

**CHAPTER IV**  
**DATA ANALYSIS**

**4.1 Pilot Study**

Before large-scale quantitative research, the researchers usually will do a pilot study. This pilot study is an effort to avoid the mistakes in research that are not well designed. The pilot studies are usually conducted on the members of the relevant population.

**4.1.1 Validity Test**

The following are the results of the instrument validity test:

**Table 4.1 Summary of Validity Statistics from 30 Samples**

Country	N of items	Pearson Correlation			
		FB	FK	FA	LC
Indonesia	1	0.751**	0.662**	0.912**	0.733**
	2	0.772**	0.592**	0.869**	0.762**
	3	0.818**	0.550**	0.830**	0.803**
	4	0.569**	0.803**	0.825**	0.850**
	5	0.393*	0.784**	0.770**	0.737**
	6	0.675**	0.708**	0.842**	0.507**
	7	0.529**	0.567**	0.668**	0.478**
	8	0.715**	0.611**	0.802**	
	9	0.734**	0.725**	0.687**	
	10	0.643**			
	11	0.840**			
Vietnam	1	0.479*	0.720**	0.758**	0.843**
	2	0.518**	0.563**	0.757**	0.792**
	3	0.694**	0.380*	0.627**	0.826**
	4	0.589**	0.786**	0.679**	0.675**
	5	0.451*	0.638**	0.397*	0.778**
	6	0.446*	0.401*	0.754**	0.450*
	7	0.561**	0.458*	0.834**	0.502**
	8	0.817**	0.649**	0.663**	
	9	0.667**	0.531**	0.853**	
	10	0.740**			
	11	0.791**			

Notes:\*\* and \* are respectively the significant levels at 5% and 1%.

From the table 4.1 above, the validity statistics from 30 respondents both in Indonesia and Vietnam were declared valid, because all the statement items which include Personal Financial Management Behaviors, Financial Knowledge, Financial Attitude and Locus of Control, were greater than the  $r_{table}$  (0.349).

#### 4.1.2 Reliability Test

The following are the results of reliability tests conducted on 30 respondents both in Indonesia and Vietnam.

**Table 4.2 Summary of Reliability Statistics from 30 Samples**

Variables	Cronbach's Alpha	
	Indonesia	Vietnam
FB	0.882	0.836
FK	0.847	0.737
FA	0.929	0.865
LC	0.808	0.809

From the table 4.2 above, the reliability statistics from 30 respondents both in Indonesia and Vietnam, which include Personal Financial Management Behaviors, Financial Knowledge, Financial Attitude and Locus of Control, were in the high reliability. All the statement items of the questionnaire are appropriate. Thus, the statements of the questionnaire can be answered correctly by respondents in both Indonesia and Vietnam.

## 4.2 Respondents Overview

The following below are the results of the respondents data obtained by the researcher. The data obtained directly from the survey from that conducted using online questionnaire, which is Google Form. The questionnaire distributed to University Students of IIB Darmajaya and UEL with 190 respondents from both countries.

### 4.2.1 Description of Respondent Profile

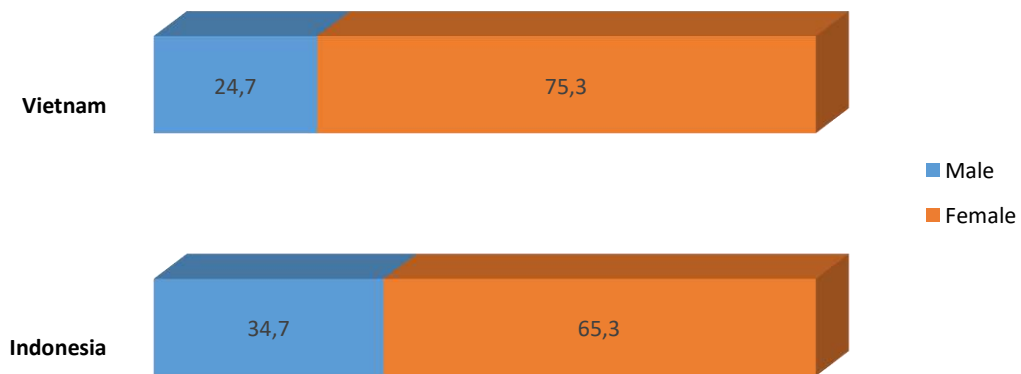
From the results of the questionnaire processing, the profile of the respondents is obtained sample in this study:

