

# DATA ANALYSIS: MILLENNIAL'S FINANCIAL BEHAVIOR

Andry Suka Putra

[andrysukaputra@gmail.com](mailto:andrysukaputra@gmail.com)

## 1.1 DATA ANALYSIS

The data used is quantitative so that data analysis performed is processed using SmartPLS statistics data processing software with Structural Equation Model – Partial Least Square (SEM-PLS) analysis techniques/models. The process of analyzing the data is as follows.

### 1.1.1 Goodness of Fit (GoF)

**TABLE 1.1**  
**Construct Crossvalidated Commuality Testing**

Variable	Q2 (= 1-SSE/SSO)
Financial Literacy	1.000
Financial Attitude	0.345
Financial Experience	1.000
Locus of Control	0.299
Lifestyle	0.332
Income	1.000
Financial Behavior	0.393
<b>TOTAL</b>	<b>4.369</b>

Source: SmartPLS data processing, 2021 (APPENDIX 1)

Known:

$$\overline{\text{COMM}} = \frac{4.369}{7} = \mathbf{0.624}$$

$$\overline{R^2} = \mathbf{0.600}$$

Then obtained the calculation of Goodness of Fit (GoF) as follows.

$$\text{GoF} = \sqrt{\overline{\text{COMM}} \times \overline{R^2}}$$

$$\text{GoF} = \sqrt{0.624 \times 0.600}$$

$$\text{GoF} = \sqrt{0.374}$$

$$\text{GoF} = \sqrt{0.374}$$

$$\text{GoF} = \mathbf{0.612}$$

### 1.1.2 Outer Model Evaluation (Measurement Model)

#### 1. Convergent Validity Test

##### A. First Outer Loading

**TABLE 1.2**  
**First Outer Loading Results**

Variable	Indicators	Outer Loading Value	Information
Financial Behavior (Y)	Y1	0. 804	<b>VALID</b>
	Y2	0. 470	INVALID
	Y3	0. 419	INVALID
	Y4	0. 871	<b>VALID</b>
Financial Literacy (X <sub>1</sub> )	X1.1	0. 741	INVALID
	X1.2	0. 781	<b>VALID</b>
	X1.3	0. 338	INVALID
	X1.4	0. 438	INVALID
	X1.5	0. 475	INVALID
Financial Attitude (X <sub>2</sub> )	X2.1	0. 739	<b>VALID</b>
	X2.2	0. 456	<b>VALID</b>
	X2.3	0. 845	<b>VALID</b>
	X2.4	0. 747	<b>VALID</b>
	X2.5	0. 843	<b>VALID</b>
Financial Experience (X <sub>3</sub> )	X3.1	0. 688	INVALID
	X3.2	0. 507	INVALID
	X3.3	0. 868	<b>VALID</b>
Locus of Control (X <sub>4</sub> )	X4.1	0. 623	<b>VALID</b>
	X4.2	0. 658	<b>VALID</b>
	X4.3	0. 749	<b>VALID</b>
	X4.4	0. 739	<b>VALID</b>
	X4.5	0. 596	INVALID
	X4.6	0. 691	<b>VALID</b>
	X4.7	0. 703	<b>VALID</b>
Lifestyle (X <sub>5</sub> )	X5.1	0. 822	<b>VALID</b>
	X5.2	0. 760	<b>VALID</b>
	X5.3	0. 863	<b>VALID</b>
Income (X <sub>6</sub> )	X6.1	0. 777	<b>VALID</b>
	X6.2	0. 759	INVALID
	X6.3	0. 650	INVALID
	X6.4	0. 193	INVALID

Source: SmartPLS data processing, 2021 (APPENDIX 2)

**TABLE 1.3**  
**First Average Variance Extracted (AVE) Test**

Variable	Average Variance Extracted (AVE)	Conclusion
Financial Literacy	0.338	INVALID
Financial Attitude	0.548	<b>VALID</b>
Financial Experience	0.494	INVALID
Locus of Control	0.465	INVALID
Lifestyle	0.666	<b>VALID</b>
Income	0.410	INVALID
Financial Behavior	0.475	INVALID

