Professional Considerations for Audit Risk in Creating Smart Governance in Indonesia

Made Sudarma[1] and Lely Kumalawati[2]

Abstract

This study aims to determine how different audit considerations determine risk between certified auditors and non-certified auditors. This study uses an empirical study approach using an experimental method. Experiments without control (natural) are carried out through audit cases encountered in the field during the audit process. This study's participants were 52 auditors with two categories, namely 26 participants with certified auditors and 26 participants for non-certified auditors. Data collection using the deployment of instruments after the field audit process is carried out. Based on the one-way analysis of the Annova test data, it shows that there are significant differences in audit considerations in determining risk between certified auditors and non-certified auditors. Certified auditors have more professional competence in providing audit considerations in determining risk. The problem of work culture for uncertified auditors is a residual risk that is difficult to detect and can lead to audit failure. Professional certified auditors' competence in providing risk considerations will encourage the formation of smart governance, given that auditors are a synergistic catalyst in organizational processes. Practical recommendations to the leadership of a government institution, especially state universities in Indonesia, that the internal auditors in a university, together with the leadership and the authorized departments, need to establish a risk map in a university leadership provision auditors. To always improve competence in the form of expertise certification training in the audit field. Professional judgment in determining audit risk by looking deeper into the theory of judgment decision making (Connolly, Arkes, and Hammond, 2000). The research approach used a study conducted by Fukukawa and Mock (2011). This study uses internal auditors at state universities in Indonesia, where an experiment is designed to determine internal audit risk. The determination of audit risk will ensure that the audit is right on target, effective, and efficient.

***JEL classification**:* G32, H38, M42

Keywords: professional auditor judgment, risk, internal audit, Indonesia

[1] Faculty of Economics, University of Brawijaya, Indonesia
[2] Doctoral Program in Accounting, Universitas Brawijaya, Indonesia

Introduction

The basic concept of risk-based auditing states that auditors allocate more resources to address significant risks and fewer resources when risk is lower (Bell, Peecher, and Solomon, 2005; Rittenberg and Schwieger 2005; Knechel 2007). A risk-based audit approach leads to a more effective and efficient audit (Bell, Peecher, and Solomon, 2005; Public Company Accounting Oversight Board (PCAOB), 2007, Fukukawa and Mock; 2011). Research on audit risk in recent years, more and more emphasis has been placed on assessing risk by auditors. For example, a more holistic "top-down" audit approach that focuses on the client's business risks has been adopted internationally by public accounting firms (KAP). The process of developing audit technology and most audit procedures are gradually considered a risk assessment procedure (Bell et al. 2005). Recent auditing standards, including ISA 300, 315, and 330 (AASB 2006a, 2006b, 2006), US Public Company Accounting Oversight Board No. 5 (PCAOB 2007), and SAS No. 104–111 (AICPA 2006a, 2006b, 2006c), re-emphasize the importance of risk assessment in auditing. Risk-oriented audit practice in recent years, if auditors fail to assess client risk properly, erroneous conclusions can occur, and even if auditors assess client risk appropriately, it is difficult to obtain effective quality control and to monitor the audit team effectively if auditors fail to disclose and communicate risk assessments accurately.

Professional judgment is considered as the foundation of accounting and auditing (Trotman, 2006: 6). The accounting and auditing disciplines are increasingly recognizing the attributes of judgment decision making (JDM) as very important in this profession because individuals such as managers, auditors, financial analysts, accountants, and standard setters make important judgments and decisions. The need for auditors to "use professional judgment" appears 244 times in International Standards on Auditing (Pillar, 2005); and International Financial Reporting Standards (IFRS), which are principles-based, requiring the use of professional judgment as of the norm.

Research on audit risk assessment has been carried out (Allegrini and D'Onza, 2003; Castanheira, Rodrigues, and Craig, 2010; Fukukawa and Mock, 2011; Kachelmeier, Majors, and Williamson, 2014). Allegrini and D'Onza (2003) 's research aims to achieve an overall view of the state of internal auditing in large Italian companies, primarily focused on risk assessment practices and implementing a risk-based approach to the audit process. Research by Castanheira, Rodrigues, and Craig (2010) analyzed company-specific factors related to the implementation of risk-based auditing. This study tries to explore the role of internal audit in enterprise risk management (ERM). The research findings of Castanheira, Rodrigues, and Craig (2010) state that internal audit is more proactive in implementing ERM in smaller organizations and is more important in the financial industry and the private sector.

