

The Effect Of Economic Learning Outcomes And Economic Expectations On The Economic Independence Of Generation Z Individuals Through Moderation Of Financial Intelligence (Study On Economic Education Students At Makassar State University)

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ABSTRACT

Technological advances and the rapid flow of information through the internet have affected the lives of generation Z, one of which is the change in consumptive attitudes that are increasing. However, some of Generation Z still have a very low awareness of digital literacy. The results of economic learning are seen to be able to determine the economic expectations of generation Z and be able to foster financial intelligence in economic independence. This study aims to investigate the effect of economic learning outcomes and economic expectations on Economic Independence in generation Z, with financial intelligence as a moderating factor. This type of research is quantitative research with a descriptive approach and uses a questionnaire as a data source. The sampling method used was Proportionate Stratified Random Sampling, and the number of samples obtained was 77 students at Makassar State University. The data analysis used in this study is the PLS method through SmartPLS software and inferential statistical analysis using the warpPLS version 4.0 program. The results showed that economic expectations and financial intelligence have a positive and significant influence on Economic Independence, while economic learning outcomes do not have a significant effect. The findings provide important insights into the factors that influence generation Z's economic independence and the implications for the development of economic literacy

INTRODUCTION

Humans are one of the most important productive factors that contribute to economic growth (Hamdan et al., 2020). Indonesia is currently experiencing a demographic bonus which is expected to end in 2045. According to Indonesia's Central Bureau of Statistics, it is projected that Indonesia's productive population (aged 15-64 years) will be 179 million people in 2020 and the millennial generation (aged 21-36 years) contributes around 63.5 million people. This makes the millennial generation a significant engine of Indonesia's economic growth.

Based on data from the Indonesia Millennial Report put forward by OJK in 2019, it shows that 51% of Generation Z's money is spent on consumptive purposes. As for saving funds, it shows as much as 10.7% and the last only 2% is used to invest. From this, it can be seen that the financial behavior of the younger generation is more for consumptive activities, rather than for saving and investing. The modernity of technology has a significant impact on the sustainability of people's lives.

Keywords: Economic Learning Outcomes, Economic Expectations, Individual Economic Independence, Financial Intelligence, Generation Z



conveniences caused by the growing technology at this time have an impact on people's behavior.

Just like what was found in the national report, young people in Makassar City are also more likely to spend their money on consumptive purposes such as food, clothing, entertainment, and daily lifestyle. This could be due to the pressure from the consumerist culture and the drive to spend their money on consumptive purposes such as food, clothing, entertainment and daily lifestyle.

One solution to overcome the difficulty of managing finances is economic learning. With the results of economic learning, it is considered capable of determining the economic expectations of generation Z. Expectation is a great hope given to something that is considered to have a good or better impact. The word expectation itself is taken from English, namely expectation, where the basic word is expect with the meaning of guessing, expecting, or expecting. So, the definition of expectation etymologically is a strong belief that something will be able to happen or become a problem in the future. Economic expectation is a prediction or expectation related to the development of the economy in the coming period of time (Agneman, 2022).

The following is an overview of the initial data framework taken from a number of respondents in this pre-research. The focus of this research is on the categories of education, knowledge, and living needs in the context of economic education at Makassar State University. This data was collected through the participation of 35 respondents from the academic environment.

No.	Education Category	Most	Less
1.	Formal economic education	94,3 %	5,7 %
2.	Non-formal economic education	51,4 %	48,6 %
3.	Informal economic education	65,7 %	34,4 %

Table 1. Education Categories

Source: Primary Data (2023)

Based on Table 1 of the initial data taken from 35 respondents in this study, it can be seen that the majority of respondents have received formal economic education (94,3%), while a small proportion have not received formal economic education (5,7%). About half of the total respondents (51,4%) had experience of non-formal economic education, while the rest (48,6%) had not had such experience. Regarding informal economic education, most respondents (65,7%) had experienced this method of economic education, while the number who had not experienced informal economic education was around 34,4%.

These findings provide an initial understanding of the economic education background of generation Z in the context of research on the influence of economic learning outcomes and economic expectations on economic independence, moderated by financial intelligence.



	Table 2. Knowledge Category					
No.	Knowledge Category	Most	Less			
1.	Knowledge economic	71,4 %	28,6 %			
	expectation					
2.	Economic independence	80%	20%			
	knowledge					
3.	Financial knowledge	100%	-			
4.	Moderating knowledge	62,9%	37,1%			
	of financial intelligence					
5.	Economic seminar	57,1%	42,9%			
6.	Expenditure limitation	68,6%	31,4%			
7.	Savings	22,9%	77,1%			
8.	Setting aside money	28,6%	71,4%			

Source: Primary Data (2023)

Based on table 2, preliminary data from 35 respondents regarding knowledge in the education category shows that the majority of respondents (71,4%) already know about Economic Expectations, and 80% of respondents know about Economic Independence. All respondents (100%) have an understanding of Finance. More than half of the respondents (62,9%) have understood Financial Intelligence Moderation. 57,1% of respondents actively participated in seminars or webinars on the economy. As many as 68,6% of respondents have nominal spending limits in transactions, and 22,9% of respondents have savings. In addition, 22,6% of respondents only set aside money. These results provide an initial picture of the respondents' knowledge in terms of economic expectations, economic independence, financial intelligence, and economy-related activities.

