# Work Experience in Moderating the Independence, Competence, and Motivation of Internal Auditors on the Effectiveness of Internal Control

# Lasando Lumban Gaol\*

Department of Accounting, Universitas Terbuka, Indonesia \*corresponding author e-mail: lasando.lumban@ecampus.ut.ac.id

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#### **Abstract**

Economic developments in Indonesia will have an impact on the growth of companies. Therefore, we need a system that can secure the company's assets and encourage business efficiency. Management is obliged to be able to manage the company's activities properly as the implementation of the internal auditor's accountability to the public. This study aims to examine the effect of the role of independence, competence, and motivation on the effectiveness of the internal control system of consumer goods companies in North Sumatra. Testing research data using multiple linear regression analysis and residual tests for moderating variables. The results of this study indicate that the independence, competence, and motivation of internal auditors simultaneously affect the effectiveness of the internal control system. Partially, the independence and competence of internal auditors affect the effectiveness of internal control. This is in line with the research hypothesis, but the motivation of internal auditors does not partially affect the effectiveness of internal controls. Meanwhile, work experience is not proven to moderate (strengthen or weaken) the relationship between the independence, competence, and motivation of internal auditors and the effectiveness of internal controls.

#### 1. Introduction

In line with the concept of the era of globalization and the development of the business world, as a consequence more and more problems will be faced by a company in an increasingly competitive and complex business competition, so this situation requires leaders or company management to be able to manage their company activities effectively and efficiently to achieve the goals that have been set. The function of the internal auditor is to carry out activities of freedom to provide suggestions to management to measure and examine the company's activities including the effectiveness of the implementation of internal control (Tugiman, 2011). The effectiveness of implementing a good internal control structure is based on the elements of internal control. Where internal control has developed, both in terms of understanding and elements. Zaki (2009) also means that internal control includes organizational plans and coordinated methods and policies within a company to secure assets, test the accuracy and to what extent accounting data can be trusted, promote business efficiency, and can encourage adherence to the policies of the leadership that have been outlined bottom.

According to Arens Alvin et al. (2008) Auditors must have the ability to understand the criteria used and be able to determine the amount of evidence needed to support the conclusions to be drawn. Auditors must also have an independent mental attitude. Even if he is an expert, if he does not have an independent attitude in gathering information, it will be useless, because the information used to make decisions must be unbiased.

In a previous study, Claudia (2013) used the performance of internal auditors as an independent variable and the effectiveness of internal control procedures for motor vehicle loans as the dependent variable. In this study, Claudia, et al. proved empirically that the performance of internal auditors had a positive effect on the effectiveness of the internal control system for motor vehicle loan procedures at financing companies in Manado City. In this study, an empirical test will be conducted on the effect of the independence, competence, and motivation of internal auditors on internal control in consumer goods companies in North Sumatra.

This study also adds a work experience variable as a moderating variable. The addition of this variable aims to see whether the work experience variable can strengthen or weaken the influence of motivation, competence, and independence of internal auditors. Previous research with a focus on research to determine and describe the performance of internal auditors, while this study is to determine the motivation, competence, and independence of internal auditors, with the experience of internal auditors as a moderating variable is a factor supporting the success of internal auditors in increasing the effectiveness of the internal control system in consumer goods companies.

Fast moving consumer goods (FMCG) is a segment of consumer goods that are not durable or nondurable goods and are used for short-term consumption. Because FMCG companies act as producer companies or manufacturing companies, they usually sell products to customers through intermediaries, in this case distributors. With the movement of goods to be distributed to final consumers very quickly, it is likely to affect the effectiveness of internal control. Companies must be able to create a good internal control system to avoid the level of fraud in the company.

In this study, I would like to examine the role of internal auditors on the effectiveness of the company's internal control with a very fast rate of distribution of goods in FMCG companies that are different from other sector companies. Very large production levels and the movement of goods to use by final consumers who require a fast distribution process can affect the company's internal control system.

### 2. Literature Review and Hypothesis Development

According to Arens Alvin et al. (2008), management in designing the internal control system has interests, namely the reliability of financial reports, encouraging operational effectiveness and efficiency, and compliance with laws and regulations. In an audit, audit procedures are determined by the effectiveness of the internal control system.

An assessment of the internal control system is carried out to determine whether the internal control system is good or bad. The objectives of the internal control system assessment are: (1) implement fieldwork standards that state that: a sufficient understanding of internal control must be obtained to plan the audit and determine the attitude, timing, and scope of tests to be performed; (2) fundamental aspects and responsibilities of management. Management must provide information to ensure that the company has been managed properly, and the internal control structure is one tool that can be used to assess that the company has been managed properly by management; and (3) an adequate management control structure can assure the auditor believes in the evidence he has and design the examination to be carried out.