Source: SmartPLS data processing, 2021 (APPENDIX 2)

## B. Second Outer Loading

**TABLE 1.4**  
**Second Outer Loading Result**

Variable	Indicators	Outer Loading Value	Information
Financial Behavior (Y)	Y1	0.905	<b>VALID</b>
	Y4	0.902	<b>VALID</b>
Financial Literacy (X <sub>1</sub> )	X1.2	1.000	<b>VALID</b>
Financial Attitude (X <sub>2</sub> )	X2.1	0.735	<b>VALID</b>
	X2.2	0.445	<b>VALID</b>
	X2.3	0.849	<b>VALID</b>
	X2.4	0.744	<b>VALID</b>
	X2.5	0.850	<b>VALID</b>
Financial Experience (X <sub>3</sub> )	X3.3	1.000	<b>VALID</b>
Locus of Control (X <sub>4</sub> )	X4.1	0.648	<b>VALID</b>
	X4.2	0.698	<b>VALID</b>
	X4.3	0.763	<b>VALID</b>
	X4.4	0.749	<b>VALID</b>
	X4.6	0.694	<b>VALID</b>
	X4.7	0.696	<b>VALID</b>
Lifestyle (X <sub>5</sub> )	X5.1	0.819	<b>VALID</b>
	X5.2	0.751	<b>VALID</b>
	X5.3	0.871	<b>VALID</b>
Income (X <sub>6</sub> )	X6.1	1.000	<b>VALID</b>

Source: SmartPLS data processing, 2021 (APPENDIX 2)

## C. Advanced Outer Loading

### 1. Outer Loading Of Income (Working Respondents)

**TABLE 1.5**  
**Results of Outer Loading Income (Working Respondents)**

Variable	Indicators	Outer Loading Value	R Square	Information
Income (Working Respondents)	X6.1	0.697	0.536	<b>VALID</b>
	X6.2	0.703		<b>VALID</b>
	X6.2	0.643		<b>VALID</b>
	X6.3	0.020		INVALID

Source: SmartPLS data processing, 2021 (APPENDIX 2)

## 2. Outer Loading Income (Respondents Not Working)

**TABLE 1. 6**  
**Income Outer Loading Results (Respondents Not Working)**

Variable	Indicators	Outer Loading Value	R Square	Information
Income (Respondents Not Working)	X6.1	0. 167	0. 639	INVALID
	X6.2	0. 519		INVALID
	X6.2	0. 005		INVALID
	X6.3	0. 465		INVALID

Source: SmartPLS data processing, 2021 (APPENDIX 2)

## D. Average Variance Extracted (AVE)

**TABLE 1.7**  
**Average Variance Extracted (AVE) Testing**

Variable	Final Indicator	Average Variance Extracted (AVE)	Conclusion
Financial Literacy	2	1.000	<b>VALID</b>
Financial Attitude	1	0.547	<b>VALID</b>
Financial Experience	5	1.000	<b>VALID</b>
Locus of Control	1	0.503	<b>VALID</b>
Lifestyle	5	0.664	<b>VALID</b>
Income	3	1.000	<b>VALID</b>
Financial Behavior	1	0.816	<b>VALID</b>

Source: SmartPLS data processing, 2021 (APPENDIX 2)

