment in Indonesia is still low when referring to the ratio of savings to Gross Domestic Product (GDP). World Bank data (2021) recorded that Indonesia's gross savings to GDP ratio in 2019 was only 31.01%. This ratio is relatively lower than some other Asian countries, such as Singapore which has reached 42.83%, China at 44.18%, and Brunei at 53.55%. According to Hadad (2016), the savings ratio can be increased through the mobilization of various sources of domestic funds in products in financial services institutions available today, not only by saving in banks but also by investing in the capital market.

Java Island, which consists of six provinces, namely DKI Jakarta, West Java, East Java, Central Java, Banten, and DI Yogyakarta, is the island that contributes the most to GDP in Indonesia, which is 58.75%. The people on this island also have a higher human development index than other islands in Indonesia (BPS, 2020). This indicates that the quality of human resources in Java is relatively better than other islands in Indonesia.

Information	2019			
DKI Jakarta				
GRDP per capita	269.074			
Expenditure per capita	18.527			
Difference	250.547			
Potential for savings/investment	93,1%			
West Java				
GRDP per capita	43.092			
Expenditure per capita	11.152			
Difference	31.940			
Potential for savings/investment	74,1%			
East Java				
GRDP per capita	59.257			
Expenditure per capita	11.739			
Difference	47.518			
Potential for savings/investment	80,2%			
Central Java				
GRDP per capita	39.243			
Expenditure per capita	11.102			
Difference	28.141			
Potential for savings/investment	71,7%			
Banten				
GRDP per capita	51.439			
Expenditure per capita	12.267			
Difference	39.172			
Potential for savings/investment	76,2%			
DI Yogyakarta				
PDRB per kapita	36.795			
Expenditure per capita	14.394			
Difference	22.401			
Potential for savings/investment	60,9%			

Table 1.	Gross Regional	Domestic I	Product ((GDRP)	and exp	enditure	per	capita	in Java	Island	2019	(in
			thous	ands of	rupiah)							

Source: BPS (2020)

The greater the difference between income and consumption, the greater the potential for people to save or invest their money. Table 1 shows that the people of DKI Jakarta have greater potential to save or invest their money because the difference between GRDP per capita and per capita expenditure amounted to 93.1% in 2019. The remaining income of more than 93.1% of income (GRDP) per capita, and supported by the good quality of human resources, shows that DKI Jakarta has good potential in terms of saving or investing in the financial services sector.

DKI Jakarta Province is currently still in the demographic bonus period because 71.98% or reaching 7 581 140 people are still at a productive age (15-64 years) (BPS, 2021). As many as 46% of them are dominated by residents with an age range of 21 to 39 years. This age range is referred to as generation Y or the millennial generation, those born between 1982 and 2000 (Howe and Strauss, 2000). In this age range, the millennial generation has begun to enter the workforce and has even begun to occupy strategic positions in their work. A productive-age population that is actively working will contribute positively to the country's GDP (gross domestic product) per capita. The productive age population needs financial services to support their daily operations (OJK, 2013). Therefore, the millennial generation has the potential to be developed in all aspects of life and contribute greatly to the country's economic growth, especially in terms of saving and investment. Meanwhile, the companies Luno and

Dalia Research (2019) found that there is a difference between saving and investing in the millennial generation. The research shows that millennials are starting to commit to financial responsibility and saving, but in investing they still face significant challenges. The survey was conducted among 1 050 millennials. The survey results show that 69% of millennials do not have an investment strategy. And of that number, 44% only invest once every one or two years and as many as 20% of them don't even invest. In addition, Alvara Research Center (2020) found that the percentage of millennial income used for saving is greater than for investing. The average allocation of expenditure for savings needs is 8.5%, while for investment it is only 0.5% of the total income they have. Both figures are still relatively low to the figure suggested by OJK in formulating financial priorities for saving and investment, which is 20% of income (OJK, 2017).