Fukukawa also researched audit risk assessment and Mock (2011), where audit considerations are important regarding client selection, audit program planning, and risk assessment. The Fukukawa and Mock (2011) study examines whether the auditor's risk assessment is influenced by a risk assessment approach and firm framing. The risk assessment approach is manipulated by giving rise to confidence versus probability-based risk assessment. Statement framing is manipulated by stating the financial statement statements to be examined positively versus negatively. Four measures of the risk of material misstatement were compared, including one based on Cobb and Shenoy (2003a, 2003b, 2006) of transforming beliefs into "probabilities." Both the risk assessment approach and the effects of framing firm on the auditor's risk assessment are observed. Given these significant differences, the measures of risk that the auditor chooses to focus on and how assertions are determined are shown to be important audit choices because they can affect the effectiveness and efficiency of the audit.

Some of the above studies are mostly applied to large companies (Allegrini and D'Onza; 2003), using experienced internal auditors (Allegrini and D'Onza; 2003), conducted by external

auditors from the big 4 Public Accounting Firm (KAP) (Fukukawa and Mock, 2011). The researcher believes that this research's urgency (priority) is; the determination of internal audit risk is an urgent and important need for government institutions in Indonesia. As far as the researcher observes, there are still very limited studies regarding the determination of internal audit risk in Indonesian government institutions because no regulations are requiring all government institutions to carry out risk-based audits, while risk-based audits are a necessity for Indonesian government institutions to ensure audits that are right on target. Effective and efficient. Researchers are interested in further developing Fukukawa and Mock's (2011) study by applying it to Indonesia's government institutions, especially in education, by providing additional research arguments. The findings and innovations that are the target of this study are experimental studies on auditors to assess audit risk, which are still minimal by most Indonesia researchers.

Various understandings related to the development of research undertaken, the importance of auditor professionalism, both from the perspective of experienced and inexperienced auditors, and certified and uncertified auditors so that they can easily carry out audit work and determine audit risk realize smart governance. The study was conducted to determine how to determine audit risk using the professional judgment of auditors. The auditor's professional judgment will produce different results when the auditor is experienced and inexperienced, and who has been certified and is not.

Literature Review

Auditor Professional Judgment, Audit Risk, and Smart Governance

Audit judgment and decision making almost always take place in an environment of risk and ambiguity. The concept of risk is well developed in the economic, decision-making, and auditing literature using multiple definitions. COSO describes risk assessment as a three-stage process; first, the estimation of the significance of the risk; second, assess the likelihood or frequency of risk occurring, and third; consider how risks are managed and assess what actions should be taken. The COSO internal control framework also suggests that risk should be considered from three perspectives: Company risk due to external factors; Company risk due to internal factors; Risk Analysis.

McNamee's (1996) study also defines risk assessment as a three-step process consisting of risk identification (what is the risk), risk measurement (how big the risk is), and risk prioritization (which risk is most important). McNamee (1996) suggests calculating risk factors for "macro risk assessments" and using a weighted or sequenced matrix for "micro risk assessments". A macro risk assessment looks at the risks faced by the company as a whole (main objectives, products, processes, problems, and so on), while "micro risk assessment" concerns the internal auditor's audit program and testing strategy, that is, which areas are being audited and the level and detail involved. Needs to be applied.

The audit risk that has been determined in an institution concerning smart governance is to assist internal auditors in carrying out audits that are right on target, effective, and efficient, so that smart governance is created in the institution concerned. Smart governance is related to the balance between leadership behavior in an audit and task orientation in realizing good governance, following established standards, and maximizing the potential that is owned and minimizing the problems' constraints. To realize good governance, an ideal leadership model is needed so that local actors' role in realizing good governance is needed.

Mock and Vertinsky (1985) discuss many of the broader notions of risk and risk assessment processes that apply to accounting and auditing. Mock and Vertinsky (1985) use the general idea of risk as to the likelihood of an undesirable outcome or, more specifically, the risk of material misstatement (RMM). Auditors can misstate the risk of a misstatement by

focusing on observable non-strategic risk factors that indicate that certain accounts are more likely to be misstated than others and fail to appreciate the accompanying implications unobservable strategic risk. Which arises when financial reporting managers anticipate that auditors will allocate resources based on non-strategic risk factors (Fellingham and Newman 1985). By correcting non-strategic risk factors and allocating resources accordingly, auditors can create fraud among apparently low-risk accounts.