#### 4.2.1.1 Respondents Profile: Gender

The following is the respondents's data based on gender which can be seen in the graph below this:

**Table 4.3 Summary of Respondents Profile: Gender**

Country		Male	Female
Indonesia	Frequency	66	124
	Percent	34.7	65.3
Vietnam	Frequency	47	143
	Percent	24.7	75.3



**Figure 4.1 Respondent Profile: Gender**

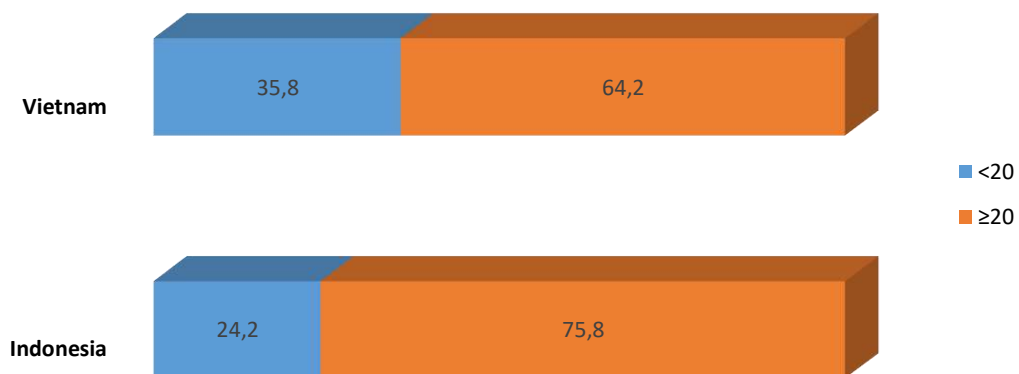
Based on the Figure 4.1 above, it shows that the gender of the respondents from Indonesia at the majority of this study were female with a percentage of 65.3% (124 people) and the rest were male with a percentage of 34.7% (66 people) of 190 respondents. While in Vietnam, the majority of this study were also female with a percentage of 75.3% (143 people) and the rest were male with a percentage of 24.7% (47 people) of 190 respondents. Thus, it indicates that more female respondents both from Indonesia and Vietnam were relate to Personal Financial Management Behaviors.

#### 4.2.1.2 Respondents Profile: Age

The following is the respondent's data based on age which can be seen in the graph below this:

**Table 4.4 Summary of Respondents Profile: Age**

Country		<20	≥20
Indonesia	Frequency	46	144
	Percent	24.2	75.8
Vietnam	Frequency	68	122
	Percent	35.8	64.2



**Figure 4.2 Respondent Profile: Age**

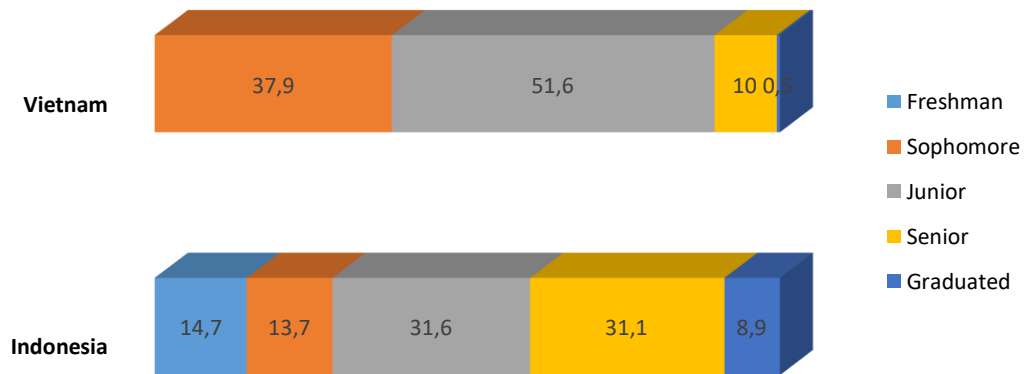
Based on the Figure 4.2 above, it shows that the age of the respondents in Indonesia from 190 people, there were 24.2% or 46 people aged <20 years old; and 75.8% or 144 people aged ≥20 years old. While in Vietnam, there were 35.8% or 68 people aged <20 years old; and the remaining 64.2% or 122 people aged ≥20 years old. Thus, it indicates that Personal Financial Management Behaviors are more relate to respondents who aged at ≥20 years old.