Based on what has been described, the problems to be answered in this study are to 1) measure the level of financial literacy and financial inclusion in the millennial generation in DKI Jakarta; 2) analyse the effect of financial literacy and financial inclusion on saving behaviour in the millennial generation in DKI Jakarta; 3) analyse the effect of financial literacy and financial literacy and financial inclusion on investment behaviour in the millennial generation in DKI Jakarta; 4) analyse the effect of financial literacy on financial inclusion in the millennial generation in DKI Jakarta; and 5) analyse the effect of saving behaviour on investment behaviour in the millennial generation in DKI Jakarta.

2. Literature Review

2.1. Financial Literacy

According to Atkinson and Messy (2012), the OECD/International Network on Financial Education has developed a financial literacy survey instrument that can be used with very different backgrounds in different countries. This instrument was later updated by OECD (2018). The three components of the instrument used to measure respondents' financial literacy level consist of: (1) Financial knowledge, covering basic knowledge of financial concepts that include calculating the time value of money, interest paid on loans, calculating interest plus loan balance, compound interest, risk and return, definition of inflation, and diversification. (2) Financial behaviour, including one's behaviour in planning expenses, the process of making purchases, budgeting, paying bills on time, and building a financial safety net. (3) Financial attitude, covering one's attitudes and preferences regarding money and financial planning for the future.

There are four levels of financial literacy classification according to OJK (2013), namely:

- (1) Well-literate, a group with a good level of financial literacy. This group has knowledge and confidence about financial institutions and financial services, as well as their products, including features, benefits and risks, rights and obligations associated with financial products and services, and has the skills to use them.
- (2) Sufficient-literate, which is the group with a moderate level of financial literacy. This group already has knowledge and confidence about financial services institutions and financial services and products, including the features, benefits and risks, rights and obligations associated with financial products and services. However, they are not skilled in using these financial products and services.
- (3) Less-literate, which is a group that only has knowledge about financial services institutions, financial products and services.
- (4) Not-literate, which is a group that lacks knowledge and confidence in financial services institutions, financial products and services, and does not have the skills to use them.

2.2. Financial Inclusion

Otoritas Jasa Keuangan (2016) defines financial inclusion as the availability of access to various financial institutions, products, and services to the needs and abilities of the community to improve people's welfare. Meanwhile, Presidential Regulation No. 82/2016 on the National Strategy for Financial Inclusion (SNKI) defines financial inclusion as the condition of each individual having access to financial services with quality, affordable financing and the ability to improve the welfare of the community.

The level of financial inclusion is measured using a guideline questionnaire developed by the OECD. This questionnaire has successfully measured the level of inclusion since it was first created in 2010 (OECD 2018). The questionnaire is designed to measure the financial inclusion indicators which consist of:

- (1) Product holding: Product holding is the most important indicator of financial inclusion and is most relevant for measuring both the demand and supply sides (OECD 2013). Product holding measures the extent to which respondents can identify and own financial products.
- (2) Product awareness: product awareness to measure the level of awareness in using products that suit your needs. This awareness is important because it will prevent the wrong selection of financial products and services and help financial institutions to know the demand from the community.
- (3) Product choice: Product choice in financial inclusion describes how people choose financial products and services to own and use. Financial products and services that are owned actually need to be monitored properly. In addition, people also need to make adjustments if there are goods and services with a changed structure.
- (4) Seeking alternative to formal services: Used to identify people who potentially do not have access to formal financial services.

2.3. Saving Behaviour

This study measures saving behaviour variables using measurements of three banking deposit products. According to OJK, bank savings products consist of savings deposits, deposits, and current accounts. Savings are deposits with banks whose withdrawals can only be made by the requirements set by the bank. Savings withdrawals are made using a savings book, withdrawal slip, receipt, or Automated Teller Machine (ATM) card. Deposits are deposits that have a certain period (maturity) and withdrawals are made according to the period based on the agreement between the Depositing Customer and the Bank. Demand deposits are deposits with banks whose withdrawals can be made at any time by using checks or billet giro, other means of payment orders, or by book entry.