High-quality Risk Based Internal Auditing (RBIA) ensures that critical risks are accurately identified and properly evaluated and reported by internal auditors. According to Griffiths (2006), RBIA directs scarce internal audit resources to examine responses to risks that present serious threats. Griffiths (2006) argues that current regulations require directors to ensure this risk is properly managed. RBIA thus provides directors with an assurance that this happens or a warning that it does not. The RBIA approach allows internal audit to know in advance where the weaknesses are and where the guarantees and advice are. By focusing efforts on the systems that matter most, internal auditors achieve more with fewer resources making them more effective.

Professional assessment framework

The professional appraisal framework is a systematic process by which accountants and auditors, who benefit from the qualification level of knowledge, experience, and realism, can adopt accounting subjects based on the realities and conditions available in the accounting standards framework to make comments (Asadi and Nemati, 2014). Empirically, it has been proven that skills and arts (special skills) affect audit reporting quality in a particular profession. Environmental conditions, too, can influence professional commentary. The auditor's comments can be influenced by different conditions (Rahimiyan and Hedayati, 2013).

Professional uncertainty, which is mandatory based on professional auditing standards, is an attitude consisting of the mind of the questioner (awareness of conditions that can be a symptom of deviation from fraud or error) and criticizing the evaluation of audit evidence. Professional uncertainty is not the equivalent of professional judgment; it is a sub-category of professional judgment. In institutions that provide professional services consulting with others such as work team members, experts, and all other professional experts is an important part of the continuous improvement of the quality of the assessment and the appropriate use of uncertainty. Professional judgment is influenced by several key factors (Kiyan, 2004): (1) Audit Work Environment, (2) Auditor Features, (3) Audit Evidence, (4) Retrieval Process.

Audit Risk

Given that audit risk is the risk that the auditor may express an inadequate audit opinion when the financial statements are materially inaccurate, audit risk is a complex concept in the entire audit process. According to the IAASB Glossary, audit risk is defined as follows: "The risk that the auditor discloses an inappropriate audit opinion when the financial statements are material misstatement. Audit risk is a function of material misstatement and detection risk". Inherent risk is the probability of failure in the absence of adequate controls. Control risk is the probability of error versus the presence of internal controls, and the risk of non-disclosure or detection exists independently of the auditor's control. Auditors can assess inherent risks and control, but cannot influence them. In any case, the auditor can control for detection risk, change the purpose, the timing of execution, and details of revised tests. In addition to this kind of audit risk, the auditor is at risk of loss and disruption of his professional practice due to

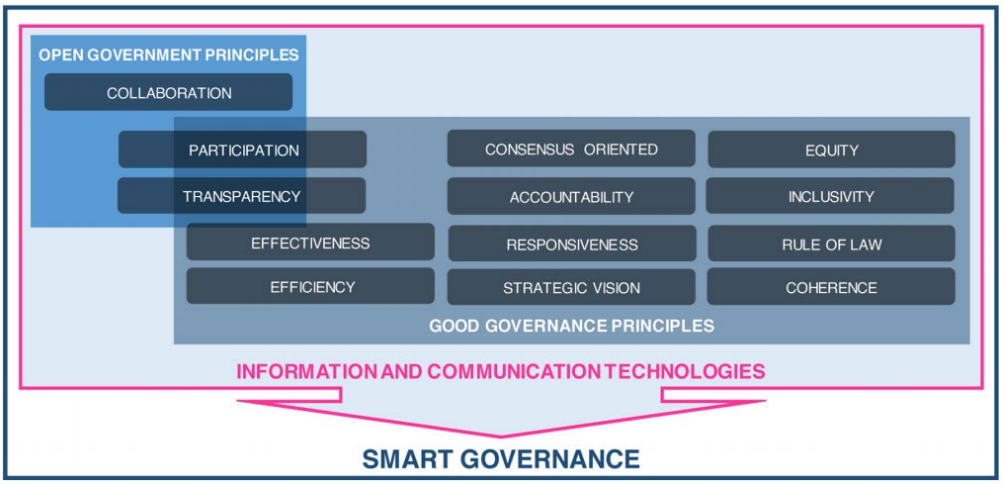
litigation, adverse publicity, or other events related to the financial statements that the auditor has reviewed and the audit report that was complained of.

Smart Governance Concept

According to Castells (2011), this is an increasingly complex and dynamic context, whose productivity and competitiveness in cities depend on the ability to produce, process, and apply knowledge-based information, making the influence of Information and Communication Technology (ICT) unquestionable. Therefore, information becomes an important element that can be applied to solutions to urban problems, because information related to land is understood by Dale and McLaughlin (2000) as a very valuable commodity that can be exploited in various ways, including public decision-making processes.