### 4.2.1.3 Respondents Profile: Academic Year

The following is the respondent's data based on academic year which can be seen in the graph below this:

**Table 4.5 Summary of Respondents Profile: Academic Year**

Country		Freshman	Sophomore	Junior	Senior	Graduated
Indonesia	Frequency	28	26	60	59	17
	Percent	14.7	13.7	31.6	31.1	8.9
Vietnam	Frequency		72	98	19	1
	Percent		37.9	51.6	10.0	0.5



**Figure 4.3 Respondent Profile: Academic Year**

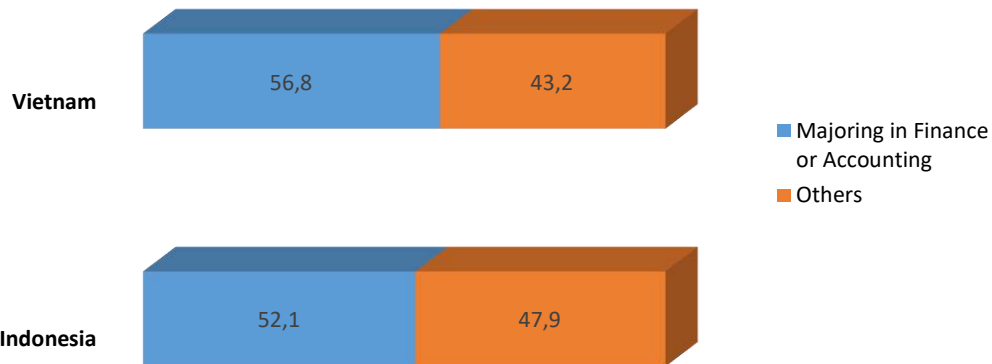
Based on the Figure 4.3 above, it shows that the academic year of the respondents in Indonesia, there were 14.7% or 28 people are a freshman; 13.7% or 26 people are sophomore; 31.6% or 60 people are junior; 31.1% or 59 people are senior and 8.9% or 17 people are graduated students. While in Vietnam, there are 37% or 72 people are sophomore; 51.6% or 98 people are junior; 10% or 19 people are senior and the remaining 5% or 1 people are graduated students. Thus, it indicates that Personal Financial Management Behaviors are more attractive for a third year students (junior).

#### 4.2.1.4 Respondents Profile: Major

The following is the respondent's data based on majoring in Finance or Accounting which can be seen in the graph below this:

**Table 4.6 Summary of Respondents Profile: Major**

Country		Majoring in Finance or Accounting	Others
<b>Indonesia</b>	Frequency	99	91
	Percent	52.1	47.9
<b>Vietnam</b>	Frequency	108	82
	Percent	56.8	43.2



**Figure 4.4 Respondent Profile: Major**

Based on the Figure 4.4 above, it shows that 52.1% or 99 people from IIB Darmajaya Indonesia are majoring in Finance or Accounting, the remaining are 47.9% or 91 people are not majoring in Finance or Accounting. While in UEL Vietnam, there were 56.8% or 108 people are majoring in Finance or Accounting, the remaining are 43.2% or 82 people are not majoring in Finance or Accounting.