2.4. Investment Behaviour

According to Rangasamy et al. (2019), investment behaviour is the perception of investors to think appropriately and accurately when choosing financial products and services for investment. It can also be the opposite to state that an investor's behaviour towards their investment choices. In a national survey conducted by OJK in 2016, OJK measured three investment products in the capital market, namely stocks, mutual funds, and bonds. So that to measure investment behaviour variables in this study using these three investment products.

2.5. Millennial Generation

According to Howe and Strauss (2000), the millennial generation is the generation born between 1982-2000. The millennial generation is very reactive to environmental changes that occur around them and has more attention to wealth (Lyons, 2004). The millennial generation also has different characteristics of each individual, depending on where he grew up, the economic and social strata of his family. Alvara Research Center (2016) in its research concluded that there are at least three characteristics in the millennial generation known as the 3Cs (creative, connected, and confidence).

3. Method

3.1. Sample / Participants

This research was conducted in DKI Jakarta Province. Data collection starts from February to July 2021. The non-probability sampling method, precisely the type of purposive sampling, was chosen to determine the sample in this study. The criteria for respondents in this study are millennial generation in the age range of 21-39 years, domiciled in DKI Jakarta, and already have personal income.

3.2. *Instrument(s)*

This research belongs to quantitative research with primary data sources derived from the results of online questionnaires and secondary data derived from literature studies of several books, journals, OJK publications, OECD publications, BPS publications, and various credible and relevant mass media articles to support the topic of this research. The financial literacy and financial inclusion questionnaires were adapted from the 2018 OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion questionnaire. Meanwhile, the questionnaire to measure investment behaviour and saving behaviour was made by referring to the modified financial inclusion questions and instruments from Hasudungan (2019).

3.3. Data collection procedures

The sample size is calculated using the Lemeshow formula (1990) because the population according to the criteria in this study is unknown. The following is the calculation of the sample size as follows:

$$n = \frac{Z_{1-\alpha/2}^{2}P(1-P)}{d^{2}}\dots\dots(1)$$

Based on this formula with a 95% confidence level (Z score of 1.96), a proportion estimate value (P) of 0.5, and a sampling error (d) of 7%, the results show that the minimum respondents needed are 196 respondents. However, to reduce errors and to better represent the population, the researcher added a sample of 210 respondents.

3.4. Data analysis

The analytical methods used, namely descriptive analysis and Structural Equation Modeling - Partial Least Square (SEM-PLS) analysis, and using Microsoft Excel 2016, IBM SPSS Statistic 25, and SmartPLS 3.0 as analytical tools.

This research design is shown in Figure 1 so that the research hypothesis appears as follows:

H11 : Financial literacy has a positive and significant effect on saving behaviour.

H12 : Financial inclusion has a positive and significant effect on saving behaviour.

H13 : Financial literacy has a positive and significant effect on investment behaviour.

H14 : Financial inclusion has a positive and significant effect on investment behaviour.

H15 : Financial literacy has a positive and significant effect on financial inclusion.

H16 : Saving behaviour has a positive and significant effect on investment behaviour.



Figure 2. Research framework

4. **Results**

4.1. Characteristics of Respondents

Based on Table 2, it is known that the majority of respondents are female with an age range of 21-25 years. Based on the domicile of residence, the majority of respondents come from West Jakarta City, the last education of respondents is Strata 1 (Bachelor) with a job as a private employee and a monthly income, which is \leq Rp 4,500,000.00.

