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Influencing Factors Analysis on Quality of Internal Audit Results
(Case Study at Inspectorate General of Ministry of Marine Affairs and Fisheries)

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Abstract:
This research aims to analyse the influence of peer review, integrity, objectivity, competence, and independence on internal audit result quality, both partially and simultaneously as well as to examine audit time as its moderating variable. Furthermore, this research also proposes better internal audit quality system at Inspectorate General of Ministry of Marine Affairs and Fisheries. As many as 86 auditors are involved as research population and observed methodically. Primary data required for this study are collected through questionnaires and analysed using Likert Scale. Secondary data are assembled from the Inspectorate General's organisational structure, Institution's annual report and Government Accountability Report (LAKIP). Structural Equation Modelling (SEM) Partial Least Square (PLS) and Statistical Package for the Social Sciences (SPSS) are used to process & analyse the data. This research indicates 1) Peer Review, competence, and independence are factors partially capable of influencing Internal Audit quality, 2) Peer review, integrity, objectivity, competence, and independence can simultaneously affect Internal Audit quality, both with or without Audit Time moderation, (3) Audit time doesn't serve as moderating variables for moderating partial influence of peer review, integrity, objectivity, and competence towards internal audit result quality, and (4) Relevant activities to enhance audit result quality are workshops, seminars and technical assistance on audit-related topics and could improve auditor's integrity, objectivity, competence, and independence.

Keywords: Peer review, integrity, objectivity, competence, independence, audit time, audit result quality

1. Introduction

The Government Internal Oversight Body (APIP) is a government institution that conducts internal supervision in central and/or regional government. Internal monitoring gets carried out to establish good governance, clean governance and to support effective, efficient, transparent, accountable as well as clear and clean from collusion, corruption and nepotism (BPKP, 2010). APIP demands quality performance to improve organisational performance and to support good governance. Performance in quality can be noticed from audit reports issued by APIP.

Indonesia's Internal Auditor profession organisation defines internal audit as:

"an independent and objective act of assurance & consulting, designed to provide value added and improve organisation operation. Internal Audit assists organisation through systematic & organised approaches in evaluating and increasing risk management effectiveness, controlling and governance process."

Based on that definition, the main role of Inspectorate General of Ministry of Marine & Fisheries as the organisation in directing internal supervision within The Ministry of Marine & Fisheries is considered not optimal in conducting its primary tasks & functions. There are several issues at the ministry found by Supreme Audit Agency (BPK) as the external supervision side. From the inspection for marine products in quality assurance for control & security system budget year 2011 to 2014, BPK found eight findings showing eight ineffectiveness issues. These problems are, for example, (1) only 0.28% (39) out of 13,068 registered vessels above 20 Gross Tonnes (GT) that have received Good Fish Handling Process Certificate (CPIB) issued by Directorate General of Capture Fisheries, and (2) the competent and authorised bodies have not yet running periodic residual monitoring to all harbours in a province or regencies as instructed (BPK, 2016). Those two findings wouldn't have existed if The Inspectorate General KKP as the internal auditor had done their duties properly, such as increasing effectivity in organisation risk management.

Sukriah et al. (2009) sums up that objectivity & competence have a positive impact on inspection quality, while independence and integrity do not have any significant impact on inspection result quality. Halim et.al (2014) in his research states that audit time budget

weakens auditor's competence influence towards audit quality, and audit time budget also reduces auditor's independence factors in audit quality

From the above description, research on influencing factors analysis on the quality of Internal Audit Results at the Inspectorate General of Ministry of Marine Affairs & Fisheries Ministry is essential & to be emphasised. This research output will be set as guidelines to elevate the role of Inspectorate in conducting its task and duties, especially in internal audit.

Problem statement for this study are as follows, (1) Have peer review, integrity, objectivity, competence and independence affected audit result quality, both partially and simultaneously? (2) Could audit time, as moderating variables, moderate the influence of peer review, integrity, objectivity, competence, and independence towards audit result quality, both partially and simultaneously?

This research objectives are (1) Analysing the influence of peer review, integrity, objectivity, competence and independence towards audit result quality, both partially or simultaneously, (2) Analysing audit time as the moderating variable, in moderating influence of peer review, integrity, objectivity, competence, and independence towards audit quality result, both partially or simultaneously, and (3) Providing suggested activities to develop Human Resource Quality, such as training and workshops, related to auditing to improve the internal audit process at the ministry.