### 4.3 Descriptive Questionnaire Results

**Table 4.7 Questionnaire Results**

Country	Item		Measurement Scale					Total	Mean
			SA (5)	A (4)	N (3)	D (2)	SD (1)		
Indonesia	Statement 1	<b>Financial Knowledge (X1)</b>	23	69	77	20	1	190	3.49
	Statement 2		17	69	76	27	1	190	3.39
	Statement 3		43	97	41	7	2	190	3.91
	Statement 4		35	79	58	17	1	190	3.68
	Statement 5		80	76	27	5	2	190	4.19*
	Statement 6		11	76	60	39	4	190	3.27
	Statement 7		24	51	71	32	12	190	3.23
	Statement 8		9	26	68	63	24	190	2.65**
	Statement 9		28	78	58	18	8	190	3.53
	Statement 1	<b>Financial Attitude (X2)</b>	86	73	25	4	2	190	4.25*
	Statement 2		64	74	40	10	2	190	3.99
	Statement 3		65	78	31	14	2	190	4.00
	Statement 4		42	68	60	20	0	190	3.69
	Statement 5		48	79	47	10	6	190	3.81
	Statement 6		43	88	46	12	1	190	3.84
	Statement 7		92	71	23	4	0	190	4.32
	Statement 8		21	45	70	41	13	190	3.11**
	Statement 9		26	79	60	21	4	190	3.54
	Statement 1	<b>Locus of Control (X3)</b>	55	86	40	6	3	190	3.97
	Statement 2		33	78	63	13	3	190	3.66
	Statement 3		65	79	36	7	3	190	4.03
	Statement 4		66	91	31	1	1	190	4.16*
	Statement 5		52	83	43	9	3	190	3.91
	Statement 6		24	49	70	39	8	190	3.22
	Statement 7		13	48	66	44	19	190	2.96**
	Statement 1	<b>Personal Financial</b>	89	69	31	1	0	190	4.29*
	Statement 2		73	85	30	2	0	190	4.21
Statement 3	51		65	60	12	2	190	3.79	

	Statement 4	<b>Management Behavior (Y)</b>	25	58	66	36	5	190	3.33**
	Statement 5		26	79	50	23	12	190	3.44
	Statement 6		79	65	41	5	0	190	4.15
	Statement 7		77	79	29	3	2	190	4.19
	Statement 8		55	83	40	8	4	190	3.93
	Statement 9		58	74	41	10	7	190	3.87
	Statement 10		31	50	70	29	10	190	3.33**
	Statement 11		41	59	65	18	7	190	3.57
Vietnam	Statement 1	<b>Financial Knowledge (X1)</b>	16	72	82	18	2	190	3.43
	Statement 2		13	82	75	19	1	190	3.46
	Statement 3		51	95	37	4	3	190	3.98
	Statement 4		20	81	66	22	1	190	3.51
	Statement 5		80	76	28	5	1	190	4.21*
	Statement 6		9	74	71	34	2	190	3.28
	Statement 7		19	51	72	34	14	190	3.14
	Statement 8		6	27	73	62	22	190	2.65**
	Statement 9		30	88	53	15	4	190	3.66
	Statement 1	<b>Financial Attitude (X2)</b>	87	77	24	2	0	190	4.31*
	Statement 2		53	82	45	9	1	190	3.93
	Statement 3		68	84	31	6	1	190	4.12
	Statement 4		25	73	69	21	2	190	3.52
	Statement 5		38	81	53	10	8	190	3.69
	Statement 6		42	95	43	10	0	190	3.89
	Statement 7		91	72	24	3	0	190	4.32
	Statement 8		17	45	68	45	15	190	3.02**
	Statement 9		25	87	59	16	3	190	3.61
	Statement 1	<b>Locus of Control (X3)</b>	52	89	41	8	0	190	3.97
	Statement 2		23	87	67	11	2	190	3.62
	Statement 3		62	84	36	7	1	190	4.05
	Statement 4		63	98	28	1	0	190	4.17*
	Statement 5		65	87	34	3	1	190	4.12
	Statement 6		20	59	65	40	6	190	3.25
	Statement 7		10	46	63	49	22	190	2.86**
	Statement 1		77	81	32	0	0	190	4.24



	Statement 2	<b>Personal Financial Management Behavior (Y)</b>	60	95	33	2	0	190	4.12
	Statement 3		32	67	75	14	2	190	3.59
	Statement 4		24	50	64	38	14	190	3.17**
	Statement 5		32	90	46	17	5	190	3.67
	Statement 6		72	68	45	5	0	190	4.09
	Statement 7		77	87	24	1	1	190	4.25*
	Statement 8		43	86	46	11	4	190	3.81
	Statement 9		47	78	46	13	6	190	3.77
	Statement 10		31	60	67	23	9	190	3.43
	Statement 11		32	58	70	21	9	190	3.44

Notes: \* = highest; \*\* = lowest

Based the table above, the answers to several statements distributed to 190 respondents both from Indonesia and Vietnam are shown as follows:

The Variable, which is Financial Knowledge (X1) with the highest answer is statement 5, namely, “I realize that setting aside a certain amount of money is important for urgent and future needs”. While the statement with the lowest answer is statement 8, namely, “I clearly understand how to invest my money in stock market”.