No.	Life Needs Category	Most	Less
1.	Prioritizing primary needs over secondary	40%	60%
2.	Occupation	14,3%	85,7%
3.	Fulfillment of life needs using personal money	22,9%	77,1%
4.	Fulfillment of life needs using parents/family money	88,6%	11,4%
5.	Food needs buy at stalls	62,9%	37,1%
6.	Making homemade food	22,9%	77,1%
7.	Buying discounted items	77,1%	22,9%
8.	Online shopping	60%	40%

Table	3. Life Needs Category
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Source: Primary Data (2023)

Based on Table 3 above, it can be stated that based on the preliminary data that has been presented, the majority of respondents, around 60%, tend to prioritize secondary needs over primary needs. In addition, most respondents (88,6%) still rely on financial support from their families. In terms of shopping habits, many of them choose to buy food outside (77,1%) and shop for discounted items (77,1%). In terms of transactions, around 60% of respondents frequently use e-commerce. These data provide an early insight into the financial decisions and shopping behavior of



Generation Z in terms of prioritized needs, sources of funds, shopping patterns, and use of e-commerce platforms.

These finding provide a preliminary picture of the respondents' level of knowledge related to economic expectations, economic independence, financial intelligence, and activities related to the economy. Through the moderation approach of financial intelligence, this preliminary data can help unravel deeper linkages in the economic education environment at Makassar State University.

Researchers are interested in studying this phenomenon because they see a gap in some of the findings of previous research. First, many studies have examined the same variables separately but tend to focus on a single aspect, such as the effect of economic education on economic independence, without considering other variables that support the significance of the research. Second, there is limited research that uses the role of financial intelligence as a moderator. This is a major concern in the literature, as financial intelligence plays an important role in influencing individuals' ability to apply economic knowledge in their financial decision-making.

Therefore, this study will complement the literature by combining the variables of economic education, economic expectations, economic independence, and financial intelligence in one holistic research framework, specifically in the context of generation Z. This research aims to provide deeper insights into how these factors interact and impact the financial decision-making of generation Z individuals. This research includes several hypotheses, namely:

Hypothesis 1: There is a positive influence between economic learning outcomes on the economic independence of generation Z individuals.

Hypothesis 2: There is an effect of economic expectations on the economic independence of generation Z individuals.

Hypothesis 3: Financial intelligence moderates the relationship between economic learning outcomes and generation Z economic independence.

Hypothesis 4: Financial intelligence moderates the relationship between economic expectations and generation Z economic independence.

Hypothesis 5: There is an effect of financial intelligence on the economic independence of generation Z.

METHODS

This study uses quantitative research with a descriptive approach. The population in this study were Economic Education students at Makassar State University, totaling 343 active students. According to Arikunto in (Hatmoko, 2015) explains that if the subject is less than 100, it is better to take all so that the research is population research. But if the number of subjects is large (more than 100 people), it can be taken between 10-15% or 20-25% or more.

Therefore, the determination of the sample in this study which will represent the entire population is used the Slovin formula, namely the following formula:

$$n = \frac{N}{(N.e^2 + 1)}$$
$$n = \frac{343}{(343.0,1^2 + 1)}$$



 $n = 77,42 \rightarrow 77$

Description:

n = Number of samples

N = Total population

e = The desired critical value (limit of accuracy). The critical value taken is 10%

By using this formula from the data on the total population of 343 students, a sample size of 77 students was obtained which became the sample in this study.

The sampling technique used in this study is Probability Sampling, which is sampling that provides equal opportunities for each element or member of the population to be selected as a sample (Sudaryono, 2017).

The following is the sampling table used in this study.

Force	Total Population	Sample Calculation	Sample
2019	58	(58/343) x 77 = 13,02	13
2020	91	(91/343) x 77 = 20,42	20
2021	92	(92/343) x 77 = 20,65	21
2022	102	$(102/343) \times 77 = 22,89$	23
Total	343		77

 Table 4 . Sampling Method

Source: Secondary Data (2023)

From the calculation using the formula above, the sample in this study was 77 students.

Variables	Operational Definition		Indicator
Economic Learning	Economic Learning Outcomes measure the extent to which a	1.	Demonstrate a good understanding of basic economic
Outcomes	person has successfully achieved		concepts.
(X1)	understanding and skills in	2.	Able to apply economic principles
Benjamin S.	economics, after undergoing a		in everyday life.
Bloom	formal education process.	3.	Have adequate knowledge of
			global economic issues
Economic	Economic Expectations measure	1.	Expect an increase in personal
Expectations	a person's expectations or beliefs		income within a certain period of
(X2)	about their economic capabilities		time.
John Maynard	and financial future, such as	2.	Plan to invest in financial
Keynes	expectations to get a good job,		instruments such as stocks or
	high income, and so on.		bonds.
		3.	Have specific savings targets for
			future financial goals.
Financial	Financial Intelligence measures a	1.	Understand the basic concepts of
Intelligence	person's level of understanding		financial management, such as
Moderation	of financial concepts and		income and expenses.
(Z)	management, including	2.	Know the risks and potential
Robert Kiyosaki	investment, debt management,		returns of different types of
	and financial planning.		investments
		3.	Able to budget and follow a
			spending plan.

 Table 5. Operational Variables



Variables	Operational Definition		Indicator
IndividualEcono	Individual Independence	1.	Able to manage personal finances
mic	measures the extent to which a		without relying on the help of
Independence	person has the ability to manage		others.
(Y)	finances and fulfill their needs	2.	Commit to continuous learning
David Ricardo,	independently.		about financial management and
Thomas Malthus,			take steps accordingly.
and JB Say		3.	Have a structured short-term and
			long-term financial plan.

Source: Researcher Analysis Results (2023)

The data analysis used in this study used the Partial Least Square (PLS) method using SmartPLS software and inferential statistical analysis (PLS) using the warpPLS version 4.0 program.