2. Research Method

This research takes place at Inspectorate General Ministry of Marine Affairs & Fisheries' office at Medan Merdeka Timur St, No. 16 - Central Jakarta. The population in this research are all 86 auditors at the Inspectorate General. Data collection uses census method, which is overall data collection where all elements in the population become research objects and are observed individually. Data sources in this research are primary & secondary data. Primary data are obtained by distributing questionnaires to each respondent and are measured using Likert Scale 1 to 5, while secondary data are collected from the organisational structure of Inspectorate General of Ministry of Marine Affairs and Fisheries, Inspectorate General annual report, and institution's Government Accountability Report (LAKIP). Data processing & analysis used in this research are component or variance based Structural Equation Modelling (SEM) Partial Least Square (PLS) and Statistical Package for the Social Sciences (SPSS).

3. Result & Analysis

3.1. Indicator Reliability Test

Indicators are considered reliable when it has correlation score > 0.50. Based on Outer Loadings, the generated output has fulfilled the convergent validity requirement, which shows all loading factor above 0.50.

3.2. Variable Quality Checking

Variable Quality Checking is performed by testing the variable's validity and reliability score. Variable's validity can be measured from Average Variance Extracted (AVE) value. A valid variable indicated by each variable's AVE value > 0.50. The checking shows AVE value of each variable in this research is > 0.50, indicating valid variables. In checking reliability, there are two methods applied, composite reliability and Cronbach alpha from indicator block that measures variables. A reliable variable has composite reliability and Cronbach alpha value > 0.70 for each variable. This result indicates that all variables are reliable. Details of AVE measurement result, composite reliability and Cronbach alpha are shown in table 1.

	AVE	Composite Reliability	Cronbach's Alpha
Independence	0.673	0.858	0.777
Integrity	0.841	0.955	0.938
Competence	0.795	0.921	0.871
Audit Result Quality	0.835	0.910	0.803
Moderating Effect Independence	1.000	1.000	1.000
Moderating Effect Integrity	1.000	1.000	1.000
Moderating Effect Competence	1.000	1.000	1.000
Moderating Effect Objectivity	1.000	1.000	1.000
Moderating Effect Peer Review	1.000	1.000	1.000
Objectivity	0.943	0.970	0.940
Peer Review	0.990	0.997	0.997
Audit Time	1.000	1.000	1.000

Table 1: AVE, composite reliability and Cronbach alpha test results
Source: Data Analysis (2017)

3.3. Structural Model Testing (Inner Model)

Structural Model Testing is accomplished by assessing R-Square which is a goodness of fit model. This step aims to analyse estimation level between independent variables (peer review, integrity, objectivity and independence) and the dependent variables (audit result quality). The analysis shows R-Square of 0.716. It means the construct variability of audit result quality can only be explained as much as 71.6% by construct variability of peer review, integrity, objectivity, competence, and independence, while the remaining 28.4% explained by other factors beyond this research.

3.4. Hypothesis Testing

There are 12 hypotheses proposed in this study. Two analytical methods used in this research are Bootstrap Hypothesis Testing, to analyse Hypothesis H_1, H_2, H_3, H_4, H_5, H_7, H_8, H_9, H_{10} and H_{11}, and Analysis of Variance (ANOVA) for hypothesis H_6 and H_{12}. Bootstrapping is a technique to recalculate samples randomly to obtain t-statistic and P value by using Path Coefficients Analysis. The t-statistic result will lead to the significance level of influence from independent variables to dependent variables. If the t-statistic value > 1.96 (from t-table, 5% confidence level), it shows a significant influence, and vice versa. Furthermore, t-statistic is also used to check interaction between independent variables with moderating variables towards the dependent variable. If the t-statistic is > 1.96 (t-table, confidence level 5%), it indicates a moderating relationship and vice versa. Next, based on the P-value, it will then determine whether the null hypothesis is rejected or accepted.

	T Statistics (|O/STDEV|)	P Values
Independence → ARQ	2.064	0.040
Integrity → ARQ	0.588	0.557
Competence → ARQ	9.112	0.000
Moderating Effect Integrity → ARQ	0.804	0.422
Moderating Effect Independence → ARQ	0.592	0.554
Moderating Effect Competence → ARQ	0.736	0.462
Moderating Effect Objectivity → ARQ	0.499	0.618
Moderating Effect TS → ARQ	1.372	0.171
Objectivity → ARQ	0.623	0.534
Peer Review → ARQ	2.096	0.037

Table 2: Path Coefficient Testing Result Using Bootstrapping Technique
ARQ = Audit Result Quality   PR = Peer Review
Source: Data analysis (2017)

3.4.1. Hypothesis 1 Testing

Hypothesis 1 (H_1) listed in this research is "peer review has a positive influence towards audit result quality." Based on path Coefficient analysis shown in table 2, it shows a p-value of 0.037 (p-value < 0.05) and t-statistic value of 2.096 (t-statistic > 1.96). This result can be interpreted as null hypothesis rejected and accept alternative hypothesis (H_1), indicating that peer review has a significant influence towards audit result quality. This result also supports study from Deis & Giroux (1992), stating that peer review from fellow auditor has a significant relation with audit quality.