The Variable, which is Financial Attitude (X2) with the highest answer is statement 1, namely, “It is important for me to develop a regular pattern of saving and stick to it”. While the statement with the lowest answer is statement 8, namely, “I make a financial plan for the next 1,5 and 10 years”.

The Variable, which is Locus of Control (X3) with the highest answer is statement 4, namely, “I always try to improve my financial situation. While the statement with the lowest answer is statement 7, namely, “Often I am the only one who copes with problems in life without anyone to help”.

The Variable, which is Personal Financial Management Behavior (Y) with the highest answer is statement 1 in Indonesia, namely, “I always compare prices when purchasing a product or service”, in another case, the statement 7 got the highest answer in Vietnam, namely, “I will borrow money only when it is really necessary”.

While the statement with the lowest answer is statement 4 in both countries, namely, “I always keep or save payment receipts to record monthly expenses”.

#### 4.4 Validity and Reliability

##### 4.4.1 Validity Test

Validity Test demonstrates how the data obtained represents the current area of study. Furthermore, validity test simply means measuring what needs to be measured (Taherdoost, 2018). Thus, the table below shows the validity test of all variables including the independent variable and the dependent variable from both countries.

#### 4.8 Summary of Validity Statistics from All Samples

Country	N of items	Pearson Correlation			
		FB	FK	FA	LC
Indonesia	1	0.580**	0.634**	0.686**	0.732**
	2	0.622**	0.628**	0.780**	0.698**
	3	0.724**	0.545**	0.686**	0.760**
	4	0.609**	0.584**	0.630**	0.713**
	5	0.256**	0.632**	0.462**	0.720**
	6	0.597**	0.499**	0.808**	0.493**
	7	0.560**	0.406**	0.702**	0.384**
	8	0.760**	0.479**	0.638**	
	9	0.755**	0.572**	0.663**	
	10	0.597**			
	11	0.772**			
Vietnam	1	0.497*	0.601**	0.580**	0.726**
	2	0.575**	0.597**	0.747**	0.670**
	3	0.693**	0.588**	0.590**	0.727**
	4	0.567**	0.593**	0.589**	0.624**
	5	0.338**	0.535**	0.475**	0.610**
	6	0.560**	0.377**	0.771**	0.433**
	7	0.567**	0.302**	0.658**	0.458**
	8	0.719**	0.466**	0.604**	
	9	0.725**	0.533**	0.650**	
	10	0.664**			
	11	0.728**			

Notes: \*\* and \* are respectively the significant levels at 5% and 1%.

From the table 4.8 above, the validity statistics from all respondents both in Indonesia and Vietnam were declared valid, because all the statement items which include Personal Financial Management Behaviors, Financial Knowledge, Financial Attitude and Locus of Control, were greater than the  $r_{table}$  (0.141).

#### 4.4.2 Reliability Test

The reliability test was carried out to determine the consistency of the respondents' answers obtained by calculating the alpha coefficient with the Cronbach alpha statistical test method using the SPSS program. The alpha value obtained is then compared with the minimum reliability value, which is 0.60 and if the reliability coefficient value is  $>0.60$  then the reliability of these items can be trusted (Ghozali, 2016). The following are the results of the research reliability test conducted on University Students from both IIB Darmajaya (Indonesia) and UEL (Vietnam).

**Table 4.9 Summary of Reliability Statistics from All Samples**

Variables	Cronbach's Alpha	
	Indonesia	Vietnam
FB	0.836	0.824
FK	0.705	0.626
FA	0.843	0.801
LC	0.742	0.686

From the table 4.9 above, the reliability statistics from all respondents both in Indonesia and Vietnam, which include Personal Financial Management Behaviors, Financial Knowledge, Financial Attitude and Locus of Control, were in the moderate reliability. All the statement items of the questionnaire are appropriate. Thus, the statements of the questionnaire can be answered correctly by respondents in both Indonesia and Vietnam.