RESULTS AND DISCUSSION

Respondent Characteristics

In this study, the distribution of questionnaires was carried out online (Google Form) and offline which was distributed through groups and each class. The characteristics of respondents in this study include age, gender, class, occupation, and GPA. The total number of samples in this study amounted to 77 respondents. The characteristics of respondents in this study are as follows:

Gender of Respondents

Table 6. Respondent Characteristics Based On Gender

No	Gender	Frequency	Percentage %
1	Male	18	23,38%
2	Female	59	76,62%
	Total	77	100%

Source: Results of research data processing (2023)

Based on this data, it is known that 18 men with a percentage of 23.38% became respondents in this study and 59 women with a percentage of 76.62% as the most respondents in this study. This shows that there are more female students than male students with a difference of 41 people.

Respondent Age

Table 7. Respondent Characteristics Based on Respondent Age

No.	Age	Frequency	Percentage %
1	23 Years	2	15,58%
2	22 Years	22	32,47%
3	21 Years	25	25,97%
4	20 Years	20	20,78%
5	19 Years	16	2,60%
6	18 Years	2	2,60%
	Total	77	100%

Source: Results of research data processing (2023)

Based on table 7 regarding the characteristics of respondents based on age, it can be seen that respondents in this study were dominated by 21 years of age with a percentage of 32.47%. This shows that the average respondent is 21 years old who is generally in semester 7.



Force

Table 8. Respondent Characteristic Based on Respondent Force

No	Force	Frequency	Persentage %
1	2022	23	29,87%
2	2021	21	27,27%
3	2020	20	25,97%
4	2019	13	16,88%
	Total	77	100%

Source: Results of research data processing (2023)

Based on this data, it is known that students who are in the 2022 batch or are in semester 3 are the most respondents with a percentage of 29.87%. Meanwhile, students who are in the 2019 batch are the least respondents, only 13 people. **Occupation**

Table 9. Respondent Characteristic Based on Occupation

No	Occupation	Frequency	Percentage %
1	Yes	10	87,01%
2	No	67	12,99%
	Total	77	100%

Source: Results of research data processing (2023)

Based on this data, it is known that respondents in this study were dominated by respondents who did not have a job, namely 67 respondents with a percentage of 87.01%. This shows that generally students who are respondents only focus on studying, without having a job.

Respondent GPA

Table 10. Respondent Characteristic Based on GPA

No	GPA	Frequency	Percentage%
1	>3,5	77	90,91%
2	<3,5	7	9,09%
	Total	77	100%

Source: Results of research data processing (2023)

Based on this data, it is known that almost all respondents have intelligence in terms of economic education, as evidenced by the GPA obtained greater than 3,5 with a percentage of 90,91%. This shows that students are able to understand the economic learning material that has been taught during lectures.

Data Analysis

Based on the data obtained by researchers and has been processed using SmartPLS version 4.0, the measurement model can be seen in Figure 1.



Figure 1. Measurement Model

Source: Results of research data processing (2023)

Outer model analysis is carried out to assess the validity and reliability of each indicator that forms a latent construct.

Convergent Validity

Convergent validity testing test the correlation between items/ indicators to measure constructs. The convergent validity value can be seen through the average variance extracted (AVE) if the AVE value> 0.5 means that it meets the convergent validity test. The AVE value in this study can be seen in table 11.

Variables	Average variance extracted (AVE)	Desc
Economic Learning Outcomes (X1)	0.687	Valid
Economic Expectation (X2)	0.738	Valid
Financial Intelligence (Z)	0.634	Valid
Economic Independence (Y)	0.710	Valid

Table 11. Average Variance Extracted (AVE)

Source: Results of research data processing (2023)

Based on table 11, it can be seen that the AVE on all indicators is more than 0.5 so it can be stated that each variable used in this study to determine the effect of Economic Learning Outcomes and Economic Expectations on the Economic Independence of Generation Z Individuals through Moderation of Financial Intelligence is valid. While the outer loading value or loading factor in this study can be seen in table 12.

Indicator	Outer loadings	Description
X1.1 <- X1	0.781	Valid
X1.2 <- X1	0.891	Valid
X1.3 <- X1	0.811	Valid
X2.1 <- X2	0.875	Valid

Table 12. Outer Loadings



Indicator	Outer loadings	Description
X2.2 <- X2	0.888	Valid
X2.3 <- X2	0.813	Valid
Y1 <- Y	0.874	Valid
Y2 <- Y	0.782	Valid
Y3 <- Y	0.869	Valid
Z1 <- Z	0.726	Valid
Z2 <- Z	0.798	Valid
Z3 <- Z	0.860	Valid
Z x X1 -> Z x X1	1.000	Valid
$Z \times X2 > Z \times X2$	1.000	Valid

Source: Results of research data processing (2023)

Based on table 12, it can be seen that the results of the outer loadings analysis show a strong level of validity for the indicators you used in the study. Indicator X1, which represents Economic Learning Outcomes, has significant outer loadings, as seen in the value of 0.891 for X1.2, indicating that this indicator validly reflects the Economic Learning Outcomes construct. Likewise, the X2 indicators representing Economic Expectations (i.e., X2.1, X2.2, and X2.3) have high outer loadings, indicating a strong association with the Economic Expectations construct.

In addition, the moderating variable Z, which reflects Financial Intelligence, also shows good validity with significant outer loadings, such as the value of 0.860 for Z3. This suggests that Financial Intelligence is effective in moderating the relationship between Economic Learning Outcomes, Economic Expectations, and Economic Independence of Generation Z Individuals.