Category	Characteristics	Frequency (people)	Precentage
Gender	Male	72	34,3%
	Female	138	65,7%
Age	21-25	133	63,3%
	26-30	46	21,9%
	31-35	16	7,6%
	36-39	15	7,1%
Domicile	Kota Jakarta Barat	73	34,8%
	Kota Jakarta Pusat	18	8,6%
	Kota Jakarta Selatan	47	22,4%
	Kota Jakarta Timur	49	23,3%
	Kota Jakarta Utara	11	5,2%
	Kab Kepulauan Seribu	12	5,7%
Last Education	High Scool/Equivalent	80	38,1%
	Diploma (D3)	19	9,0%
	Bachelor Degree	108	51,4%
	Magister Degree	3	1,4%
Job	Government Employees	6	2,9%
	Private Employees	106	50,5%
	BUMN Employees	8	3,8%
	Self-Employed	47	22,4%
	Other	43	20,5%
Income per Month	\leq Rp 4.500.000	119	56,7%
	\leq Rp 4.500.000 – Rp 6.750.000	57	27,1%
	Rp 6.750.001 – Rp 9.000.000	19	9,0%
	Rp 9.000.001 – Rp 11.250.000	8	3,8%
	> Rp 11.250.000	7	3,3%

Table 2. Characteristics of respondent

4.2. Financial Literacy Level of Millennial Generation in DKI Jakarta

Based on Table 3, it can be concluded that the financial literacy level of DKI Jakarta's millennial generation is 50%. A financial literacy level of 50% means that in every 100 millennials in DKI Jakarta, 50 people are already in the well-literate category. This figure is indeed lower than the results of the DKI Jakarta financial literacy level carried out by OJK in 2019, which amounted to 59.16%. However, there is a considerable difference of 11.97% when compared to the national financial literacy rate of 38.03% in 2019. In general, the average financial literacy score of DKI Jakarta's millennial generation has a score of 74 and is classified in the sufficient literate category.

Informatioan	Informatioan Category (in people)				
	Not	Less	Sufficient	Well	Value
	Literate	Literate	Literate	Literate	(%)
	(0-25%)	(26-50%)	(51-75%)	(76-100%)	
Financial Behaviour	0	8	63	139	78
Financial Attitude	4	15	119	72	69
Financial Knowledge	1	7	101	101	74
Financial Literacy	0	8	96	106	74
-	0%	4%	46%	50%	

Table 3. Financial literacy

4.3. Financial Inclusion Level of Millennial Generation in DKI Jakarta

Based on Table 4, in general, the financial inclusion level of the millennial generation in DKI Jakarta has a score of 60%. The inclusion rate for payment products has the highest average value, which is 70%. This indicates that millennials in DKI Jakarta have good access to payment products, such as ATM/debit cards, internet/mobile/sms banking, and electronic money. Followed by the average value related to knowledge of the definition of financial institution products at 68%, insurance-related products at 55%, and savings and investment products at 49%. Meanwhile, products related to loans or credit have the lowest average value, which is 42%. This may be due to the characteristics of the respondents in this study. From data released by the Ministry of Communication and Information, Tangkary (2019) states that credit applications such as home ownership loans (KPR) are dominated by millennials aged 26-36 years.

Product	Minimum Value (%)	Maximum Value (%)	Average (%)
Savings/Investment	33%	90%	49%
Payment Products	33%	100%	70%
Insurance	33%	100%	55%
Loans/Credit	33%	83%	42%
Knowledge of the Definition of Financial Institution Product	20%	100%	68%
Financial Inclusion	28%	90%	60%

4.4. Saving Behaviour of the Millennial Generation in DKI Jakarta

The saving behaviour studied is only specific to banking deposit products (savings, deposits, current accounts). Based on the number of owners, the majority of respondents have 1 savings product with the type of savings. For the allocation percentage category of take-home pay, the majority of respondents answered> 5%-10% and it is known that the volume of saving transactions carried out by respondents each month is IDR 100,001.00 - IDR 500,000.00 and annually IDR 1,200,001.00 - IDR 6,000,000.00. From these results, it can be said that the saving behaviour of DKI Jakarta's millennial generation is still relatively low when referring to the percentage of numbers suggested by OJK in formulating financial priorities for saving, which is 20% of income.

4.5. Investment Behaviour of the Millennial Generation in DKI Jakarta

The investment behaviour studied is only specific to investment products in the capital market (stocks, mutual funds, bonds). Based on the amount of ownership, the majority of respondents do not have investment products in the capital market. For the category of percentage allocation from take-home pay, the majority of respondents answered $\leq 5\%$ and it is known that the volume of investment

transactions made by respondents each month is \leq Rp 100,000.00 and annually is \leq Rp 1,200,000.00. From these results, it can be said that the investment behaviour of DKI Jakarta's millennial generation is still relatively low when referring to the percentage figure suggested by OJK in formulating financial priorities for investment, which is 20% of income.