## 4.5 Classic Assumption Test

### 4.5.1 Normality test

The normality test aims to determine whether the distribution of a research data follows or approaches the normal distribution or not. In this study, the researcher used the Kolmogorov-Smirnov test by looking at the Kolmogorov-Smirnov Z value and the Asymp. Sig. (2-tailed) value. The data can be said to be normal if the value of Kolmogorov-Smirnov Z and Asymp. Sig. (2-tailed) is greater than  $\alpha = 5\%$

**Table 4.10 Summary of Normality Test**

Country		Unstandardized Residual
Indonesia	Kolmogorov-Smirnov Z	0.075
	Asymp. Sig. (2-tailed)	0.115
Vietnam	Kolmogorov-Smirnov Z	0.057
	Asymp. Sig. (2-tailed)	0.200

Based on Table 4.10 above, it shows that the Kolmogorov-Smirnov Z is 0.075 and the Asymp. Sig. (2-tailed) value is 0.115 from Indonesia respondent, which is above the significant value of 5%. While, from Vietnam respondent, the Kolmogorov-Smirnov Z is 0.057 and the Asymp. Sig. (2-tailed) value is 0.200, which is also above the significant value of 5%. Thus, it can be said that the distribution of residual data is normal.

### 4.5.2 Multicollinearity Test

The multicollinearity test aims to determine whether in the regression model there is a correlation between the independent variables. It is also to determine whether or not there is an interference with the data where multicollinearity occurred. Thus, this test is carried out so that the existing data must be free from the multicollinearity interference. This test is also carried out by looking at the VIF (Variance Inflation Factor) value with the provisions that it must below 10. The test results are as follows:

**Table 4.11 Summary of Multicollinearity Test**

Country	Model	Unstandardized		Standardized	Collinearity Statistics	
		Coefficients		Coefficients	Tolerance	VIF
		B	Std. Error	Beta		
<b>Indonesia</b>	Constant	12.858	2.733			
	FK	0.240	0.109	0.171	0.525	1.903
	FA	0.483	0.093	0.419	0.486	2.056
	LC	0.195	0.123	0.125	0.512	1.952
<b>Vietnam</b>	Constant	2.455	2.713			
	FK	0.236	0.093	0.155	0.648	1.544
	FA	0.604	0.077	0.486	0.615	1.626
	LA	0.420	0.098	0.247	0.709	1.410

Based on the table 4.11 above, it shows that there is no occurrence of multicollinearity symptoms on the variables in the study both from Indonesia and Vietnam. Because from the results above, it shows that all the variables from Indonesia, the VIF values are 1.903; 2.056; and 1.952 which those VIF values are <10.00; and the tolerance values are 0.525; 0.486 and 0.512 which those tolerance values are >0.100. While all the variables from Vietnam, the VIF values are 1.544; 1.626; and 1.410 which those VIF values are <10.00; and the tolerance values are 0.648; 0.615; and 0.709 which those tolerance values are >0.100. All the VIF and tolerance value above, it makes the multicollinearity symptoms do not occur.

#### **4.5.3 Heteroscedasticity Test**

The Glejser test is carried out by regressing the independent variable to the absolute value of its residual on the dependent variable (Ghozali, 2013). The criteria used to state whether there is heteroscedasticity or not among the observational data can be explained by using a significance coefficient. The coefficient of significance should be compared with the previously set significance level (5%). If the significance coefficient is greater than the specified significance level, it can be concluded that there is no heteroscedasticity problem (homoscedasticity). If the significance coefficient is smaller than the specified significance level, it can be concluded that there is heteroscedasticity. The following are the heteroscedasticity test from both Indonesia and Vietnam Sample.