Discriminant Validity

Discriminant validity is tested to measure items/indicators of two constructs that do not have a high correlation. Measurement of discriminant validity is done by calculating the square root of AVE where the value obtained in a variable is greater than the correlation value between constructs, meaning that respondents have no difficulty in answering the statements presented in the questionnaire. The results of the calculation of discriminant validity can be seen in table 13.

Variabel	(X2)	(X1)	(Z)	(Y)
Economic Expectation (X2)	0.859			
Economic Learning Outcomes (X1)	0.712	0.829		
Financial Intelligence (Z)	0.666	0.608	0.797	
Economic Independence (Y)	0.690	0.627	0.765	0.843

Table	13.	Fornel	[1-]	Larc	ker
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Source: Results of research data processing (2023)

Based on table 13, it can be seen that the Fornell-Larcker criterion, which is a method of assessing construct validity in factor analysis, shows success in measuring the construct variables used in this study. The results of the correlation value between the variables of Economic Expectations (X2), Economic Learning Outcomes (X1), Financial Intelligence (Z), and Economic Independence (Y) show that each construct variable has a higher correlation with itself (diagonal value). Compared to its correlation with other construction variables. This means that variable X2 is more



attached to itself than variables X1, Z, or Y, as well as variables X1, Z, and Y.

Thus, the results of the Fornell-Larcker criterion analysis confirm that the indicators used in this study have good discriminant validity, strengthening confidence in the measurement of construct variables in the context of this study.

Apart from using the Fornell-Larcker criterion, assessment of discriminant validity can also be done through the cross loadings method. The cross loadings table can be found in Table 14 Cross loadings analysis allows researchers to see the extent to which indicators of a particular con

Table 14. Closs Loadings in Research						
Indicator	(X1)	(X2)	(Z)	(Y)	(Z) x (X1)	
X1.1	0.781	0.616	0.433	0.421	-0.634	
X1.2	0.891	0.555	0.508	0.59	-0.539	
X1.3	0.811	0.600	0.567	0.543	-0.415	
X2.1	0.647	0.875	0.517	0.550	-0.481	
X2.2	0.62	0.888	0.609	0.636	-0.392	
X2.3	0.551	0.813	0.593	0.593	-0.403	
Y1	0.600	0.608	0.607	0.874	-0.378	
Y2	0.409	0.542	0.638	0.782	-0.347	
Y3	0.584	0.600	0.687	0.869	-0.323	
Z1	0.502	0.581	0.726	0.536	-0.579	
Z2	0.339	0.460	0.798	0.569	-0.081	
Z3	0.599	0.564	0.860	0.706	-0.512	
Z x X2	-0.627	-0.483	-0.479	-0.419	0.964	
Z x X1	-0.625	-0.493	-0.495	-0.413	1.000	

Table 14. Cross Loadings in Research

Source: Results of research data processing (2023)

Based on table 14 related to the results of measuring cross loading on the indicators used in this study, it can be seen that all indicators have a value above 0.7 so that they are said to be valid. The high cross loading value in this study indicates that each indicator used has met the requirements to be a measurement in testing the relationship between variables in this study.

Composite Reliability

Calculations on Composite reliability are done by looking at Cronbach's alpha and composite reliability. In testing Cronbach's alpha will be considered reliable if it has a value> 0.7. Meanwhile, the composite reliability will be considered reliable if it has a value> 0.6. The Cronbach alpha and composite reliability values obtained from PLS data processing can be seen in table 15.

Variables	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Desc
Economic Learning Outcomes (X1)	0.773	0.793	0.868	Reliable
Economic Expectation (X2)	0.822	0.826	0.894	Reliable
Financial Intelligence (Z)	0.711	0.731	0.838	Reliable
Economic Independence	0.795	0.799	0.880	Reliable

Table 15. Composite Reliability

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Variables	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Desc
(Y)				

Source: Results of research data processing (2023)

Based on table 15, it can be seen that the Cronbach's alpha value for each variable is more than 0.7, which means that all variables can be considered reliable. While the composite reliability value on each variable is also greater than the minimum limit of 0.7. So when viewed from the Cronbach's alpha and composite reliability values, all variables used in this study are reliable. High reliability in this study indicates that each variable has the accuracy and accuracy to measure the relationship to be tested in this study.

Measurement Model Analysis (Inner Model)

The inner model in partial least square is carried out to test the relationship between latent variables by looking at the amount of variance that can be explained to determine the significance of the P value.

R-Square

R-square is done to explain the effect between exogenous lat. variables on endogenous latent variables. The calculation of R-square in this study can be seen in table 16.

Table 16. R-square

Variables	R-square
Financial Intelligence (Z)	0.494
Economic Independence (Y)	0.660

Source: Results of research data processing (2023)

The results of data analysis show that the financial intelligence variable (Z) has a significant role as a moderating variable in the context of the economic independence of Generation Z individuals. With an R-square value of 0.494 or 49.2% which means moderate, financial intelligence can strengthen or weaken the relationship between economic learning outcomes, economic expectations, and economic independence (Y).

The R-Square value of 0.660 indicates that about 62% of the variability in the economic independence of Generation Z individuals can be explained by the economic learning outcomes, economic expectations, and financial intelligence measured in this study.

Q- Square

Q-square is used as an indicator to assess the extent of the observed values generated by the research model. The Q-square value ranges from 0 to 1, and is used as a criterion for measuring the strength of the model. Relevant values for assessing model strength based on Q-square are as follows: 0.35 (strong model); 0.15 (moderate model); and 0.02 (weak model).