#### Internal Auditor

The role of internal auditors in the internal control system according to Pickett (2005) includes: (1) Assess the areas most at risk against the main objectives that have been set; (2) Define and implement a program to review the highest-profile system that can attract the highest risk; (3)

Review each system by examining and evaluating systems related to internal control to determine the extent to which the main objectives of the main control have been met; (4) Provide advice to management whether the control has been operating properly and effectively or not, as well as for the achievement of the objectives of the control system; (5) Recommend improvements needed to strengthen controls; and (6) Follow up on the results of audit work to determine whether management has implemented the agreed audit recommendations.

## Internal Auditor Independence

Independence is a condition of being free from situations that threaten the ability of the internal auditor's activities to be able to carry out their responsibilities impartially. (NCA Self Study Criterion 2 Documents International Standards for the Professional Practice of Internal Auditing NCA Self-Study Committee, 2012) According to Halim (2015), there are three aspects of the independence of an auditor, namely: (1) Independence in fact (independence in fact), namely the auditor must have high honesty. (2) Independence in appearance, which is the view of other parties towards the auditor in connection with the audit implementation. The auditor must maintain his position in such a way that other parties will trust his independence and objectivity. (3) Independence incompetence (independence from the point of view of expertise) is closely related to the competence or ability of the auditors in carrying out and completing their duties.

# Internal Auditor Competence

Internal auditors must have the knowledge, skills, and other competencies needed to carry out their duties and responsibilities. The internal audit activity, collectively, must possess or acquire the knowledge, skills, and other competencies required to carry out its responsibilities. Internal auditors are encouraged to demonstrate their expertise/skills through obtaining appropriate professional certifications and qualifications such as CIA (Certified Internal Auditor), QIA (Qualified Internal Auditor), or other certifications offered by other appropriate professional organizations.

#### **Internal Auditor Motivation**

Motivation is one of the factors that encourage human resources in an organization to be involved in establishing goal congruence. Motivation also makes human resources achieve satisfaction in their work. Pride for what has been achieved to create a sense of satisfaction, can also be referred to as motivation.

In addition, especially in organizational behavior, the need for security and the need for status are important secondary motives (Luthans, 2005). If the internal auditor can detect fraud committed by employees who take advantage of weaknesses in the company's internal control, it will be able to provide a shock effect (shock therapy) to other employees who want to cheat on company assets or take advantage of their positions for their interests.

### Internal Auditor Work Experience

Work experience is a process of learning and increasing the potential to behave both from formal and non-formal education or can be defined as a process that leads a person to a higher pattern of behavior. The experience variable will be measured using indicators of the length of work, the frequency of inspection work that has been carried out, and the amount of training he has attended (Singgih & Bawono, 2010). Auditor experience can be measured by the length of time working as an auditor and the number of duties of the internal auditor in carrying out their duties. The longer the experience of the internal auditor, the higher the quality of the audit it produces.

# Consumer Goods Company

The definition of a consumer goods company is a company that produces consumer goods that can directly satisfy consumer needs. Companies in the consumer goods sector are divided into 5 sections, namely food and beverages, tobacco manufacturers, pharmaceuticals, cosmetics and household, and houseware. Examples of consumer goods companies that are widely known in Indonesia are Unilever, Indofood, Wings Food, Garuda Food, Mayora, OT, and others.

Fast-moving consumer goods (FMCG) are products that can be sold quickly at relatively low prices and are usually daily necessities. Examples of fast-moving consumer goods include items such as soft drinks, personal care cosmetics, and grocery items. Although the profit earned from each item is small, these items are usually sold in very large quantities so that the total profit is large.

# Review of Past Research

In a previous study, Dianawati & Ramantha (2013) conducted a study entitled The Effect of Independence, Professional Expertise, and Work Experience of Internal Auditors on the effectiveness of the internal control structure of Rural Banks in Gianyar Regency, the results of the study that Independence, Professional Expertise, Work Experience have a positive effect on effectiveness the internal control structure of the Rural Pre-credit Bank in Gianyar Regency. In Bayu (2012) with the title The influence of internal audit in increasing the effectiveness of internal control, it was found that internal audit had a positive effect on the effectiveness of internal control. In Mulihartini's research (Mulihartini & RM, 2016) with the title "Work experience as moderating the effect of education level on the effectiveness of internal control. Work experience is not able to moderate the effect of education level on the effectiveness of internal control.