## 2. Diskriminant Validity Test

### A. Cross Loading

**TABLE 1.8**  
**Cross Loading Test Results**

	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>	X <sub>5</sub>	X <sub>6</sub>	Y
<b>X1.2</b>	<b>1.000</b>	0.586	0.654	0.391	0.372	0.250	0.565
<b>X2.1</b>	0.406	<b>0.735</b>	0.427	0.446	0.417	0.264	0.529
<b>X2.2</b>	0.210	<b>0.445</b>	0.208	0.488	0.385	0.109	0.234
<b>X2.3</b>	0.522	<b>0.849</b>	0.560	0.469	0.415	0.197	0.591
<b>X2.4</b>	0.416	<b>0.744</b>	0.418	0.541	0.456	0.109	0.481
<b>X2.5</b>	0.529	<b>0.850</b>	0.549	0.556	0.506	0.184	0.666
<b>X3.3</b>	0.654	0.611	<b>1.000</b>	0.426	0.483	0.282	0.627
<b>X4.1</b>	0.251	0.461	0.258	<b>0.648</b>	0.395	0.195	0.328
<b>X4.2</b>	0.194	0.366	0.172	<b>0.698</b>	0.281	0.100	0.329
<b>X4.3</b>	0.277	0.469	0.262	<b>0.763</b>	0.441	0.052	0.389
<b>X4.4</b>	0.413	0.590	0.480	<b>0.749</b>	0.520	0.185	0.616
<b>X4.6</b>	0.191	0.396	0.232	<b>0.694</b>	0.467	0.053	0.324
<b>X4.7</b>	0.240	0.428	0.281	<b>0.696</b>	0.602	0.033	0.403
<b>X5.1</b>	0.281	0.475	0.375	0.467	<b>0.819</b>	0.139	0.445

<b>X5.2</b>	0.195	0.329	0.263	0.498	<b>0.751</b>	-0.005	0.316
<b>X5.3</b>	0.393	0.566	0.495	0.613	<b>0.871</b>	0.137	0.542
<b>X6.1</b>	0.250	0.238	0.282	0.153	0.125	<b>1.000</b>	0.233
<b>Y1</b>	0.493	0.648	0.559	0.573	0.507	0.147	<b>0.905</b>
<b>Y4</b>	0.529	0.632	0.574	0.501	0.488	0.275	<b>0.902</b>

Source: SmartPLS data processing, 2021 (APPENDIX 2)

Information:

X<sub>1</sub> = Financial Literacy  
 X<sub>2</sub> = Financial Attitude  
 X<sub>3</sub> = Financial Experience  
 X<sub>4</sub> = Locus of Control  
 X<sub>5</sub> = Lifestyle  
 X<sub>6</sub> = Income  
 Y = Financial Behavior

## B. Fornell-Lacker

**TABLE 1.9**  
**Fornell-Lacker Test Results**

Variable	X1	X2	X3	X4	X5	X6	Y	Conclusion
Financial Literacy	<b>1.000</b>							<b>VALID</b>
Financial Attitude	0.586	<b>0.740</b>						<b>VALID</b>
Financial Experience	0.654	0.611	<b>1.000</b>					<b>VALID</b>
Locus of Control	0.391	0.656	0.426	<b>0.709</b>				<b>VALID</b>
Lifestyle	0.372	0.580	0.483	0.649	<b>0.815</b>			<b>VALID</b>
Income	0.250	0.238	0.282	0.153	0.125	<b>1.000</b>		<b>VALID</b>
Financial Behavior	0.565	0.708	0.627	0.594	0.551	0.233	<b>0.903</b>	<b>VALID</b>

Source: SmartPLS data processing, 2021 (APPENDIX 2)

Information:

X<sub>1</sub> = Financial Literacy  
 X<sub>2</sub> = Financial Attitude  
 X<sub>3</sub> = Financial Experience  
 X<sub>4</sub> = Locus of Control  
 X<sub>5</sub> = Lifestyle  
 X<sub>6</sub> = Income  
 Y = Financial Behavior

### 3. Internal Consistent Reliability Test

#### A. Composite Reliability

**TABLE 1.10**  
**Composite Reliability Test Results**

Variable	Composite Reliability	Conclusion
Financial Literacy	1.000	RELIABEL
Financial Attitude	0.853	RELIABEL
Financial Experience	1.000	RELIABEL
Locus of Control	0.858	RELIABEL
Lifestyle	0.855	RELIABEL
Income	1.000	RELIABEL
Financial Behavior	1.000	RELIABEL

Source: SmartPLS data processing, 2021 (APPENDIX 2)