Facing the trend of accelerating urban growth, innovation allows governments to rethink traditional approaches to solving urban problems, enabling them to deal, in a sustainable manner, with the demand for resources such as transportation, water, waste, energy, among others (Ojo et al., 2016). From this perspective, in the 90s, a movement called Smart Growth marked the origins of the Smart City concept (Harrison and Donnelly, 2011).

Considering the influence of ICTs on the evolution of MTC and Smart Governance, this study aims to contribute to advancing the state-of-the-art in the sphere of smart cities and city management. Its main purpose is to analyze the availability of open area data on the Internet to measure and qualify Brazil's geoportal capital. In this way, this study seeks to evaluate the available cadastral and thematic information that characterizes MTC and identifies the effectiveness of information transparency and collaborative participation to improve aspects of Smart Governance. Thus, it becomes possible to determine the gaps that need to be filled concerning the geoinformation available for the interface between Government and citizens. Therefore, this research will contribute to generating new perspectives that aim to improve instrumentation in terms of geotechnology technology, including MTC, as a means to achieve good city governance, namely Smart Governance in its main aspects (open, transparent, accountable, fair, responsive, participative, and collaborative).



Source: Graham, Amos and Plumptre (2003), Harrison et al. (2012); Gross and Źróbek (2015) and Klimach, Dawidowicz and Źróbek (2018).

Methodology

Design This study uses laboratory experiments to test the hypotheses that have been formulated. The experiment was designed to test hypothesis 1, using a 1x2 design between subjects. Experiments are designed using one treatment in two different conditions: audit risk and the auditor's professional judgment. Each subject was randomized into 1 of 2 designated treatment conditions. There are 2 treatment conditions designed based on the manipulation of the dependent variable. Random assignment of subjects to each treatment was carried out so that each individual could be compared with the dependent variable. This study distinguishes between certified and uncertified internal auditors taken from State Universities of Public Service Agency (BLU) in Indonesia. Each participant is randomly assigned to a condition to determine audit risk in personnel spending, goods and services expenditures, and capital expenditures. In that task, participants make a series of repeated risk assessments. An audit case is developed and discussed with the internal auditors at one college deemed to have carried out the internal audit management well, who participated to ensure its validity. Research is carried out by developing research instruments that use a qualitative, quantitative, or combination approach to determine audit risk. Research using the ANOVA approach in hypothesis testing. ANOVA 1x2 test, audit risk as an independent variable and professional auditor judgment are dependent variables.

Results and Discussion

Internal auditors in this study are internal auditors who work at the Public Service Agency (BLU) in Indonesia. According to the Government Regulation of the Republic of Indonesia Number 23 of 2005, the Public Service Agency (BLU) itself is an agency within the Government that was formed within the Government which was formed to provide services to the public in the form of providing goods and/or services that are sold without prioritizing for profit and in carrying out its activities are based on the principles of efficiency and productivity.

Internal auditors within the BLU work scope are the Internal Supervisory Unit (SPI) as stipulated in the Regulation of the Minister of Finance of the Republic of Indonesia Number 200 / PMK.05 / 2017 concerning Internal Control Systems in Public Service Bodies. In accordance with Article 4, it is stated that the term SPI can be adjusted to the nomenclature applicable to the Public Service Agency (BLU) concerned. The general objective of the implementation of the Republic of Indonesia Regulation Number 200 is to realize the governance of the Public Service Agency (BLU), which can increase the accountability and transparency of the financial management of the Public Service Agency (BLU) and provides guidelines and standardization of control systems at the Public Service Agency (BLU).

Internal audit helps an organization achieve its goals by taking a systematic and disciplined approach in evaluating and increasing the effectiveness and efficiency of risk management, control, and governance processes. The Minister of Finance Regulation (PMK) is intended to provide space for optimizing SPI's role through guidelines for implementing duties and standardization and qualifications of its personnel. SPI reporting is addressed to the Head of the Public Service Agency (BLU) and the Supervisory Board. To maintain their professionalism and independence, SPI personnel and their membership requirements are regulated, such as concurrent duties and positions in the Public Service Agency (BLU) operational unit, except for duties and positions in the compliance and risk management function. This is aimed at maintaining the independence of SPI's performance. SPI's head must have sufficient auditing expertise, which is recognized in the internal auditor profession by obtaining the appropriate professional certification.