In the research of Suantara et al. (2014) entitled The effect of independence, professional expertise, and work experience of internal auditors on the effectiveness of internal control with motivation as a moderating variable (a case study on BPR in Singaraja), it was found that the role of audit independence, professional expertise, and work experience of internal auditors had an effect on positive on the effectiveness of internal control; motivation can strengthen the relationship between independence, professional expertise, and work experience of internal auditors with the effectiveness of internal control. In Putra & Rasmini (2014) research entitled The effect of the independence, competence, and scope of supervisory audit work on the effectiveness of the cooperative's internal control, it was found that the independence, competence, and scope of the supervisory audit work had a significant effect on the effectiveness of internal control. In the research of Tarigan et al. (2013) with the title The role of the internal auditor on the effectiveness of the internal control process of credit granting and collection, it was found that Internal Audit had a significant effect on the effectiveness of internal control. Badara (2013) with the title Impact of the Effective Internal Control System on the Internal Audit Effectiveness at Local Government Level found that the effectiveness of the internal control system has a significant effect on the effectiveness of the internal audit.

Claudia (2013) with the title The Effect of Internal Auditor Performance on the Effectiveness of Internal Control Procedures for Motor Vehicle Loans at Financing Companies in Manado City found that Internal Audit had a significant effect on the effectiveness of internal controls. Gamage et al. (2014) with the title Effectiveness of Internal Control System in State Commercial Banks in Sri Lanka found that there is a positive influence between the components of internal control and the internal control system. Ayagre et al. (2014) with the title The Effectiveness of Internal Control System of banks: The case of Ghanaian banks found that strong control exists in the control environment and monitoring activities.

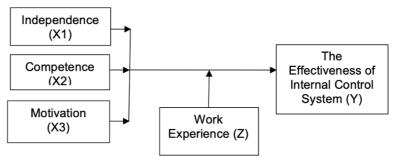


Figure 1. Conceptual Framework

Internal auditors are an integral part of the organization and carry out their functions based on policies established by senior management or the board of directors. To be able to carry out an adequate internal audit, internal auditors should be guided by the norms of professional practice of internal auditing (Tugiman, 2011).

Internal controls are policies and procedures designed to provide management with reasonable assurance that the company has achieved its goals and objectives (Arens Alvin et al., 2008). This means that internal control has a great influence on the continuity of the company, with a good internal control system, the company can carry out all its activities by the goals and objectives to be achieved, if the company's goals have been achieved, it means that the employee's actions are by the regulations and not some actions harm the company. Some fraudulent acts occur due to the weakness of the internal control system.

#### Research Hypothesis

The hypothesis is a temporary answer to the research problem formulation. Internal auditors must have good competence obtained through audit training conducted within the company and outside the company. The quality of the results of the internal audit can be measured clearly because it already has applicable standards. The more experience an internal auditor has, the more accurate the quality of audit work and the more knowledge of the field of internal audit. The motivation that exists in an internal auditor will realize a goal-directed behavior in order to achieve the ultimate goal of job satisfaction so that it can produce a good audit quality. The experience of the auditor who increases along with the increasing level of complexity of the audit task will make it easier for the auditor to find weaknesses in the internal control system he is auditing. Good audit quality produced by internal auditors will be able to increase the effectiveness of the internal control system.

Based on the background of the problem, the formulation of the problem, and the conceptual framework, the hypotheses of this research are: (1) The independence, competence, and motivation of internal auditors have a simultaneous and partial effect on the effectiveness of the internal control system in consumer goods companies in North Sumatra; and (2) The work experience of internal auditors can moderate the relationship between the independence, competence, and motivation of internal auditors with the effectiveness of the internal control system in consumer goods companies in North Sumatera.

#### 3. Research Method

Research is a long process, where each research aims to find new knowledge to answer a question or find a solution to the problem at hand (Lubis, 2012). This type of research can be regarded as causal research. Causal research is to identify causal relationships between various variables (Erlina, 2007). In this case, to see the effect of independence, competence, and motivation on the effectiveness of internal control in consumer goods companies in North Sumatra with the work experience of internal auditors as a moderating variable. The location of the research was carried out in a consumer goods company in North Sumatra. The time of the study started from May 2016 to September 2016.

Population is a generalization area consisting of subjects or objects that have certain qualities or characteristics determined by research to be studied and drawn conclusions. The method of determining the sample in this study is the saturated sampling method (census). Saturated sampling is a sampling technique when all members of the population are used as samples.

The sample of this study is every internal auditor manager, internal auditor coordinator, and internal auditor staff who have worked for more than 2 years who are placed in a branch office or who are at the head office of a consumer goods company in North Sumatra have the same opportunity to be a sample. Determination of the research sample is carried out on respondents, namely consumer goods companies that have internal auditors with a total sample of 58 consumer

goods companies. The questionnaires that will be sent are 58 questionnaires, where one answer to the questionnaire will be filled out by the internal auditor representing a consumer goods company.