		Savings Products		Capita Investme	l Market nt Products
Behaviour	Information	Number	Percentage	Number	Percentage
		of	(%)	of	(%)
		(people)		(people)	
Number of	Do not have yet	17	8%	92	44%
Holdings	1 product	127	60%	70	33%
	2 product	53	25%	28	13%
	3 product	13	6%	20	10%
Allocation	$\leq 5\%$	63	30%	113	54%
percentage from	> 5% - 10%	74	35%	58	28%
take home pay	> 10% - 15%	35	17%	17	8%
	> 15% - 20%	12	6%	9	4%
	> 20%	26	12%	13	6%
Transaction	≤ Rp 100.000	43	20%	100	48%
volume per	Rp 100.001 - Rp 500.000	86	41%	60	29%
month	Rp 500.001 - Rp 1.000.000	41	20%	27	13%
	Rp 1.000.001 – Rp 2.000.000	26	12%	15	7%
	> Rp 2.000.000	14	7%	8	4%
Transaction	≤ Rp 1.200.000	73	35%	121	58%
volume per year	Rp 1.200.001 - Rp 6.000.000	79	38%	55	26%
	Rp 6.000.001 - Rp 12.000.000	35	17%	21	10%
	Rp 12.000.001 – Rp 24.000.000	13	6%	8	4%
	> Rp 24.000.000	10	5%	5	2%

Table 5. Description of saving behaviour and investment behaviour

4.6. Structural Equation Modeling-Partial Least Square Analysis (SEM PLS)

4.6.1 Evaluation of the Measurement Model (Outer Model)

The outer model is carried out to test the construct validity and reliability of research instruments. Construct validity in this study consists of convergent validity and discriminant validity, while the reliability test used is composite reliability. Convergent validity can be seen based on the outer loading value on each indicator that measures the construct. According to Abdillah and Hartono (2015), researchers should not remove indicators that have outer loading between 0.5-0.7 as long as the average variance extracted (AVE) is> 0.5.

If there are indicators that do not meet the criteria, dropping will be carried out on the indicator that has the smallest value and then recalculated. Based on the results of the PLS algorithm, the financial literacy variable is reflected by indicators (LK1.1), namely financial planning, (LK1.6), namely long-term financial goals, and (LK1.10), namely consideration of financial service selection in the financial behaviour sub variable, (LK2.2), namely preferring to save the money owned in the financial attitude sub variable, and LK3.7 related to asset diversification in the financial knowledge sub variable. Financial inclusion variables are reflected by awareness, ownership status, and length of ownership in the savings and investment sub-sector, namely in deposit products (IK1.2); stocks (IK1.5); bonds/sukuk (IK1.6); and mutual funds (IK1.7). Saving behaviour variables are reflected by ownership of savings products (PM1), the percentage of savings from take-home pay (PM2), the volume of savings transactions per month (PM3), and the volume of savings transactions per year (PM4). Investment behaviour variables are reflected by ownership of investment products (PI1), percentage of investment from take-home pay

(PI2), investment transaction volume per month (PI3), and investment transaction volume per year (PI4). The results of the outer loading value are described in Figure 3.

Figure 3. SEM model after dropping

After checking the outer loading value, testing is carried out by checking the Average Variance Extracted (AVE) value. The model is adequate when the AVE value is > 0.5. The results of the AVE value in this study for the variables of financial literacy, financial inclusion, saving behaviour, and investment behaviour are 0.582; 0.542; 0.568; and 0.723, respectively. Therefore, the AVE value on each variable is acceptable because it has met the requirements.