Validity and Reliability Test

This study's data are primary data collected by distributing instruments to groups of certified and uncertified internal auditors. The test steps carried out are to test the audit risk professional consideration research instrument's validity and reliability. In Table 1, the validity test data is presented using SPSS. In the table, it can be seen that there are 12 question items about determining audit risk. Based on the validity test, it can be seen that all question items have a Sig value. (2-tailed) <0.05 and Pearson Correlation is positive. Based on this value, it is concluded that the entire question item is valid so that the entire question item in the instrument can be used in this study.

Table 1. Validity Test

Correlations

		Y.1	Y.2	Y.3	Y.4	Y.5	Y.6	Y.7	Y.8	Y.9	Y.10	Y.11	Y.12	Resiko Audit
Y.1	Pearson Correlation	1	.574**	.566**	.361**	.507**	.392**	.572**	.692**	.570**	.313*	.471**	.379**	.781**
	Sig. (2-tailed)		.000	.000	.008	.000	.004	.000	.000	.000	.024	.000	.006	.000
	N	52	52	52	52	52	52	52	52	52	52	52	52	52
Y.2	Pearson Correlation	.574**	1	.419**	.330*	.366**	.491**	.489**	.409**	.495**	.343*	.477**	.251	.699**
	Sig. (2-tailed)	.000		.002	.017	.008	.000	.000	.003	.000	.013	.000	.073	.000
	N	52	52	52	52	52	52	52	52	52	52	52	52	52
Y.3	Pearson Correlation	.566**	.419**	1	.386**	.345*	.538**	.530**	.556**	.541**	.417**	.517**	.276*	.745**
	Sig. (2-tailed)	.000	.002		.005	.012	.000	.000	.000	.000	.002	.000	.048	.000
	N	52	52	52	52	52	52	52	52	52	52	52	52	52
Y.4	Pearson Correlation	.361**	.330*	.386**	1	.248	.503**	.551**	.566**	.278*	.140	.312*	.188	.601**
	Sig. (2-tailed)	.008	.017	.005		.077	.000	.000	.000	.046	.323	.024	.182	.000
	N	52	52	52	52	52	52	52	52	52	52	52	52	52
Y.5	Pearson Correlation	.507**	.366**	.345*	.248	1	.415**	.577**	.303*	.375**	.317*	.433**	.193	.628**
	Sig. (2-tailed)	.000	.008	.012	.077		.002	.000	.029	.006	.022	.001	.171	.000
	N	52	52	52	52	52	52	52	52	52	52	52	52	52
Y.6	Pearson Correlation	.392**	.491**	.538**	.503**	.415**	1	.538**	.329*	.474**	.416**	.422**	.291*	.727**
	Sig. (2-tailed)	.004	.000	.000	.000	.002		.000	.017	.000	.002	.002	.036	.000
	N	52	52	52	52	52	52	52	52	52	52	52	52	52
Y.7	Pearson Correlation	.572**	.489**	.530**	.551**	.577**	.538**	1	.609**	.486**	.244	.572**	.329*	.800**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.082	.000	.017	.000
	N	52	52	52	52	52	52	52	52	52	52	52	52	52
Y.8	Pearson Correlation	.692**	.409**	.556**	.566**	.303*	.329*	.609**	1	.309*	.182	.441**	.307*	.690**
	Sig. (2-tailed)	.000	.003	.000	.000	.029	.017	.000		.026	.196	.001	.027	.000
	N	52	52	52	52	52	52	52	52	52	52	52	52	52
Y.9	Pearson Correlation	.570**	.495**	.541**	.278*	.375**	.474**	.486**	.309*	1	.165	.335*	.478**	.691**
	Sig. (2-tailed)	.000	.000	.000	.046	.006	.000	.000	.026		.243	.015	.000	.000
	N	52	52	52	52	52	52	52	52	52	52	52	52	52
Y.10	Pearson Correlation	.313*	.343*	.417**	.140	.317*	.416**	.244	.182	.165	1	.417**	.260	.524**
	Sig. (2-tailed)	.024	.013	.002	.323	.022	.002	.082	.196	.243		.002	.063	.000
	N	52	52	52	52	52	52	52	52	52	52	52	52	52
Y.11	Pearson Correlation	.471**	.477**	.517**	.312*	.433**	.422**	.572**	.441**	.335*	.417**	1	.248	.691**
	Sig. (2-tailed)	.000	.000	.000	.024	.001	.002	.000	.001	.015	.002		.076	.000
	N	52	52	52	52	52	52	52	52	52	52	52	52	52
Y.12	Pearson Correlation	.379**	.251	.276*	.188	.193	.291*	.329*	.307*	.478**	.260	.248	1	.522**
	Sig. (2-tailed)	.006	.073	.048	.182	.171	.036	.017	.027	.000	.063	.076		.000
	N	52	52	52	52	52	52	52	52	52	52	52	52	52
Resiko Audit	Pearson Correlation	.781**	.699**	.745**	.601**	.628**	.727**	.800**	.690**	.691**	.524**	.691**	.522**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	52	52	52	52	52	52	52	52	52	52	52	52	52