Data collection was carried out using the survey method. The survey method is a primary data collection method by giving questionnaires to individual respondents. Questionnaires were given to internal auditors who were assigned to work at branch offices or who worked at the head office of consumer goods companies in North Sumatra.

Internal control are policies and procedures designed to provide management with reasonable assurance that the company has achieved its goals and objectives. This study uses three independent variables, namely independence (X1), competence (X2) and motivation (X3). The dependent variable is the effectiveness of internal control (Y), while work experience (Z) is the moderating variable.

T	Table 1. Operational Definition and Variable Measurement						
Name Variable	Operational Definition	Indicator	Scale				
Independence (X 1)	The state of being free from influence, not controlled by other parties, not dependent on others	<ol> <li>Independence in fact</li> <li>Independence in appearance</li> <li>Independence in competence</li> </ol>	Attitude/Likert				
Competence (X 2)	Possess a certain level of skill or high level of knowledge in a particular subject gained from training and experience	<ol> <li>Mastery of Internal Audit Standards</li> <li>Insights About the organization</li> <li>Skill Upgrade</li> </ol>	Attitude/Likert				
Motivation (X 3)	The process or factor that drives people to act or behave in a certain way.	<ol> <li>Needs for achievements</li> <li>Needs for affiliation</li> <li>Needs for power</li> </ol>	Attitude/Likert				
Internal Control System Effectiveness (Y)	Implemented by management and employees to address business risks and fraud risks that are known to threaten the achievement of the entity's objectives	<ol> <li>Control         Environment         Risk Assessment         Information and communication         Control Activities         Monitoring     </li> </ol>	Attitude/Likert				
Work experience (Z)	Experience is a process of learning and enhancing the development of potential behavior from both formal and non-formal education or it can also be interpreted as a process that leads a person to a higher pattern of behavior	<ol> <li>Length of time working</li> <li>The number of duties of the internal auditor</li> </ol>	Attitude/Likert				

#### Data Analysis Models and Techniques

The data analysis method used in this research is multiple linear regression analysis (Multiple Regression Analysis) and residual test for moderating variables. The research data was processed using the Statistical Package for Social Science (SPSS) program. Multiple regression analysis is used if it intends to predict how the condition of the dependent variable is when it is associated with two or more independent variables. To test the moderating variable, the residual test was used (Ghozali, 2006). With multiple regression equations in model I and residual test in model II.

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Model I :  $Y = b_0 + b_1 X_{1+} b_2 X_2 + b_3 X_3 + e$ Model II :  $Z = b_0 + b_1 X_{1+} b_2 X_2 + b_3 X_3 + e$ .....(1)  $|e| = b_0 + b_1 Y$ .....(2)

Where:

Y = Effectiveness of Internal Control

 $b_0 = Constant$ 

 $b_1,b_2,b_3$  = Regression coefficient

X<sub>1</sub> = Independence X<sub>2</sub> = Competence X<sub>3</sub> = Motivation Z = Work Experience

e = error

#### 4. Results and Discussions

This is the statistical description of the research variables, it shows that the number of respondents (N) is 51 people. Each variable has a minimum value, maximum value, average value (mean) and standard deviation values that vary. The effectiveness of Internal Control (Y) has a minimum value of 57 and a maximum value of 74. The average value of the effectiveness of internal control is 66.27, indicating that each respondent carries out his obligations in the effectiveness of internal control. The standard deviation of the effectiveness of internal control is 4.477, which means that the deviation from the effectiveness of internal control by respondents is quite small.

**Table 2.** Description of Research Variable Statistics

	N	mean	Std. Deviation
X 1	51	40.75	3.039
X 2	51	32.61	3.131
X 3	51	35.12	3.109
Z	51	30.39	2.359
Y	51	66.27	4.477
Valid N (listwise)	51		

Source: Data processed, 2021

Independence  $(X_1)$  has a minimum value of 34 and a maximum value of 45. The average value of independence is 40.75, indicating that each respondent upholds the value of Independence in carrying out their duties. The standard deviation value of Independence is 3.039, which means that the deviation from Independence is quite small. Competence  $(X_2)$  has a minimum value of 26 and a maximum value of 39. The average value of competence is 32.61, indicating that each respondent has good competence. The standard deviation value is 3.131, which means that the deviation from competence is quite small. Motivation  $(X_3)$  has a minimum value of 29 and a maximum value of 40. The average value of motivation is 35.12, indicating that each respondent has good motivation. The standard deviation value is 3.109, which means that the deviation from motivation is quite small. Work Experience (Z) has a minimum value of 24 and a maximum value of 35. The average value of work experience is 30.39 indicating that each respondent needs work

experience in carrying out their duties. The value of the standard deviation of work experience is 2.359, which means that the deviation from work experience is quite small.