Table 17. <i>Q- Square</i>		
Variables	Q ² predict	
Financial Intelligence (Z)	0.469	
Economic Independence	0.407	
I		



(Y)

Source: Results of research data processing (2023)

Based on table 17, data analysis shows that the financial intelligence variable (Z) has a Q2 predict value of 0.469, while the economic independence variable (Y) has a Q2 predict value of 0.407. From these results, it can be concluded that the research model has a significant level of predictive relevance. In this context, the Q-square value of 0.474 exceeds the threshold of 0.35, confirming that the model has a strong predictive power on the economic independence of Generation Z individuals. This finding indicates that the developed model is able to effectively predict and explain variations in economic self-reliance, making a significant contribution to the understanding of the factors that influence economic self-reliance in the context of this study.

Goodness of Fit Index (GoF)

Table 18. Goodness of Fit Index Value					
Average AVE	Mean R Square	GoF Index	Desc		
0.738 + 0.687 + 0.634 + 0.710 = 2.769/4 = 0.692	0.660 + 0.494 = 1.154/2 = 0.577	$\sqrt{0.692 + 0.577} = \sqrt{1.269} = 1.126$	Large		

Source: Results of research data processing (2023)

Based on table 18 related to GoF, the values found in this study indicate a significant level of model fit. The mean AVE of 0.692, mean R Square of 0.577, and GoF Index of 1.126 place this model in the "Large" category according to the criteria used. These findings indicate that the variables included in the model are able to well explain variations in Generation Z individuals' economic independence, validating the relevance and accuracy of the model.

Hypothesis Testing

The results of hypothesis testing in the study were carried out using PVLS 3.0 through Bootstrapping. The results of hypothesis testing can be seen in Figure 2.





Figure 2. Hypothesis Testing Results Source: Results of research data processing (2023)

Hypothesis Testing of Direct Influence

Based on the data obtained by researchers and has been processed using SmartPLS version 4.0, the results of the hypothesis testing analysis in this study can be seen in table 19.

Variables	Original Sample (O)	T Statistics	P-values	Desc
X1 > Y	0.184	1.441	0.150	No Sig
X2 > Y	0.251	2.003	0.045	Sig
Z > Y	0.530	4.870	0.000	Sig

Table 19. Path Coefficients

Source: Results of research data processing (2023)

Based on the results of hypothesis testing in table 19, the relationship between variables in this study is as follows:

Hypothesis 1 (H1): The Effect of Economic Learning Outcomes (X1) on Individual Economic Independence (Y). There is an insignificant influence between economic learning outcomes (X1) on individual economic independence (Y) in Generation Z. In table 19, it can be seen that the path coefficient value in this hypothesis is 0.184 with a P-value of 0.150> 0.05. Therefore, H1 is rejected and H0 is accepted. This means that the economic learning outcomes obtained by generation Z are not maximized so that they do not have a maximum effect on their economic independence. This is because the results of economic learning or the results of financial learning obtained in college mostly refer to theory only and are lacking in practice in everyday life. So that the results of economic learning obtained by generation Z are more on the cognitive aspect (knowledge), and less on the affective and psychomotor aspects.

Hypothesis 2 (H2): The Effect of Economic Expectations (X2) on Individual Economic



Independence (*Y*). There is a positive and significant influence between economic expectations (X2) on individual economic independence (Y) in Generation Z. In table 19, it can be seen that the path coefficient value in this hypothesis is 0.251 with a P-value of 0.045 < 0.05. Therefore, H2 is accepted and H0 is rejected. This means that through economic expectations or expectations possessed by generation Z are able to have a positive effect on their economic independence. So that the higher and more positive economic expectations will make an increase in the economic independence of generation Z, otherwise if the lower and negative economic expectations of generation Z, there will be a decrease in their economic independence.

Hypothesis 5 (H5): The Effect of Financial Intelligence on Individual Economic Independence (Y). There is a positive and significant influence between financial intelligence (Z) on individual economic independence (Y) in Generazi Z. In table 19, it can be seen that the path coefficient value in this hypothesis is 0.530 with a P-value of 0.000 <0.05. Therefore, H5 is accepted and H0 is rejected. This means that Generation Z's financial intelligence is able to have a positive and significant effect on their economic independence. So that the higher the level of financial intelligence, it will increase the economic independence of generation Z and vice versa.

Moderation Hypothesis testing

Moderation hypothesis testing aims to test the effect of moderating variables on the effect of exogenous variables directly on endogenous variables. The test criteria state that if the T statistic \geq T table (1.96 with an alpha of 5%) or p value \leq the level of significance (alpha 5%), it is stated that the moderating variable is able to moderate the exogenous variable on the endogenous variable. The following are the results of the evaluation of the moderating relationship which can be seen in table 20.