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Based on Table 1, it is known that there were no cases (52 participants) from the instrument results of the distribution of data released in the test (excluded 0%). This means that all data can be used in the test. This test covers the overall reliability of the question items. On the other hand, Cronbach's Alpha value is known to be 0.888. This value is more than 0.60. This Cronbach's Alpha value is intended to assess the question items' reliability, namely as many as 12 questions. Based on the test results, the test results show that all question items are reliable (12-item questions).

Table 2. Reliability

Cases		N	%
	Valid	52	100.0
	Excluded[a]	0	.0
	Total	52	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.888	12

Descriptive Statistical Analysis

Descriptive analysis is intended to see the characteristics of the data, in which this study uses the mean, standard deviation, maximum value, and minimum value of the audit risk assessment professional considerations for each participant, totaling 52 participants, namely: certified and non-certified auditors. Participants tested were 26 for professionally certified auditors and 26 for non-certified auditors, respectively.

Table 3 Statistics Descriptives Research Variables Professional Considerations for Audit Risk Determination

					95% Confidence Internal for Mean			
	N	Mean	Std Deviation	Std, Error	Lower Bound	Upper Bound	Min\	Max
Certified	26	45.000	7.39022	1.42225	42.0765	47.9235	32.00	60.00
Non-Certified	26	38.7600	1.51028	1.51028	35.6429	41.8771	22.00	49.00
Total	52	42.0000	8.03668	1.11449	39.7626	44.2374	22.00	60.00

Based on Table 3, it can be seen that the certified auditor participants have their respective values: the minimum value of 32.00 and a maximum value of 60.00. The average value is 45, with a standard deviation of 7.39022. Meanwhile, the non-certified auditors have respective values: minimum value of 22.00 and a maximum value of 49.00. The average value (mean) is 38.7600, with a standard deviation of 7.55138. Based on the data above, it can be compared that the certified auditor has a higher mean data and a lower standard deviation value

than the non-certified auditor participants. It can be concluded that the certified auditor participants have a deeper ability to provide professional judgment in determining audit risk.

Homogeneity of Variances test

The homogeneity of variances test is used to see the data's homogeneity from the existing variances as one of the ANOVA assumption bases. The purpose of this homogeneity test is as a reference and condition for determining the next statistical decision (Widiyanto, 2010: 51). Data variance can be tested using the Levene test. When the value is sig. > 0.05, the data is assumed to have the same variance. With the sig value <0.05, the data is assumed to have an unequal variance.

Table 4. Homogeneity Test

		Levene Statistic	df1	df2	Sig.
Risk Audit	Based on Mean	.000	1	50	.990
	Based on Median	.009	1	50	.924
	Based on Median and with adjusted df	.009	1	49.907	.924
	Based on trimmed mean	.005	1	50	.943

Based on table 4, the homogeneity test shows that the significance value is sig. > 0.05, that is 0.9. This value indicates that the variance of two or more population groups is the same so that the data can be tested at a later stage.

Hypothesis test

Based on the descriptive test results presented in Table 4.3, based on the mean value of the two participants, namely certified auditors, and non-certified auditors, it is concluded that there are absolute differences regarding professional judgment in risk assessment. However, to see whether this difference is real statistically, the second part's output must also be seen, namely the One-Way ANOVA test as a hypothesis test.

Table 5. Hypothesis Test Table

ANOVA					
Risk Audit					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig**
Between Groups	505.440	1	505.440	9.063	.004
Within Groups	2788.560	50	55.771		
Total	3294.000	51			

Based on Table 5 above, it can be seen that the sig. <0.05, which is 0.004, indicates a significant difference between the professional judgment of professionally certified auditors and those not professionally certified to determine audit risk. This means that H0 is rejected and accepts H1.