3.4.2. Hypothesis 2 Testing

Hypothesis two (H_2) defined in this research is "integrity has a positive influence towards audit result quality". Based on Path Coefficient Analysis in table 2, the p-value resulted in 0.557 (p-value > 0.05) and a t-statistic value of 0.588 (t-statistic < 1.96). This result could be interpreted as to accept the null hypothesis and rejects the alternative hypothesis (H_2), implying that integrity does not have a significant influence on audit result quality.

3.4.3. Hypothesis 3 Testing

Hypothesis 3 (H_3) in this research stated: "objectivity has a positive impact towards audit result quality". Based on Path Coefficients Analysis in table 2, it shows p-value of 0.534 (p-value > 0.05) and t-statistic 0.623 (t-statistic < 1.96). These results indicate that null hypothesis (H0) is accepted and that the alternative hypothesis (H_3) is rejected. These findings also confirm research done by Susilo & Widyastuti (2015) and Badjuri (2012), both confirmed that objectivity did not have a positive influence towards audit result quality.

3.4.4. Hypothesis 4 Testing

Hypothesis 4 (H_4) listed in this study is that competence has a positive influence towards audit result quality." Based on Path Coefficients Analysis in table 2 for competence variable, it shows a p-value of 0.000 (p-value < 0.05) and t-statistic 9.112 (t-statistic > 1.96). These results suggest rejecting the null hypothesis (H0) and accept alternative hypothesis (H_4) because it shows that competence has significant influence to audit quality result. This result is similar on research findings from Halim et al. (2014), Usman et al. (2014) Bouhawia et al. (2015), Deli et al. (2015), Dityatama (2015), Cahyono et al. (2015), and Nasriana et al. (2015), in which all of them confirmed that competence has significant effect towards audit quality.

3.4.5. Hypothesis 5 Testing

Hypothesis 5 (H_5) formulated in this research is "Independence has a positive influence towards audit result quality). Based on Path Coefficients Analysis in table 2 above for independence variable towards audit result quality, the p-value is 0.040 (p-value < 0.05) and t-statistic 1.064 (t-statistic > 1.96), suggesting rejecting null hypothesis (H_5) and accept alternative hypothesis (H5), implying that independence has a significant towards audit result quality. This research finding is similar to research from Suyono (2012), Halim et al. (2014), Usman et al. (2014), Cahyono et al. (2015), Deli et al. (2015), and Khasanah (2015), in which all of them confirmed that independence influence audit result quality.

3.4.6. Hypothesis 6 testing

Hypothesis 6 (H_6) stated in this research is "peer review, integrity, objectivity, competence, and independence simultaneously have a positive influence towards audit result quality." This testing uses ANOVA analysis using SPSS software version 20. Hypothesis 6 (H_6) will be accepted if confidence level <0.05 or f-value > f-table.

F-table = F (k; n-k) = F (5; 81) = 2.33

Analytical result of this hypothesis is described in table 3 as follows:

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3076.050	5	615.210	24.232	.000[b]
Residual	2031.032	80	25.388		
Total	5107.081	85			

Table 3: ANOVA Analysis
Source: Data Analysis (2017)

Based on table 3 above, confidence level for the influence of peer review, integrity, objectivity, competence, and independence simultaneously towards audit result quality is 0.000 (< 0.005), and the f-value is 24.232 (> f-table, 2.33). These numbers indicate that peer review, integrity, objectivity, competence and independence simultaneously have a significant influence on audit result quality. This result confirms to reject the null hypothesis and accept alternative (H_6) hypothesis.

3.4.7. Hypothesis 7 Testing

Hypothesis 7 (H_7) indicated in this research is "audit time is moderating influence peer review on audit result quality. From Path Coefficients Analysis in table 2, the t-value for moderating effect of peer review towards audit result quality is 1.372 (t-statistic < 1.96). It implies the interaction variable between peer review and audit time do not influence audit result quality. It confirms that there is no moderating relationship occurred, or, audit time variable is not the moderating variable for peer review influence towards audit result quality. Based on the result, therefore, the null hypothesis is accepted, and the alternative hypothesis (H_7) is rejected

3.4.8. Hypothesis 8 Testing

Hypothesis 8 (H_8) identified in this research is "audit time is moderating integrity towards audit result quality." Based on Path Coefficient analysis in table 2, it shows audit result quality has t-value of 0.804 (t-statistic <1.96). This result indicates that interaction variable between integrity and audit time does not influence audit result quality. Therefore, it is confirmed there is no moderating relationship occurred or audit time is not the moderating variable for integrity influence towards audit result quality. Based on the result, the null hypothesis is therefore accepted, and the alternative hypothesis (H_8) is rejected.