# Reliability Test

A questionnaire should be reliable, in this study the method used to measure whether the data from the questions can be said to be reliable with Cronbach Alpha statistical testing, if Cronbach's Alpha > 0.6 then it is said to be reliable, on the other hand if Cronbach's Alpha < 0.6 then it is said to be unreliable.

 Table 3. Reliability Test

No	Question	N of Items	Cronbach's Alpha	Test results
1	Control System Effectiveness	15	0.766	Reliable
	Internal (Y)			
2	Independence (X1)	9	0.742	Reliable
3	Competence (X2)	8	0.764	Reliable
4	Motivation (X3)	8	0.808	Reliable
5	Work Experience (Z)	7	0.617	Reliable

Source: Data processed, 2021

#### Classic assumption test

# 1. Normality test.

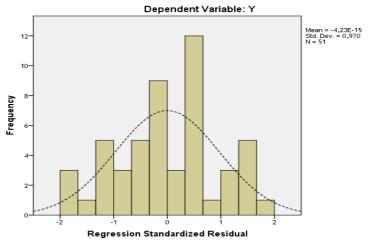
To find out whether the data is normally distributed, the Kolmogorov-Smirnov (KS) test can be done.

**Table 4.** Data Normality Test with Kolmogorov – Smirnov

One-Sample Kolmogorov-Smirnov Test					
		Unstandardized Residual			
N		51			
Normal Parameters a,b	mean	0E-7			
	Std. Deviation	1.36778202			
Most Extreme Differences	Absolute	.084			
	Positive	0.053			
	negative	084			
Kolmogorov-Smirnov Z		.598			
asymp. Sig. (2-tailed)		.867			

a. Test distribution is Normal.

From the table 4, it can be seen that the Kolmogorov – Smirnov value is 0.598 with the asymp value. Sig. (2-tailed) is 0.867, thus the value of sig. 0.005 then the data from this study has a normally distributed residual.



**Figure 2.** Histogram Image

b. Calculated from data.

The graph of this study shows that the data is normally distributed. The results of the normality test using the normal PP Plot, based on the picture it can be concluded that the normal PP Plot graph is spread along the diagonal line.

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Dependent Variable: Y

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Normal P-P Plot of Regression Standardized Residual

Figure 3. Normal PP Plot Image

### Multicollinearity Test Results

Multicollinearity test was conducted to see the level of closeness between the independent variables in the model. A good model should not have a close correlation (there is no correlation between the independent variables.

Table 5 explains that Independence has a tolerance value of 0.505 and a VIF value of 1.981, Competence has a tolerance value of 0.641 and a VIF value of 1.561 and Motivation has a tolerance value of 0.644 and a VIF value of 1.553. From the analysis on testing the tolerance value and VIF, it can be concluded that the tolerance value is > 0.10 and the VIF value is < 10, so in this test there is no multicollinearity of an independent variable.

**Table 5.** Multicollinearity Testing with Tolerance and VIF

	Model	<b>Unstandardized Coefficients</b>		Sig	Collinearity	Statistics
		В	Std. Error		Tolerance	VIF
1	(Constant)	4.587	3.299	.171		
	Independence (X1)	1.044	0.090	.000	.505	1.981
	Competence (X2)	.488	.077	.000	.641	1.561
	Motivation (X3)	-0.057	.077	.466	.644	1.553

Source: Data processed, 2021

#### Heteroscedasticity Test

Heteroscedasticity test in this study was carried out using the Glejser test approach.

Table 6. Heteroscedasticity Testing with Glejser Test

Model	T	Sig
Constant	2.200	.033
Independence (X1)	936	.354
Competence (X2)	947	.348
Motivation (X3)	160	.873

Source: Data processed, 2021

Table 6 shows that all of the independent variables used in this study have no effect on the absolute value of the unstandardized residual, this can be seen from the sig value of each

independent variable greater than 5%. Thus it can be justified that all variables used in this study are free from the assumption of heteroscedasticity.

# Hypothesis Test Results

Coefficient of Determination Test Results (R2)

The coefficient of determination (R2) is used to determine how much the independent variable can explain the dependent variable. The value of the coefficient of determination is between zero and one.