#### B. Cronbach's Alpha

**TABLE 1.11**  
**Cronbach's Alpha Test Results**

Variable	Cronbach's Alpha	Conclusion
Financial Literacy	1.000	RELIABEL
Financial Attitude	0.786	RELIABEL
Financial Experience	1.000	RELIABEL
Locus of Control	0.807	RELIABEL
Lifestyle	0.753	RELIABEL
Income	1.000	RELIABEL
Financial Behavior	0.774	RELIABEL

Source: SmartPLS data processing, 2021 (APPENDIX 2)

#### 1.1.3 Evaluation of Inner Model (Structural Model)

##### 1. Determination Coefficient Test ( $R^2$ )

**TABLE 1.12**  
**Determination Coefficient Test Results ( $R^2$ )**

Variable	R Square	R Square Adjusted
Financial Behavior	0.600	0.590

Source: SmartPLS data processing, 2021 (APPENDIX 3)

## 2. Test Path Coefficients

### A. Analysis of Multiple Linear Regression Equations

**TABLE 1.13**  
**Path Coefficients Test Results**

Variable	Original Sample (O)	t Statistics	P Values
Financial Literacy -> Financial Behavior	0.118	1.699	0.090
Financial Attitudes -> Financial Behavior	0.330	<b>4.335</b>	<b>0.000</b>
Financial Experience -> Financial Behavior	0.223	<b>3.209</b>	<b>0.001</b>
Locus of Control - > Financial Behavior	0.173	<b>3.206</b>	<b>0.001</b>
Lifestyle - > Financial Behavior	0.093	1.447	0.149
Income -> Financial Behavior	0.024	0.560	0.576

Source: SmartPLS data processing, 2021 (APPENDIX 3)

The formula of the double linear regression equation is as follows,

$$Y = \alpha + X_1\beta_1 + X_2\beta_2 + X_3\beta_3 + X_4\beta_4 + X_5\beta_5 + X_6\beta_6 + e$$

Then obtained,

$$Y = 0,118X_1 + 0,330X_2 + 0,223X_3 + 0,173X_4 + 0,093X_5 + 0,024X_6$$

Optimal regression is obtained,

$$Y = 0,330X_2 + 0,223X_3 + 0,173X_4$$

### B. Hypothesis Test

**TABLE 1.14**  
**Conclusion of Research Hypothesis**

Independent	Dependent	P Values	Relationship	Conclusion
Financial Literacy	Financial Behavior	0,090	Insignificant (+)	Ha not accepted
Financial Attitude		<b>0,000</b>	<b>Significant (+)</b>	<b>Ha accepted</b>
Financial Experience		<b>0,001</b>	<b>Significant (+)</b>	<b>Ha accepted</b>
Locus of Control		<b>0,001</b>	<b>Significant (+)</b>	<b>Ha accepted</b>
Lifestyle		0,149	Insignificant (+)	Ha not accepted
Income		0,576	Insignificant (+)	Ha not accepted

Source: SmartPLS data processing, 2021

#### 1.1.4 Result

Based on the hypothesis testing that has been carried out on the SEM-PLS model tests, this analysis obtains the following results.

1. Financial Literacy has no significant positive effect on Financial Behavior.
2. **Financial Attitude has a significant positive effect on Financial Behavior.**
3. **Financial Experience has a significant positive effect on Financial Behavior.**
4. **Locus of Control has a significant positive effect on Financial Behavior.**
5. Lifestyle has no significant positive effect on Financial Behavior.
6. Income has no significant positive effect on Financial Behavior.