3.4.9. Hypothesis 9 Testing

Hypothesis 9 (H_9) that is formulated in this research is "audit time is moderating influence objectivity towards audit result quality. Path Coefficients Analysis in table 2 indicates t-statistic for moderating effect objectivity towards audit result quality is 0.449 (t-statistic < 1.96). This figure implies interaction variable between objectivity and audit time does not influence audit result quality. Furthermore, it confirms that there is no moderating relationship or audit time variable is not the moderating variable for objectivity influence towards audit result quality. Based on the result, the null hypothesis is accepted, and the alternative hypothesis (H_9) is rejected.

3.4.10. Hypothesis 10 Testing

Hypothesis 10 (H_{10}) listed in this research is "audit time is moderating influence competence towards audit result quality. Path Coefficients Analysis in table 2 indicates t-statistic for moderating effect objectivity towards audit result quality is 0.736 (t-statistic < 1.96). This figure implies interaction variable between competence and audit time does not influence audit result quality. Furthermore, it confirms that there is no moderating relationship or audit time variable is not the moderating variable for competence influence towards audit result quality. Based on the result, the null hypothesis is accepted, and the alternative hypothesis (H_{10}) is rejected.

3.4.11. Hypothesis 11 Testing

Hypothesis 11 (H_{11}) that is formulated in this research is "audit time is moderating influence independence towards audit result quality. Path Coefficients Analysis in table 2 indicates t-statistic for moderating effect objectivity towards audit result quality is 0.592 (t-statistic < 1.96). This figure implies interaction variable between independence and audit time does not influence audit result quality. Furthermore, it confirms that there is no moderating relationship or audit time variable is not the moderating variable for independence influence towards audit result quality. Based on the result, the null hypothesis is accepted, and the alternative hypothesis (H_{11}) is rejected. This finding supports research conclusion from Gasperz (2014), saying budget time does not influence to moderate relationship between auditor independence and audit quality.

3.4.12. Hypothesis 12 Testing

Hypothesis 12 (H12) formulated in this research is "audit time is moderating the effect of peer review, integrity, objectivity, competence, and independence simultaneously towards audit result quality. The analysis used in this H_{12} testing is ANOVA using SPSS version 20. H_{12} will be accepted if confidence level < 0.05 or f-statistic > t-table.

F table = F (k; n-k) = F (5; 81) = 2.33

Output from data analysis is shown in Table 4 as follows:

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3288.538	10	328.854	13.563	.000[b]
Residual	1818.544	75	24.247		
Total	5107.081	85			

Table 4: ANOVA Analysis for Moderating Variables
Source: Data Analysis (2017)

Based on table 4 above, significance value for peer review, integrity, objectivity, competence, and independence simultaneously towards audit result quality using audit time as moderating variable is 0.000 and f-value of 13.563 (> F table 2.33). This result implies that peer review, integrity objectivity, competence and independence simultaneously and audit time as moderating construct has a significant influence towards audit result quality. Based on this result, then the null hypothesis is rejected, and the alternative hypothesis (H_{12}) is accepted.

3.5. Managerial Implications

This research can be used as a reference for Inspectorate General Ministry of Marine Affairs & Fisheries in defining decisions to improve auditor's performance. Based on this research, it is found that peer review, competence, and independence in partial are variables that can influence audit result quality. Besides peer review, competence and independence variables that affect audit result quality partially, this research also acquired the fact that all independent variables (peer review, integrity, objectivity, competence and independence, simultaneously and influence audit result quality, both moderated or non-moderated by audit time.

Along with the result, this research recommends managerial leader of Inspectorate General Ministry of Marine Affairs and Fisheries to improve auditors' quality by strengthening their integrity, objectivity, competence, and independence. This effort can also be made through training and workshop, seminars, or technical assistance on topics related to auditing. This research emphasises peer review is the most significant towards audit result quality, both partially and simultaneously with other variables, and therefore by conducting routine & consistent peer review, it would able to guarantee audit result quality.

4. Conclusion

Based on this research analysis, there are several conclusions obtained:
   i. Peer Review, competence & independence are factors partially capable of influencing Internal Audit quality.
  ii. Peer review, integrity, objectivity, competence and independence can simultaneously affect internal audit quality, both or without audit time moderation.
 iii. Audit time is not a moderating variable for moderating partial influence of peer review, integrity, objectivity and competence towards internal audit result quality.
  iv. Relevant activities to do to enhance audit result quality are workshops, seminars and technical assistance on audit-related topics and could improve auditor's integrity, objectivity, competence, and independence.

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