**Table 7.** Determination Coefficient Test Results (R2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.956 a	.914	.907	1.367		
a. Predictors: (Constant), Z, X2, X3, X1						

Source: Data processed, 2021

Based on table 7, the coefficient value (R) is 0.956 which shows a strong relationship between the variables, with the coefficient of determination (R square) of 0.907 or 90.7%. This means that the variables of independence, competence, and motivation as well as work experience can explain the effectiveness of internal control variables by 90.7% while the remaining 9.3% is explained by other variables outside this estimation model. The F statistic test basically shows whether all the independent variables included in the model have a simultaneous effect on the dependent variable.

Table 8. ANOVA

ANOVA b

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	916.220	4	229.055	122.608	.000 b
Residual	85.936	46	1.868		
Total	1002.157	50			

a. Predictors: (Constant), X2, X3, X1

b. Dependent Variable: Y Source: Data processed, 2021

Based on table 8, it is known that the significant value of 0.000 is smaller than 0.05 so it can be said that simultaneously the variables of independence, competence, and motivation have a positive and significant effect on the effectiveness of internal control variables. That is, Hypothesis 1 can simultaneously be supported. The t-statistical test basically shows how far one independent variable individually explains the variation of the dependent variable.

**Table 9.** T-test Results

Coefficients <sup>a</sup>

Model -	<b>Unstandardized Coefficients</b>		Standardized Coefficients		T	G•-
	В	Std. Error	Beta		1	Sig.
1 (Constant)	8.186	2.864			2.858	.006
X1	1.063	.092		.721	11.561	.000
X2	.495	0.080		.346	6.225	.000
X3	039	0.079		027	486	.629

a. Dependent Variable: Y Source: Data processed, 2021

Table 9 states that partially independence has a significant partial effect on the effectiveness of internal control in consumer goods companies . This is based on the value of the role of internal auditors 0.000 < of the significant value 5%. Competence has a significant effect partially on the effectiveness of internal control in consumer goods companies . This is based on the value of the role of internal auditors 0.000 < of the significant value 5%. Motivation has no significant effect partially on the effectiveness of internal control in consumer goods companies . This is based on the value of the internal auditor's role of 0.629 > from a significant value of 5%. Based on the coefficient value, the regression equation can be arranged as follows:  $Y = 8.186 + 1.063 X_1 + 0.495 X_2 - 0.039 X_3$ 

# Residual Test Results (Moderating)

Residual test is conducted to see whether the moderating variable can strengthen or weaken the influence of the independent variable on the dependent variable. A variable is a moderating variable by looking at the value of the coefficient b1 of the regression equation as significant and negative.

**Table 10.** Residual Test Results (Moderating)

Coefficients						
Madal	Unstandardized Coefficients Standardized Coe		Standardized Coefficient	l Coefficients		Sig.
Model -	В	Std. Error	Beta			
1 (Constant)	20.869	4.735			4.407	.000
X1	.107	.152		.138	.707	.483
X2	.043	.131	0	.058	.330	.743
X3	.106	.131		.140	.809	.422

a. Dependent Variable: Z

Source: Data processed, 2021

**Table 11.** Residual Test Results (Moderating)

Coefficients <sup>a</sup>

#### **Unstandardized Coefficients Standardized Coefficients** Model T Sig. Std. Error Beta 1 (Constant) -5.637 2.749 -2.0500.046 .041 2.699 .112 .010

a. Dependent Variable: ABS\_RES2

Source: Data processed, 2021

Table 11 depicts a significant value of 0.010 which is smaller than alpha 0.05 and the value of the parameter coefficient is positive, namely 0.112, then the work experience variable is proven to be unable to be used as a moderating variable that can strengthen or weaken the influence of independence, competence, motivation variables on the effectiveness of internal control variables. This means that hypothesis 2 cannot be supported or hypothesis 2 is not supported.

#### Discussion of Research Results

This study examines the effect of independence, competence, and motivation on the effectiveness of internal control with work experience as a moderating variable. The independence, competence, and motivation of internal auditors on the effectiveness of internal control partially and simultaneously affect consumer goods companies in North Sumatra. The results of statistical tests show the first hypothesis that simultaneously the influence of independence, competence, and motivation of internal auditors has a positive and significant effect on the performance of consumer goods companies in North Sumatra. The significant value of 0.000 is smaller than 0.05 so it can be said that simultaneously the variables of independence, competence, and motivation can explain

the effectiveness of the company's internal control system. This study supports the research conducted by (Dewi et al., 2015) that independence, competence, and motivation have a significant effect on the effectiveness of internal control. Internal auditors need to have independence so that the internal audit function can be carried out properly. In carrying out the inspection and supervision, it must be carried out with the ability and expertise to assess the implementation of the company's internal control structure. Thus, an independent internal auditor with high professional expertise and high motivation to build the company will be able to increase the effectiveness of the company's internal control.