## APPENDIX

### APPENDIX 1: Goodness of Fit (GoF)

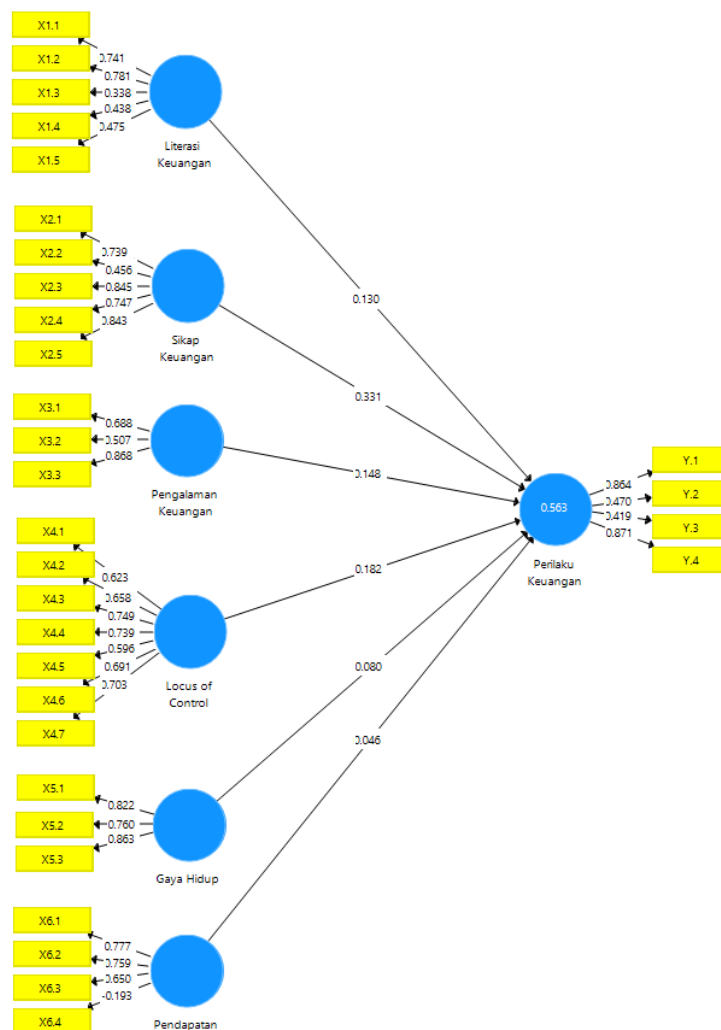
#### Construct Crossvalidated Communality

	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
Gaya Hidup	765,000	510,936	0,332
Literasi Keuangan	255,000		1,000
Locus of Control	1530,000	1072,934	0,299
Pendapatan	255,000		1,000
Pengalaman Keuangan	255,000		1,000
Perilaku Keuangan	510,000	309,748	0,393
Sikap Keuangan	1275,000	834,658	0,345