Furthermore, the discriminant validity test is carried out by checking the cross-loading value of each indicator against its latent variable. An adequate model when the cross-loading value shows the correlation of the indicator to its own latent variable is greater than that of other latent variables. The results of cross loading in this study obtained that each indicator on its latent variable is greater than the other latent variables. So, it can be concluded that the research model is in accordance with the requirements of the discriminant validity test.

After the all variables are proven valid, a reliability test is conducted by checking the composite reliability (CR) value. The CR value in this study for the variables of financial literacy, financial inclusion, saving behaviour, and investment behaviour are 0.873; 0.824; 0.839; and 0.912, respectively. The composite reliability value of each construct is > 0.7, so it can be concluded that the model is constructively reliable.

4.6.2 Testing the Structural Model (Inner Model)

Inner model testing is measured by examining the R-Square value where the value is used to see the amount of influence of the independent variable on the dependent variable. The R Square value in this study for the financial inclusion variable means that the financial literacy variable can explain financial inclusion by 2.8% and the remaining 97.2% is explained by other variables outside the model. The investment behaviour variable has an R-Square value of 47.4%, which means that the financial literacy, financial inclusion, and saving behaviour variables can explain investment behaviour by 47.4% and the remaining 52.6% is explained by other variables outside the model. The saving behaviour variable has an R-Square value of 16.4%, which means that the financial literacy and financial inclusion variables can explain saving behaviour by 16.4% and the remaining 83.6% is explained by other variables outside the model.

The next structural model test is to test the influence between variables by bootstrapping the model (Figure 4).

Figure 4. Bootstrapping results on the structural model

She will be loved A variable can be said to have a significant relationship if it produces a P value smaller than 0.05 and has a T statistics value greater than the T table. This study uses a significance level of 95% so that the T table value is 1.96. The original sample value is used to describe the direction of the relationship, either positive or negative. The results of the path coefficient value are described in Table 6.

Table 6. Path coefficient of bootstrapping results

Hypothesis	Original	T Statistic	P-Values
	Sample		
H ₁₁	0,157	2,283	0,023
H_{12}	0,348	4,958	0,000
H_{13}	0,153	3,199	0,001
H_{14}	0,598	10,921	0,000
H ₁₅	0,166	2,297	0,022
H_{16}	0,102	1,454	0,147

The following is a description of the test results of each hypothesis proposed in this study as listed in Table 6.

Hypothesis H11 is accepted, meaning that the higher the individual's financial literacy, the higher the saving behaviour. If the millennial generation is increasingly encouraged to have financial behaviour, attitudes and knowledge, it will increase ownership of savings products, the percentage of allocations, and the volume of saving transactions both per month and per year carried out by the millennial generation. These results are in line with Prasetyo, Yulianto and Setyadharma (2020), Nguyen et al. (2017), and Sirine and Utami (2016) which state that financial literacy has a significant role in influencing individual saving behaviour.

Hypothesis H12 is accepted, meaning that every increase in the value of financial inclusion will increase their saving behaviour. The more millennials who use products in financial services, especially in the savings and investment sector, the greater the tendency to own savings products, the percentage of allocations, and the volume of saving transactions both per month and per year carried out by the millennial generation. These results are in line with Putri and Susanti (2018) and Ardiana (2016), which state that increasing financial inclusion will increase saving behaviour in individuals.

Hypothesis H13 is accepted, meaning that the higher the level of individual financial literacy, the better the investment behaviour. If the millennial generation is increasingly encouraged to have financial behaviour, attitudes, and knowledge, it will increase the ownership of investment products, the percentage of allocations, and the volume of transactions in investing both per month and per year made by the millennial generation. These results are in line with Rangasamy, Mathew and Francline (2019)

and Putri and Rahyuda (2017), which state that increasing financial literacy will have an impact on individual investment behaviour.

Hypothesis H14 is accepted, meaning that every increase in the value of financial inclusion will increase their investment behaviour. The more millennials who use financial institutions, products, and services, especially in the savings and investment sector, the greater the tendency to own investment products, the percentage of allocations, and the volume of transactions in investing. These results are in line with Hasudungan (2019), which states that there is a positive and significant influence between financial inclusion and individual investment behaviour. This is because an individual who has broad access to financial products and services, the interest in investing, especially in ownership of capital market products, will also be higher (Febrianti, 2020).