Variables	Path Coefficient	P values	Desc
Z > X1 > Y	0.147	0.055	No Effect
Z > X2 > Y	0.254	0.001	Influential

Table 20. Moderation Relationship I	Evaluation Results
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Source: Results of research data processing (2023)

Based on the results of testing the moderation hypothesis in table 20, the relationship between variables in this study is as follows:

Hypothesis 3 (H3): The Effect of Economic Learning Outcomes (X1) on Individual Economic Independence (Y) Through Financial Intelligence (Z) as a Moderating Variable. The moderating variable of financial intelligence (Z) has no significant effect in moderating the relationship between economic learning outcomes (X1) on economic independence (Y). In table 20 it can be seen that the path coefficient value in this hypothesis is 0.147 with a P-value of 0.055> 0.05. Therefore, H3 is rejected and H0 is accepted. This means that generation Z's financial intelligence cannot moderate the relationship between economic learning outcomes and generation Z's economic independence. This means that generation Z's financial intelligence basically does not have a maximum effect on economic learning outcomes so that it cannot significantly influence them. This can be due to the financial intelligence of generation Z cannot strengthen the results of economic learning which is basically only more on the cognitive aspect (knowledge), and less on the affective and psychomotor aspects so that it has less effect on the behavior of generation Z in creating economic



independence. *Hypothesis* 4 (H4): *The Effect of Economic Expectations* (X1) *on Individual Economic Independence* (Y) *Through Financial Intelligence* (Z) *as a Moderating Variable*. The moderating variable of financial intelligence (Z) has a significant effect in moderating the relationship between economic expectations (X2) on economic independence (Y). In table 20, it can be seen that the path coefficient value in this hypothesis is 0.254 with a P-value of 0.001 <0.05. Therefore, H4 is accepted and H0 is rejected. This means that through financial intelligence owned by generations, it is able to moderate the relationship between economic expectations and economic independence. This means that generation Z can utilize their financial intelligence or financial literacy to seek economic or financial information related to rational expectations in the future so as to create economic independence or financial well-being.

The Effect of Economic Learning Outcomes (X1) on Individual Economic Independence (Y)

Based on the results of hypothesis testing, it shows that there is an insignificant influence between the results of economic learning (X1) on the economic independence of individuals (Y) in Generation Z. This means that the results of economic learning obtained by generation Z have not been maximized so that it does not have the maximum effect on their economic independence. The results of this study are in line with the results of research by Mulyadi & Riyadi (2023) which states that there is no significant correlation between the results of learning financial management and the ability to manage personal finances of economic education students.

The findings of this study indicate that the knowledge gained by Generation Z from economic learning is not enough to contribute to their economic independence. This is due to the results of economic learning or the results of financial learning obtained in college mostly referring to theory only and less in practice in everyday life. So that the results of economic learning obtained by Generation Z are more on the cognitive aspect (knowledge), and less on the affective and psychomotor aspects. This is then supported by the theory of Benjamin S. Bloom's theory in (Mahmudi et al., 2022) that learning outcomes refer to three domains, namely cognitive, affective, and psychomotor. Therefore, it is important for Generation Z to obtain these three domains in economic learning outcomes in order to contribute to their economic independence or financial well-being.

According to Haryono et al (2022), economic learning outcomes are behaviors that reflect students' knowledge, attitudes, and tendencies in conducting economic activities. This follows the general learning outcomes that include students' knowledge, attitudes, and skills. Economic learning outcomes are not only on students' knowledge of economic material which includes basic macroeconomics, microeconomics, and accounting and this knowledge is expected to underlie the mindset of students in carrying out daily economic activities.

The findings of this study imply that the effectiveness of economic learning to generation Z is needed, for example by providing economic learning materials that are close to everyday life and the existence of economic practices or financial management practices for generation Z so that the learning outcomes obtained can be



meaningful and can be implemented in everyday life in order to create economic independence for generation Z.

The Effect of Economic Expectations (X2) on Individual Economic Independence (Y)

Based on the results of hypothesis testing, it shows that there is a positive and significant influence between economic expectations (X2) on individual economic independence (Y) in Generation Z. This means that through economic expectations or expectations possessed by generation Z, they are able to have a positive effect on their economic independence. This means that through economic expectations or expectations possessed by generation Z, they are able to have a positive effect on their economic independence. So that the higher and more positive economic expectations will make an increase in the economic independence of generation Z, on the contrary, if the lower and more negative the economic expectations of generation Z, there will be a decrease in their economic independence. The results of this study are in line with the results of research by Roth & Wohlfart (2019) which states that expectations of future income affect individual consumption and financial behavior.

The findings of this study indicate that Generation Z's economic expectations contribute to their economic independence or financial well-being. This is because generation Z has a picture or information about the future economic situation so that they can make rational decisions for their economic independence. This statement is supported by the theory of rational expectations put forward by John F. Muth (1961) which states that a person's decision will be influenced by their expectations or projections regarding what will happen in the future. If economic conditions in the future are expected to improve, then economic actors will also adjust their decisions to these expectations and vice versa.

With expectations about the economy, individuals will anticipate a decline in future income by saving more to smooth consumption. Individuals' consumption decisions may change when they believe that in the future there will be changes in fiscal policy from the government, especially with regard to taxes and subsidies. And individual economic decision-making can change when they believe that when the economy improves, their income will also continue to improve so they will increase current consumption (Baker et al., 2020).

The findings of this study imply that Generation Z needs to continue to have rational expectations about their economy or finances. This rational expectation can be done by considering current economic information as well as previous economic information.

The Effect of Economic Learning Outcomes (X1) on Individual Economic Independence (Y) Through Financial Intelligence (Z) As a Moderating Variable

Based on the results of hypothesis testing, it shows that the moderating variable of financial intelligence (Z) has no significant effect in moderating the relationship between economic learning outcomes (X1) on economic independence (Y). This means that generation Z's financial intelligence cannot moderate the relationship between economic learning outcomes and generation Z's economic independence. The results of this study are in line with the results of Maulita & Mersa's (2017) research which states that financial literacy or financial intelligence possessed by students cannot



strengthen the relationship or does not affect the relationship between learning in college and student personal financial management.