The results in this study also found evidence that partially the independence and competence of internal auditors had a significant direct effect on the effectiveness of internal control, while the motivation of internal auditors did not have a significant direct effect on the effectiveness of the company's internal control. This finding is not in line with the research of (Suantara et al., 2014) that motivation has a significant influence on the effectiveness of internal control. In this study, the motivation value of internal auditors is 0.629, which is greater than the significant value of 5%. So that partially internal auditor motivation does not directly affect the effectiveness of internal control.

This study supports the research of (Dianawati & Ramantha, 2013) that the independence of internal auditors has a positive effect on the effectiveness of internal control. This study also strengthens the research conducted by (Putra & Rasmini, 2014) that independence and internal competence have a positive effect on the effectiveness of internal control. The role of the internal auditor is to provide the information needed by the company's management in carrying out their responsibilities effectively, the internal auditor acts as an independent assessor to review the company's operations by evaluating the effectiveness of the company's internal controls.

The role of internal auditors and the effectiveness of the internal control system have a major influence on the continuity of the company, with a good internal control system, the company can carry out all its activities by the goals and objectives to be achieved. If the company's goals have been achieved, it means that the employee's actions are by the regulations and there are no actions that can harm the company.

The work experience of internal auditors can moderate the relationship between the independence, competence, and motivation of internal auditors on the effectiveness of the internal control of consumer goods companies in North Sumatra. The test of the second hypothesis in this study states that work experience can moderate the relationship between the independence, competence, and motivation of internal auditors on the effectiveness of the internal control of consumer goods companies, it can be seen from the results of SPSS output with regression analysis of the work experience variable that the value of the significant value of 0.010 is smaller than alpha 0.05 but the value of the parameter coefficient is positive, namely 0.112. This is not by the theory which states that a variable is a moderating variable by looking at the value of the coefficient b from the regression equation as significant and negative.

This study is not in line with (Dianawati & Ramantha, 2013) which states that the work experience of internal auditors has a positive effect on the effectiveness of internal control. (Suantara et al., 2014), also found that the work experience of internal auditors has a positive effect on the effectiveness of internal control. In this study, work experience could not moderate the relationship between independence, competence, and motivation on the effectiveness of internal control.

This research is not in line with the theory which says that the work experience of internal auditors as well as the ability to deal with and resolve conflicts in the process of internal audit activities, will be able to help internal auditors to increase the effectiveness of internal control.

#### 5. Conclusions

The main objective of this study was to determine the effect of the independence, competence, and motivation of internal auditors on the effectiveness of internal control. From the results of the research conducted, the following conclusions can be drawn: (1) Simultaneously, the independence, competence, and motivation of internal auditors have a positive and significant effect on the effectiveness of internal control, this is in line with the research hypothesis. This means that the independence, competence, and motivation of internal auditors are interrelated elements that must be carried out by internal auditors to increase the effectiveness of internal controls in consumer goods companies in North Sumatra; (2) Partially, the independence and competence of internal auditors affect the effectiveness of internal control. This is in line with the research hypothesis, but the motivation of internal auditors does not partially affect the effectiveness of internal controls; (3) Work experience is not proven to moderate (strengthen or weaken) the independence, competence, and motivation of internal auditors on the effectiveness of internal control.

#### Research Limitations

This study has the following limitations: Firstly, the results of this study found that work experience cannot moderate the relationship between independence, competence, and motivation with the effectiveness of the company's internal control system and it is estimated that other variables can be used to moderate the relationship between the independent variable and the dependent variable. Second, this study uses a questionnaire instrument whose answers are based on the perception of respondents' answers, so that it may contain an element of subjectivity. Third, the population in this study only focused on the internal auditors of consumer goods companies without looking at the elements directly involved in increasing the effectiveness of the company's internal control system and only used 3 independent variables, namely independence, competence, and motivation.

#### Suggestion

Based on the conclusion, the improvements suggested by the researcher for further research are: (1) Subsequent research is to be able to examine using moderating variables other than work experience variables that can influence and moderate the relationship of internal auditors to the effectiveness of the company's internal control system; (2) The next researcher, besides using a questionnaire, also conducted interviews and identified secondary data as consideration for assessing the objectivity of respondents' answers; and (3) Future researchers should use a larger sample to generalize the results of the study and pay attention to other elements such as the audit committee and external auditors that can affect the effectiveness of the company's internal control system and add variables outside of the variables of independence, competence, and motivation.