Discussion

Based on the ANOVA test results above, it can be concluded that a certified auditor has a better professional judgment in determining audit risk when compared to an uncertified internal auditor. There are significant differences in professional judgment in determining audit risk between certified and non-certified internal auditors. A certified auditor has more experience and more flying hours than a non-certified auditor. Good professional judgment will be obtained through experience and hours of experience so that the improvement in his ability to identify, assess, and respond to risks will be greater.

Professional standards in providing a professional certification program for auditors require the auditor's experience factor in their profession to get upgrading through the certification program through workshops and examinations. In getting the professional certification test requirements, of course, you must meet the requirements and professional standards. This existence certainly greatly supports the ability of auditors who have taken the certification exam. This ability will certainly be attached to the auditor's judgment in carrying out all the audit processes.

All stages of the audit process depend heavily on the auditor's professional judgment in determining the risk level and how to respond appropriately to risk. As stated in ISA 200, the auditor's professional judgment is affected by applying relevant knowledge and experience during the engagement. Determination of audit risk is related to three stages of the audit, namely: identifying risks, assessing and responding to risks. So, thus professional judgment is a determinant in reducing the occurrence of audit failures.

In the internal audit process, an auditor is required to (1) compensate for management deficiencies of control due to the development of organizational complexity; (2) maintaining a conducive organizational culture; (3) has a support function in monitoring and making improvements to risk management and internal control; (4) become a training ground for future managers; (5) collaborating with external auditors to expand the scope of the audit (Sarens and De Beelde, 2006). One of the most important elements for an internal auditor is monitoring and improving risk management and internal control.

Professional Judgment in Determining Risk Based on Agency Theory

Adams (1994) states that in general, researchers use agency theory in explaining the role and function of external audit, but in relative terms, agency theory can explain the existence, rules of the game, and internal auditors' responsibilities in carrying out their functions and roles as part of management. The concept of agency development in government institutions such as BLU itself generally refers to the theory of Osborne (1992) and Denhart and Denhart (2003) regarding the separation of authority in government institutions.

The application of Government Regulation Number 23 of 2005 regarding BLU is applying the concept of agencification, which has been widely practiced in foreign countries. The concept of agencification is based on the basic idea of separation of responsibilities between the regulator (steering), which in this case is the Government and the holder of the operational run (rowing), in this case, the BLU Institution itself. The separation of responsibilities is intended so that the regulator's focus is on building regulatory quality and free from the mix of operational service problems. On the other hand, operational function

holders can focus on implementing their functions without overlapping problems with planning and discussions with the legislature (Siringoringo, 2017). This agency concept is trying to orient public sector institutions' services to a professional, private vision, as in NPM (New Public Management).

The Government is the holder of the regulation (regulator), and the institution is the executor who provides good services to the community. In this BLU institution, there is still confusion in the concept of agency, therefore Siringoringo (2017) views this concept as an agency. Redefining stakeholders is essential for the effectiveness and efficiency of BLUs. On the other hand, every line of business run by the Government is community ownership.

The existence of this agency relationship will certainly affect the work concept of internal auditors who work at the BLU, nominally referred to as SPI (Internal Supervisory System). One of the efforts that must be made by internal auditors is to build good governance so that good and accountable services are achieved to the public. Paradigmatically, it is clear that the role of the internal auditor in the BLU is to envision independent supervision in providing catalysts for the institution to answer the community (principal).

The research results show that auditors who have professional certificates have more expertise than auditors who do not have professional certificates. As it is known, that the function holders and roles of SPI in BLU are still held by several personnel, including civil servants, who are not audit professionals in their fields. As explained above, there are still agency problems that require a redefinition of the pattern of agency relationships in institutions under the auspices of Government, which also require a redefinition of who are stakeholders. This existence will certainly affect the internal auditor's independence aspect in determining and making his main decisions in determining the aspects of audit risk.

Based on the explanation above, it can be concluded that there are general agency problems that occur within the BLU, which of course, will affect the scope of work and assignment of internal auditors (Siringoringo, 2017). Seeing the existence of internal auditors held by civil servants and generally not certified will have the greatest possibility of failure to identify residual risk related to organizational culture issues. Failure to identify this residual risk factor will affect its success in risk identification, risk assessment, and response to existing risks (inherent risk, control, or detection). Residual risk is a residual risk, but it is an inherent thing in all processes and activities (Plamondo, 2000), which can be toxic in organizations.