**Table 4.12 Summary of Heteroscedasticity Test**

Country	Model	Unstandardized Coefficients		Standardized	Sig.
		B	Std. Error	Coefficients	
Indonesia	Constant	10.426	1.692		
	FK	-0.024	0.068	-0.035	0.720
	FA	-0.073	0.058	-0.126	0.210
	LC	-0.132	0.076	-0.170	0.085
Vietnam	Constant	1.105	1.700		
	FK	0.004	0.058	0.006	0.945
	FA	-0.018	0.048	-0.034	0.713
	LA	0.096	0.061	0.135	0.119

Based on the table 4.12 above, it shows that there is no occurrence of heteroscedasticity symptoms on the variables in the study both from Indonesia and Vietnam. Because from the results above, it shows that all the variables from Indonesia, the Sig. Glejser values are 0.720; 0.210; and 0.085 which those Sig. Glejser values are  $>0.05$ . While all the variables from Vietnam, the Sig. Glejser values are 0.945; 0.713 and 0.119 which those Sig. Glejser values are also  $>0.05$ . Then, it can be concluded that all the entire value of Sig. Glejser are  $>0.05$  which make the heteroscedasticity symptoms do not occur.

#### **4.6 Multiple Linear Regression Test**

Multiple linear regression analysis aims to determine the factors that can influence the personal financial management behavior in university students especially from IIB Darmajaya Indonesia and UEL Vietnam. The dependent variable is personal financial management behavior while the independent variables are financial knowledge, financial attitude and locus of control variables. This analysis is also to determine the direction of the relationship between the independent variable with the dependent variable whether each independent variable is positively or negatively related and to predict the value of the dependent variable if the value of the independent variable has increased or decreased. Following are the results of multiple linear regression tests with respondent data obtained from the country of Indonesia:

**Table 4.13 Summary of Multiple Linear Regression Test**

Country	Model	Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
<b>Indonesia</b>	Constant	12.858	2.733		4.705	
	FK	0.240	0.109	0.171	2.198	0.029*
	FA	0.483	0.093	0.419	5.177	0.000***
	LC	0.195	0.123	0.125	1.584	0.115
<b>Vietnam</b>	Constant	2.455	2.713		0.905	
	FK	0.236	0.093	0.155	2.555	0.011**
	FA	0.604	0.077	0.486	7.826	0.000***
	LA	0.420	0.098	0.247	4.279	0.000***

Notes :  $P < 0.05$ ; \* =  $P \leq 0.05$ ; \*\* =  $P \leq 0.01$ ; \*\*\* =  $P \leq 0.001$

Based on the table 4.13 above, it shows that only two variables in Indonesia, which the significant value is  $< 0.05$ . It indicates that the independent variable influences the dependent variable. So it can be concluded that only Financial Knowledge and Financial Attitude have an influence with each sig. value of 0.029 and 0.000.

While in Vietnam, all the independent variables influence the dependent variable with a probability value of 5%, which it can be concluded that Financial Knowledge, Financial Attitude and Locus of Control have an influence with each sig. value of 0.011; 0.000; and 0.000.

#### 4.7 Hypothesis Test Results

The t-test is a statistical test to determine whether the independent variable significantly influences the dependent variable or not. The t-test values are also used to answer the hypotheses that have been built in the previous chapter. Furthermore, based on the information obtained from table 4.13, the following are the hypotheses received based on the results of multiple linear regressions that were tested using samples from Indonesia and Vietnam as follows:

**Table 4.14 Summary of Hypothesis Description**

	<b>Hypothesis</b>	<b>Indonesia</b>	<b>Vietnam</b>
<b>H1</b>	There is a positive relationship between financial knowledge and personal financial management behavior.	<b>Accepted</b>	<b>Accepted</b>
<b>H2</b>	There is a positive relationship between financial attitude and personal financial management behavior.	<b>Accepted</b>	<b>Accepted</b>
<b>H3</b>	There is a positive relationship between locus of control and personal financial management behavior.	Not Accepted	<b>Accepted</b>

Based on the table 4.14 above, it shows that not all the hypotheses that are built can be accepted. There are only two accepted hypotheses in Indonesia, which is H1 with variable Financial Knowledge that has a positive relationship to the Personal Financial Management Behaviors and the acceptance of H2 with variable Financial Attitude that also has a positive relationship to the Personal Financial Management Behaviors. While in Vietnam, all the hypotheses were accepted. The hypothesis received in H1 with Financial Knowledge that has a positive relationship to the Personal Financial Management Behaviors, and H2 with Financial Attitude which has a positive relationship to the Personal Financial Management Behaviors. As well as H3 with Locus of Control which also has a positive relationship to the Personal Financial Management Behaviors.