The findings of this study indicate that the financial intelligence possessed by generation Z cannot strengthen the relationship between economic learning outcomes and economic independence. This means that the financial intelligence of generation Z basically does not have a maximum effect on economic learning outcomes so that it cannot significantly influence them. This can be caused by the financial intelligence possessed by generation Z cannot strengthen the results of economic learning which is basically only more on the cognitive aspect (knowledge), and less on the affective and psychomotor aspects so that it has less effect on the behavior of generation Z in creating economic independence. This statement is supported by the theory of Robert M. Gagne in (Hutabarat et al., 2023) which reveals that learning is a change in behavior as a result of the learning process.

Financial intelligence is an important aspect that every individual must have to be able to manage their personal finances correctly and appropriately. With proper management, every individual can get the maximum benefit from the money they have. Knowledge, attitude, and implementation in managing finances need to be owned by every individual to obtain financial well-being. Individuals who have good financial literacy will be able to see money with a different perspective and will have control over their financial condition. The individual will understand how to manage income and expenses to ensure their future survival (Kartini & Mashudi, 2022).

The findings of this study imply that there is a need for an effective economic learning process for generations through integrating material with daily life and increasing the practice of economic learning. In addition, Generation Z also needs to improve their financial intelligence through participation in economic seminars or learning independently from the internet in order to create economic independence or financial well-being.

The Effect of Economic Expectations (X1) on Individual Economic Independence (Y) Through Financial Intelligence (Z) As a Moderating Variable

Based on the results of hypothesis testing, it shows that the moderating variable of financial intelligence (Z) has a significant effect in moderating the relationship between economic expectations (X2) on economic independence (Y). This means that through financial intelligence the generation is able to moderate the relationship between economic expectations and economic independence. The results of this study are in line with the results of research (Yildırım & Uzunöz, 2021) which states that the knowledge or financial intelligence possessed by individuals affects the process of forming rational expectations so that it affects individual economic or financial decision making.

The findings of this study indicate that financial intelligence possessed by generation Z can strengthen the relationship between economic expectations and economic independence. This means that generation Z can utilize their financial intelligence or financial literacy to seek economic or financial information related to rational expectations in the future so as to create economic independence or financial well-being. The findings of this study are supported by the theory of rational expectations in (Wardani & Supiati, 2020), which states that the theory of rational



expectations is that expectations will be identical to optimal estimates, for example the best estimate of the future using all available information not only on past data.

The findings of this study imply that generation Z needs to use their financial intelligence in obtaining information to produce rational economic expectations so that it can have a good impact on their economic decisions in the future. With effective economic decisions can create economic independence or financial well-being for generation Z.

The Effect of Financial Intelligence on Individual Economic Independence (Y)

Based on the results of hypothesis testing, it shows that there is a positive and significant influence between financial intelligence (Z) on individual economic independence (Y) in Generation Z. This means that the financial intelligence of generation Z is able to have a positive and significant effect on their economic independence. So that the higher the level of financial intelligence, it will increase the economic independence of generation Z and vice versa. The results of this study are in line with the results of research (Artha & Wibowo, 2023) which states that financial literacy or financial intelligence owned by students has a significant effect on personal financial management.

The findings of this study indicate that the financial intelligence possessed by generation Z can affect their economic independence. This means that the higher the level of intelligence possessed by generation Z can help them in economic behavior or managing finances which certainly has a positive impact on the economic independence of generation Z. The findings of this study are supported by the financial intelligence theory of Robert T. Kiyozaki & Sharon L. Lecth in (Wu & Gu, 2021), which states that financial intelligence refers to a person's ability to recognize and control wealth, the ability to make money, manage money, and spend money. Basically, financial intelligence is about how a person manages his finances so that he can gain prosperity or economic independence.

A person's welfare does not lie in how much income is generated each month but how to manage that income as effectively and efficiently as possible so that all needs can be met. Therefore it is very important that a person has the ability to manage their personal finances to be economically secure (Gunartin et al., 2019).

The findings of this study imply that Generation Z needs to continue to improve their financial intelligence so that they can use this intelligence in terms of financial management or economic behavior so that they can achieve economic independence or financial well-being.

CONCLUSION

Based on the results of the research and discussion, the conclusions obtained in this study are as follows. There is an insignificant influence between the results of economic learning (X1) on individual economic independence (Y) in Generation Z. This means that the economic learning outcomes obtained by Generation Z are not optimal so that they do not have a maximum effect on their economic independence. This means that the results of economic learning obtained by generation Z have not been maximized so that it does not have the maximum effect on their economic independence. There is a positive and significant influence between economic



expectations (X2) on individual economic independence (Y) in Generation Z. This means that through economic expectations or expectations possessed by generation Z, they are able to have a positive effect on their economic independence. This means that through economic expectations or expectations possessed by generation Z, they are able to have a positive effect on their economic independence. So that the higher and more positive economic expectations will make an increase in the economic independence of generation Z and vice versa. The moderating variable of financial intelligence (Z) has no significant effect in moderating the relationship between economic learning outcomes (X1) on economic independence (Y). This means that the financial intelligence of generation Z basically does not have a maximum effect on the results of economic learning so that it cannot significantly influence it. The moderating variable of financial intelligence (Z) has a significant effect in moderating the relationship between economic expectations (X2) on economic independence (Y). This means that generation Z can utilize their financial intelligence or financial literacy to seek economic or financial information related to rational expectations in the future so as to create economic independence or financial well-being.

There is a positive and significant influence between financial intelligence (Z) on individual economic independence (Y) in Generation Z. This means that Generation Z's financial intelligence is able to have a positive and significant effect on their economic independence. This means that the financial intelligence of generation Z is able to have a positive and significant effect on their economic independence. So that the higher the level of financial intelligence, it will increase the economic independence of generation Z and vice versa.