Hypothesis H15 is accepted, meaning that financial literacy has a positive and significant effect on financial inclusion. Millennials who have done good financial planning, pay attention to long-term personal financial goals, make considerations in choosing financial services, can deal with money wisely by choosing to save it for the long term, and understand financial knowledge related to asset diversification will increase the use, utilization, and understanding of financial products and services followed by an increase in financial inclusion. These results are in line with (Sari and Kautsar, 2020) and (Bongomin et al., 2016) proving that financial literacy increases awareness, choices, and better individual financial decisions it can lead to increased access and use of financial services.

Hypothesis H16 is rejected, meaning that the higher the saving behaviour does not guarantee a person to have high investment behaviour as well. The absence of a significant relationship occurs because from the results of open-ended questions, the majority of respondents stated that they did not know how to invest and were not ready to accept the risk of losing money due to investing in the capital market. This result is in line with (Suppakitjarak and Krishnamra, 2015) which states that savers prefer to invest in some tangible assets such as real estate and gold rather than investing in financial assets such as mutual funds, stocks and bonds. Savers are not interested because this type of investment in financial assets is characterized by high risk, complicated investment processes, and high initial investment.

5. **Conclusions**

Referring to the results of this study, it can be concluded that the level of financial literacy and financial inclusion of the millennial generation in DKI Jakarta is 50% and 60%, respectively. In addition, the results show that financial literacy and inclusion have a positive and significant effect on saving behaviour and investment behaviour. Financial literacy also has a positive and significant effect on financial inclusion. However, saving behaviour does not have a significant effect on investment behaviour.

References

- Alvara Research Center. 2020. Indonesia Gen Z and Millenial Report 2020: The Battle of Our Generation. Jakarta (ID): Alvara Research Center.
- Abdillah W, Hartono J. 2015. Partial Least Square (PLS): Alternatif Structural Equation Modeling (SEM) Dalam Penelitian Bisnis. Yogyakarta (ID): Andi.
- Ardiana, M. 2016. Kontrol diri, pendidikan pengelolaan keuangan keluarga, pengetahuan inklusi keuangan siswa pengaruhnya terhadap perilaku menabung siswa SMK se Kota Kediri. Jurnal Ekonomi Pendidikan Dan Kewirausahaan. 4(1): 59–75.
- Bongomin, G. O. C. et al. 2016. Social capital: mediator of financial literacy and financial inclusion in rural Uganda. Review of International Business and Strategy. 26(2): 291–312.
- [BPS] Badan Pusat Statistik. 2021. Hasil Sensus Penduduk 2020 Provinsi DKI Jakarta. Jakarta (ID): BPS.
- [BPS] Badan Pusat Statistik. 2020. [Metode Baru] Indeks Pembangunan Manusia menurut Provinsi 2018-2020. www.bps.go.id. [10 Februari 2021].