Source: SmartPLS data processing, 2021

### APPENDIX 2: Outer Model Evaluation (Measurement Model)

#### 1. Convergent Validity Test



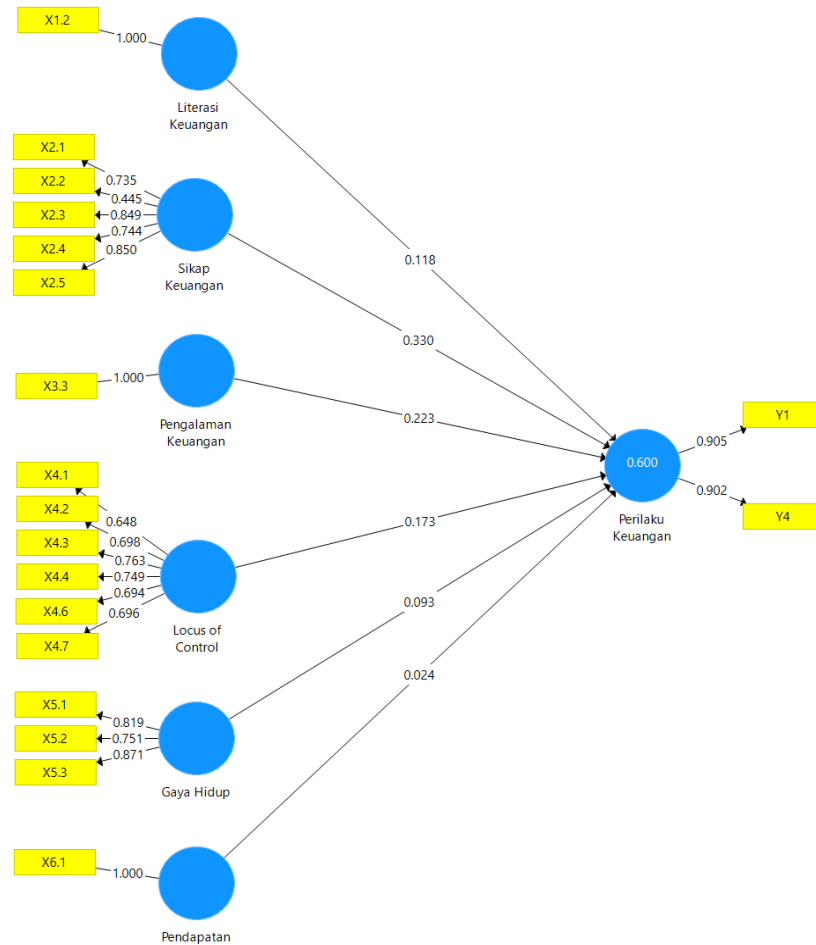
#### First Outer Loading

Source: SmartPLS data processing, 2021

### First Average Variance Extracted (AVE)

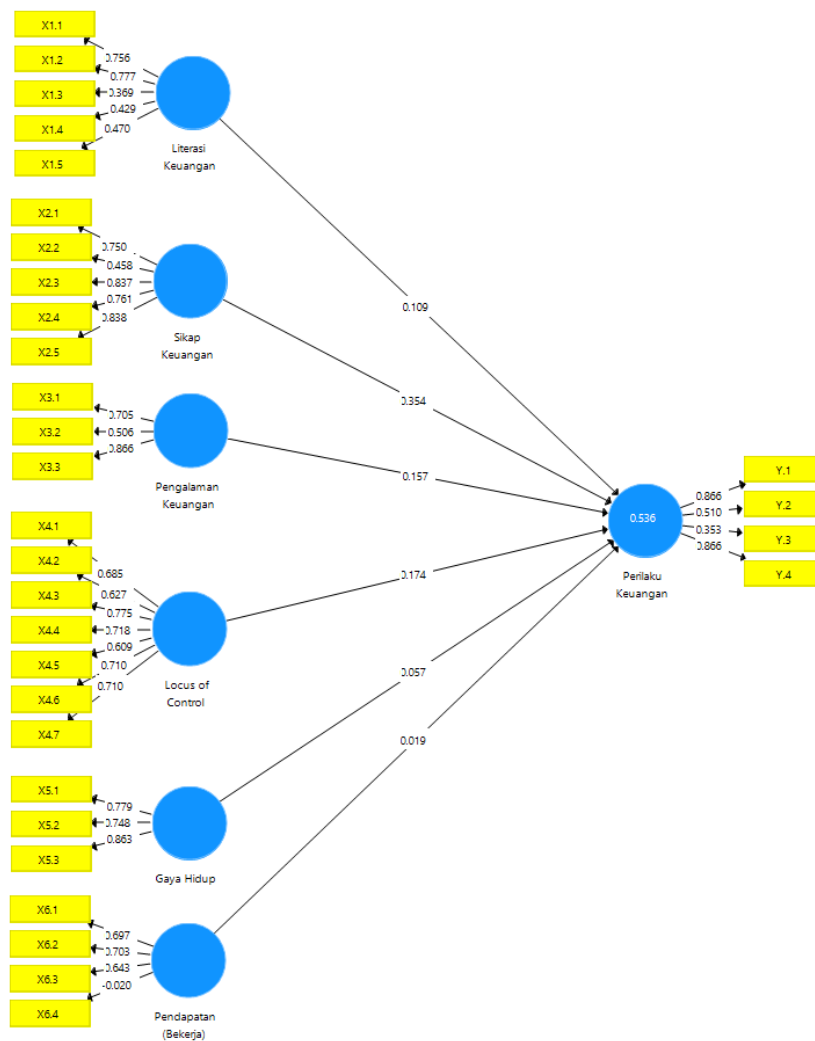
	Average Variance Extracted (AVE)
Gaya Hidup	0,666
Literasi Keuangan	0,338
Locus of Control	0,465
Pendapatan	0,410
Pengalaman Keuangan	0,494
Perilaku Keuangan	0,475
Sikap Keuangan	0,548