REFERNCES

- Agneman, G. (2022). How economic expectations shape preferences for national independence: Evidence from Greenland. European Journal of Political Economy, 72, 102112. https://doi.org/10.1016/j.ejpoleco.2021.102112
- Artha, F. A., & Wibowo, K. A. (2023). The influence of financial literacy, financial planning, and financial attitudes on personal financial management. *Value Added: Magazines of Economics and Business*, 19(1), 1-9.
- Baker, S. R., Farrokhnia, R. A., Meyer, S., Pagel, M., & Yannelis, C. (2020). Income, Liquidity, and the Consumption Response to the 2020 Economic Stimulus Payments. *NBER Working Paper*, 1–65.
- Gunartin, Afriliani, F., & Anwar, S. (2019). Factors Affecting Financial Literacy (Study on Students of Economics Education Study Program, Pamulang University).
 EDUKA: Journal of Education, Law, and Business, 4(2), 1–7. https://doi.org/10.32493/eduka.v4i2.3848
- Hamdan, A., Sarea, A., Khamis, R., & Anasweh, M. (2020). A causality analysis of the link between higher education and economic development: empirical evidence.Heliyon, 6(6),e04046. https://doi.org/10.1016/j.heliyon.2020.e04046
- Haryono, A., Narmaditya, B. S., Handayani, S., Satrio, Y. D., & Munir, S. (2022). Economic Learning Education and Financial Literacy Among Indonesian Students. *Pegem Journal of Education and Instruction*, 12(3), 106–110. https://doi.org/10.47750/pegegog.12.03.12



- Hatmoko, J. H. (2015). Survey of Female Students' Interest and Motivation towards PE Subjects in the Citywide Vocational High School of Salatiga in 2013.*E-Jurnal Physical Education, Sport, Health and Recreation,* 4(4), 1729–1736. https://doi.org/10.15294/active.v4i4.4855
- Hutabarat, D. S., Harahap, T. H., & Panggabean, E. M. (2023). The Application of Robert M. Gagne's Learning Theory in the Learning Process of High School Mathematics. *Tut Wuri Handayani: Journal of Teacher Training and Education Science*, 59–65.
- Hutagalung, N. (2020). Analysis of the Effectiveness of Inflation Expectation Path in Monetary Policy Transmission Mechanism in Indonesia: A Vector Autoregressive (Var) Approach. *Quantitative Economics Journal*, 1(2), 16–28. https://doi.org/10.24114/qej.v1i2.17404.
- Kartini, T., & Mashudi, U. (2022). Financial Literacy of Indekos Students of Prospective Economics Educators FKIP University of Jember. *PROMOSION* (*Journal of Economic Education*), 10(2), 154–164. https://doi.org/10.24127/pro.v10i2.6648.
- Mahmudi, I., Athoillah, M. Z., Wicaksono, E. B., & Kusuma, A. R. (2022). Taxonomy of Learning Outcomes According to Benjamin S. Bloom. *Madani Multidisciplinary Journal*, 2(9), 3507–3514. https://doi.org/10.55927/mudima.v2i9.1132.
- Maulita, & Mersa, N. A. (2017). The Effect of Financial Literacy on Personal Financial Management in Students at Samarinda State Polytechnic. *National Seminar on Applied Technology Innovation*, 136–143.
- Muflih, M. (2021). Islamic Finance Industry Satisfaction with the Performance of College Internship Students: An Expectation-Disconfirmation Theory Analysis. *JPEKA: Journal of Economics, Management and Finance Education*, 5(1),13–22. https://doi.org/10.26740/jpeka.v5n1.p13-22.
- Mulyadi, D. R., & Riyadi, R. (2023). Relationship between Financial Management Learning Outcomes and Financial Management of FETT Students, Mulawarman University. 5(1), 35–43.
- Muth, F. J. (1961). Rational Expectations and the Theory of Price Movements. *Econometrica*, 29(3), 315-335.
- Roth, C., & Wohlfart, J. (2019). How do expectations about the Macroeconomy affect personal expectations and Behavior? *Review of Economics and Statistics*, 102(4), 731–748. https://doi.org/10.1162/rest_a_00867.
- Soelaiman, L., Puspitowati, I., & Selamat, F. (2022). The Role of Role Models on Student Entrepreneurial Intention through the Application of the Theory of Planned Behavior. *Journal of Muara Ilmu Ekonomi Dan Bisnis*, 6(2), 320– 329.https://doi.org/10.24912/jmieb.v6i2.20387.
- Sudaryono. (2017). Research Methodology: Quantitative, Qualitative, and Mix Method. PT Raja Grafindo Persada.
- Wardani, D. K., & Supiati. (2020). The Effect of Capital Market Socialization and Perception of Risk on Student Investment Interest in the Capital Market. *Journal of Accounting*, 12(1), 13–22. https://doi.org/10.28932/jam.v12i1.2044.
- Widiansyah, A. (2017). The role of economics in education and education in economic

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development. *Cakrawala-Journal of Humanities* 17(2), 207–215. Wu, L., & Gu, Z. (2021). The Construction of University Financial Quotient Evaluation Index System and Its Level Measurement. *Advances in Social Science, Education and Humanities Research,* 517, 688–693. https://doi.org/10.2991/assehr.k.210121.137

Yildırım, E., & Uzunöz, M. (2021). İktisadi Beklentiler ve Karar Almada Deneyimsel ve Bilişsel Süreçler. *Siyasal: Journal of Political Sciences*, 30(1), 169–191. https://doi.org/10.26650/siyasal.2021.30.1.0019.