- [BPS] Badan Pusat Statistik. 2020. Produk Domestik Regional Bruto Kabupaten/Kota di Indonesia. Jakarta (ID): BPS.
- [BPS] Badan Pusat Statistik. 2020. Pengeluaran per Kapita Disesuaikan Menurut Provinsi [Metode Baru], 2010-2019. www.bps.go.id [10 Februari 2021]. [BPS] Badan Pusat Statistik. 2020. Pertumbuhan Ekonomi Indonesia Triwulan IV-2020. Jakarta (ID): BPS
- Febrianti F. 2020. Analisis literasi dan inklusi keuangan terhadap minat investasi generasi z di Jabodetabek [skripsi]. Bogor: Institut Pertanian Bogor.
- Hadad MD. 2016. Masyarakat Indonesia masih minim menabung. https://keuangan.kontan.co.id. [10 Februari 2021].
- Hasudungan, S. 2019. Literasi, Inklusi Keuangan, Penggunaan Produk Fintech, dan Perilaku Investasi pada Generasi Milenial di Jabodetabek [skripsi]. Bogor: Institut Pertanian Bogor.
- [LIPI] Lembaga Ilmu Pengetahuan Indonesia. 2013. Empat Syarat Peluang Bonus Demografi Memajukan Bangsa Indonesia. Jakarta (ID): LIPI.
- Luno, Dalia Research. 2019. The future of money. https://luno.com. [10 Feb 2021]
- Lusardi, A. and Mitchell, O. S. 2014. The economic importance of financial literacy: Theory and evidence. Journal of Economic Literature. 52(1): 5–44.
- Nguyen, T. A. N. et al. 2017. The effects of perceived and actual financial knowledge on regular personal savings: Case of Vietnam. Journal of International Studies. 10(2): 278–291.
- [OECD] Organisation for Economic Co-operation and Development. 2006. The Importance of Financial Education. Paris (FR): OECD Publishing.
- [OJK] Otoritas Jasa Keuangan. 2019. Survei Nasional Literasi dan Inklusi Keuangan 2019. [diakses 2021 Feb 20]. Tersedia pada http://www.sikapiuangmu.ojk.go.id.
- [OJK] Otoritas Jasa Keuangan. 2017. Revisit Strategi Nasional Literasi Keuangan Indonesia. Jakarta (ID): OJK.
- [OJK] Otoritas Jasa Keuangan. 2017. Menjadi millenial yang cerdas keuangan. http://www.sikapiuangmu.ojk.go.id. [20 Februari 2021].
- [OJK] Otoritas Jasa Keuangan. 2016. Peraturan Presiden Republik Indonesia Nomor 82 Tahun 2016 tentang Strategi Nasional Keuangan Inklusif. http://www.ojk.go.id. [20 Februari 2021].
- [OJK] Otoritas Jasa Keuangan. 2013. Literasi Keuangan. http://www.ojk.go.id. [20 Februari 2021].
- Prasetyo, B. S., Yulianto, A. and Setyadharma, A. 2020. The Influence of Financial Literacy and Parents' Income on Saving Behaviour Based on Parents' Education and School Status. Journal of Economic Education. 10(1): 14–20.
- Putri, N. M. D. R. and Rahyuda, H. 2017. Pengaruh Tingkat Financial Literacy Dan Faktor Sosiodemografi Terhadap Perilaku Keputusan Investasi Individu. E-Jurnal Ekonomi dan Bisnis Universitas Udayana. 6(9): 3407–3434.
- Putri, T. P. and Susanti. 2018. Pengaruh Kontrol Diri, Literasi Keuangan Dan Inklusi Keuangan Terhadap Perilaku Menabung Mahasiswa Pendidikan Akuntansi Fakultas Ekonomi Universitas Negeri Surabaya. Jurnal Pendidikan Akuntansi (JPAK). 6(3): 323–330.
- Rangasamy, S., Mathew, J. and Francline, S. C. 2019. Impact of financial literacy on investment behaviour and consumption behaviour of middle-class families in Karnataka, India. International Journal of Advanced Science and Technology. 28(19): 634–647.
- Sari, A. N. and Kautsar, A. 2020. Analisis Pengaruh Literasi Keuangan, Financial Technology, dan Demografi terhadap Inklusi Keuangan pada Masyarakat di Kota Surabaya. Jurnal Ilmu Manajemen. 8(4): 1233-1246.

- Sirine, H. and Utami, D. S. 2016. Faktor-Faktor Yang Memengaruhi Perilaku Menabung Di Kalangan Mahasiswa. Jurnal Ekonomi dan Bisnis. 19(1):27–52. Suppakitjarak, N. and Krishnamra, P. 2015. Household Saving Behaviour and Determinants of the Forms of Saving and Investment in Thailand. Journal of Economics, Business and Management. 3(3): 326–330.
- World Bank. c2021. Gross domestic savings (% of GDP). https://datacatalog.worldbank.org. [10 Februari 2021].