Source: SmartPLS data processing, 2021



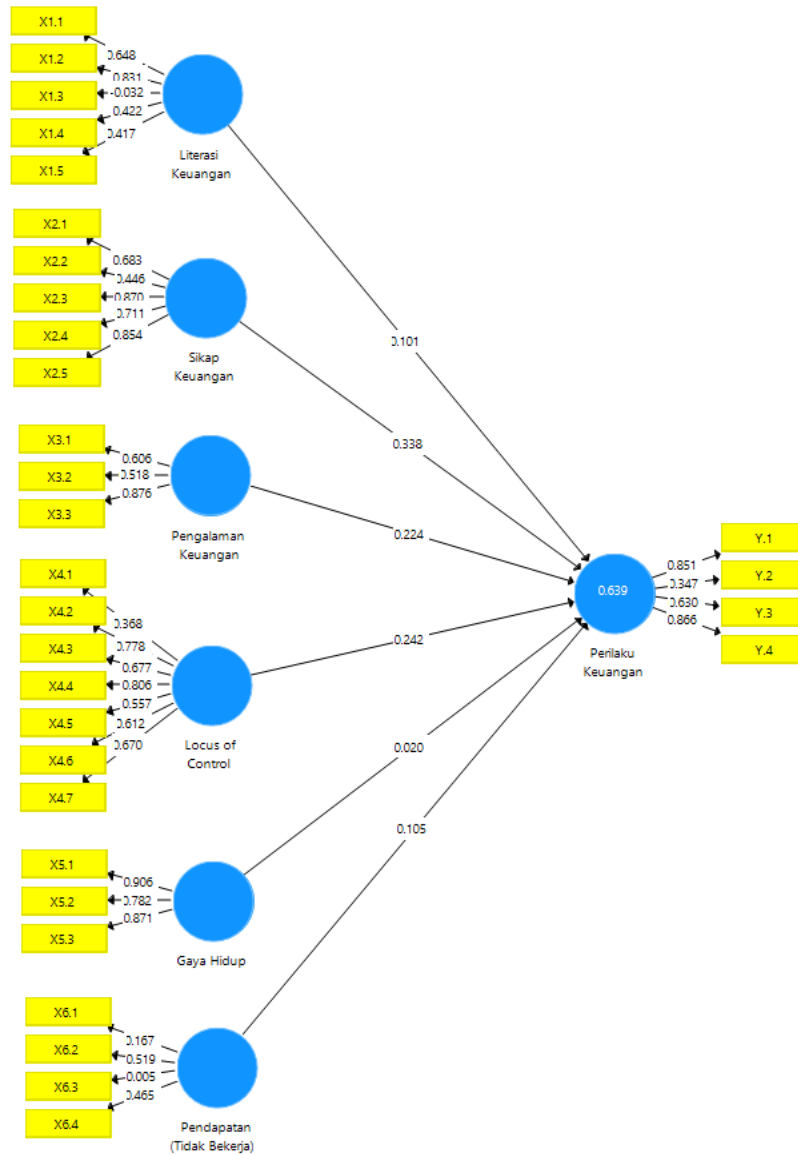
### Second Outer Loading

Source: SmartPLS data processing, 2021



## Income Outer Loading (Working)

Source: SmartPLS data processing, 2021



### Income Outer Loading (Not Working)

Source: SmartPLS data processing, 2021

### Average Variance Extracted (AVE)

	Average Variance Extracted (AVE)
Gaya Hidup	0,664
Literasi Keuangan	1,000
Locus of Control	0,503
Pendapatan	1,000
Pengalaman Keuangan	1,000
Perilaku Keuangan	0,816
Sikap Keuangan	0,547