#### References

- Arens Alvin, A., Elder, R. J., & Mark, S. (2008). Auditing dan Jasa Assurance Pendekatan Terintegrasi (12th ed., Vol. 1). Erlangga.
- Ayagre, P., Appiah-Gyamerah, I., & Nartey, J. (2014). The Effectiveness of Internal Control Systems of Banks: The Case of Ghanaian Banks. *International Journal of Accounting and Financial Reporting*, 4(2), 377.
- Badara, M. (2013). Impact of The Effective Internal Control System on The Internal Audit Effectiveness at Local Government Level. *Journal of Social and Development Sciences*, 4(1), 16–23.
- Bayu, F. R. (2012). Pengaruh Internal Audit Dalam Meningkatkan Efektivitas Pengendalian Internal. Universitas Telkom.

- Claudia, J. (2013). Pengaruh Kinerja Auditor Internal Terhadap Efektivitas Pengendalian Intern Prosedur Kredit Kendaraan Bermotor Pada Perusahaan Pembiayaan Di Kota Manado. Manado: Universiats Sam Ratulangi.
- Dewi, B. C., Purnamawati, G., & Atmadja, T. (2015). Pengaruh Independensi, Pengalaman Kerja, Kompetensi, Motivasi, dan Ruang Lingkup Pekerjaan Audit Pengawas pada Efektivitas Pengendalian Intern Koperasi. E-Jurnal S1 Akuntansi, Universitas Pendidikan Ganesha.
- Dianawati, N. M. D., & Ramantha, W. (2013). Pengaruh Independensi, Keahlian Profesional dan Pengalaman Kerja Auditor Internal terhadap Efektivitas Struktur Pengendalian Internal Bank Perkreditan Rakyat di Kabupaten Gianyar. E-Jurnal Akuntansi, 4(3), 439-450.
- Erlina, S. M. (2007). Metodologi Penelitian Bisnis: Untuk Akuntansi dan Manajemen (Cetakan Pertama). Medan: USU Press.
- Gamage, C. T., Lock, K. L., & Fernando, A. A. J. (2014). A Proposed Research Framework: Effectiveness of Internal Control System in State Commercial Banks in Sri Lanka. *International Journal of Scientific Research and Innovative Technology*, 1(5), 25–44.
- Halim, A. (2015). Auditing; Dasar-dasar Audit Laporan Keuangan. UPP STIM YKPN.
- Lubis, A. F. (2012). Metode Penelitian Akuntansi dan Format Penulisan Tesis. Medan: Universitas Sumatera Utara Press.
- Luthans, F. (2005). Perilaku Organisasi (10th ed.). Yogyakarta: Andi.
- Mulihartini, N. K., & RM, K. M. (2016). Pengalaman Kerja sebagai Pemoderasi Pengaruh Tingkat Pendidikan Pada Efektivitas pengendalian Internal. E-Jurnal Akuntansi, 14(3), 1951–1977.
- Pickett, K. H. S. (2005). The Essential Handbook of Internal Auditing. England: John Wiley & Sons Inc.
- Putra, B. S., & Rasmini, N. K. (2014). Pengaruh Independensi, Kompetensi, dan Ruang Lingkup Pekerjaan Audit Pengawas pada Efektivitas Pengendalian Intern Koperasi di Kabupaten Buleleng. *E-Jurnal Akuntansi*, 8(3), 371–384.
- NCA Self Study Criterion 2 Documents International Standards for the Professional Practice of Internal Auditing NCA Self-Study Committee, Pub. L. No. Criterion 2 Documents (2012). http://thekeep.eiu.edu/eiuncaintegritydocs/41
- Singgih, E. M., & Bawono, I. R. (2010). Pengaruh Independensi, Pengalaman, Due Professional Care dan Akuntabilitas Terhadap Kualitas Audit. Simposium Nasional Akuntansi XIII, 1–21.
- Suantara, G., Musmini, L. S., SE, A. K., Herawati, N. T., & AK, S. E. (2014). Pengaruh Independensi, Keahlian Profesional dan Pengalaman Kerja Auditor Internal terhadap Efektivitas Sistem Pengendalian Internal Dengan Motivasi Sebagai Variabel Moderasi (Studi Kasus pada BPR di Kota Singaraja). JIMAT (Jurnal Ilmiah Mahasiswa Akuntansi) Undiksha, 2(1).
- Tarigan, N. E., Saputra, B. W., & Ginting, T. (2013). Peran Internal Auditor Terhadap Efektifitas Pengendalian Internal Process Credit Granting And Collection. Finance & Accounting, 2(1). Tugiman, H. (2011). Standar Profesi Audit Internal (Edisi Tujuh). Yogyakarta: Kanisius.
- Zaki, B. (2009). Sistem Akuntansi Penyusunan Prosedur dan Metode. Yogyakarta: YKPN.