Source: SmartPLS data processing, 2021

## 2. Diskriminant Validity Test

### Cross Loading

	Gaya Hidup	Literasi Keuangan	Locus of Control	Pendapatan	Pengalaman Keuangan	Perilaku Keuangan	Sikap Keuangan
X1.2	0,372	1,000	0,391	0,250	0,654	0,565	0,586
X2.1	0,417	0,406	0,446	0,264	0,427	0,529	0,735
X2.2	0,385	0,210	0,488	0,109	0,208	0,234	0,445
X2.3	0,415	0,522	0,469	0,197	0,560	0,591	0,849
X2.4	0,456	0,416	0,541	0,109	0,418	0,481	0,744
X2.5	0,506	0,529	0,556	0,184	0,549	0,666	0,850
X3.3	0,483	0,654	0,426	0,282	1,000	0,627	0,611
X4.1	0,395	0,251	0,648	0,195	0,258	0,328	0,461
X4.2	0,281	0,194	0,698	0,100	0,172	0,329	0,366
X4.3	0,441	0,277	0,763	0,052	0,262	0,389	0,469
X4.4	0,520	0,413	0,749	0,185	0,480	0,616	0,590
X4.6	0,467	0,191	0,694	0,053	0,232	0,324	0,396
X4.7	0,602	0,240	0,696	0,033	0,281	0,403	0,428
X5.1	0,819	0,281	0,467	0,139	0,375	0,445	0,475
X5.2	0,751	0,195	0,498	-0,005	0,263	0,316	0,329
X5.3	0,871	0,393	0,613	0,137	0,495	0,542	0,566
X6.1	0,125	0,250	0,153	1,000	0,282	0,233	0,238
Y1	0,507	0,493	0,573	0,147	0,559	0,905	0,648
Y4	0,488	0,529	0,501	0,275	0,574	0,902	0,632

Source: SmartPLS data processing, 2021

### Fornell-Lacker

	Gaya Hidup	Literasi Keuangan	Locus of Control	Pendapatan	Pengalaman Keuangan	Perilaku Keuangan	Sikap Keuangan
Gaya Hidup	0,815						
Literasi Keuangan	0,372	1,000					
Locus of Control	0,649	0,391	0,709				
Pendapatan	0,125	0,250	0,153	1,000			
Pengalaman Keuangan	0,483	0,654	0,426	0,282	1,000		
Perilaku Keuangan	0,551	0,565	0,594	0,233	0,627	0,903	
Sikap Keuangan	0,580	0,586	0,656	0,238	0,611	0,708	0,740

Source: SmartPLS data processing, 2021

### 3. Internal Consistent Reliability Test

#### Cronbach's Alpha and Composite Reliability

	Cronbach's Alpha	Composite Reliability
Gaya Hidup	0,753	0,855
Literasi Keuangan	1,000	1,000
Locus of Control	0,807	0,858
Pendapatan	1,000	1,000
Pengalaman Keuangan	1,000	1,000
Perilaku Keuangan	0,774	0,899
Sikap Keuangan	0,786	0,853

Source: SmartPLS data processing, 2021

### APPENDIX 3: Evaluation of Inner Model (Structural Model)

#### 1. Determination Coefficient Test ( $R^2$ )

##### Determination Coefficient ( $R^2$ )

	R Square	R Square Adjusted
Perilaku Keuangan	0,600	0,590

Source: SmartPLS data processing, 2021

#### 2. Test Path Coefficients

##### Path Coefficients

	Original Sample (O)	T Statistics ( O/STDEV )	P Values
Gaya Hidup -> Perilaku Keuangan	0,093	1,447	0,149
Literasi Keuangan -> Perilaku Keuangan	0,118	1,699	0,090
Locus of Control -> Perilaku Keuangan	0,173	3,206	0,001
Pendapatan -> Perilaku Keuangan	0,024	0,560	0,576
Pengalaman Keuangan -> Perilaku Keuangan	0,223	3,209	0,001
Sikap Keuangan -> Perilaku Keuangan	0,330	4,335	0,000

Source: SmartPLS data processing, 2021