Compared to certified auditors, they will have adequate knowledge and have strong ethical ties to the profession. These tools equip auditors to take adequate professional action and judgment, including one in determining risk. A certified auditor will ethically have more ties to the profession he has. The awareness of being independent of the institution will be stronger than non-certified auditors, more capable of exercising control over the control system and its problems. So that he is better able to position himself as a catalyst for the institution, rather than seeing it as an integral part of the institution. This ability will help them to be able to break away from the intervention of institutional culture and put better control over organizational control.

An organizational culture that is not controlled by good aspects of internal control will result in an undetectable residual risk. Then the auditor's ability to determine control risk is an important thing needed to avoid audit failure. The tools of knowledge and professional ethics that bind internal BLU auditors are needed in building insights and awareness, especially concerning the auditing profession, namely, as a holder of public trust, in this case, the main principal holder is society. This is expected to better build a knowledge framework in the context of professional judgment. Thus, determining audit risk - which in the context of risk-based internal audit - is important in the entire audit process, can be identified, analyzed, and responded to appropriately (Fukukawa 2011).

Professional Judgment in Determining Risk for the Realization of Smart Governance.

Risk management is one of the management targets in achieving good governance. Supervision of risk management and the risk management function will facilitate internal auditors in determining risk synergistically. Internal auditors can make sufficient integration for a good governance framework (Boecker et al., 2011).

In encouraging the achievement of efficiency and effectiveness of internal auditors' work, the determination, assessment, and risk response are the keys to almost the audit assignment's entire work process. Risk identification must be oriented towards obstacles that can weaken organizational functions in achieving BLU goals. Good risk identification is the key to finding the right problems in the organization. Based on this risk identification, the auditor can determine the level of risk to face based on his professional judgment. How and how much risk is assessed by the auditor will determine the priority scale of the response that must be taken and decided.

The professional judgment of the internal auditor will greatly determine the course of BLU organizational governance. Without good professional judgment, it can cause auditors' failure to perform supervisory functions, determine the priority scale, and mean failure to consider taking certain actions.

Based on the hypothesis testing results, which states that there are significant differences between certified auditors and non-certified auditors, it is necessary to improve the knowledge development for non-certified auditors. Through the knowledge and tools of professional expertise provided, it is hoped that it can encourage a good process in running the BLU organization.

Conclusion

Based on the results and discussion of the one-way ANOVA test on differences in professional judgment in determining audit risk between certified and non-certified auditors, the following conclusions can be drawn:

1. There is an absolute difference between audit judgment in determining audit risk on certified and non-certified auditors based on a descriptive analysis test. This test's results were also verified by the one-way ANOVA test, which stated that this absolute difference was statistically significant, as indicated by the sig value. 0.004, so the value is sig. <0.005. These results indicate the rejection of the hypothesis H0 and accept the hypothesis H1.
2. Professional judgment failure in identifying residual risks arising from organizational culture's effects may occur due to agency relationship problems that are very vulnerable to arise from internal auditors who are not professionally certified and have a background in Civil Servants (PNS).
3. The certified auditor has a role based on the professional certification program's knowledge and skills based on the results. His professional ethics drive can encourage auditors' awareness of their professional judgment to determine risks and ensure risk management has been carried out properly. The catalyst for the role of the internal auditor will certainly encourage smart governance.

References:

Abbott, L. J., Parker, S., & Peters, G. F. (2010). Serving two masters: The association between audit committee internal audit oversight and internal audit activities. Accounting Horizons, 24(1), 1-24.
https://doi.org/10.2308/acch.2010.24.1.1

Allegrini, Marco., & D'Onza, Giuseppe. (2003). Internal auditing and risk assessment in large Italian companies: an empirical survey. International Journal of Auditing, 7, 191-208.
https://doi.org/10.1046/j.1099-1123.2003.00070.x

Almer, E., Cannon, N., & Kremin, J. (2018). The impact of leadership style on auditor job outcomes: Portland State University, and Texas State University

Alzebab, Abdulaziz. 2015. The Impact of Culture on the Quality of Internal Audit: An Empirical Study. Journal of Accounting, Auditing & Finance. Vol. 30(1) 57-77.
https://doi.org/10.1177/0148558X14549460

American Institute of Certified Public Accountants (AICPA). (1983). Audit risk and materiality in conducting an audit. SAS No. 47. New York, NY: AICPA.

American Institute of Certified Public Accountants (AICPA). (2006a). Audit evidence. SAS No. 106. New York, NY: AICPA.

American Institute of Certified Public Accountants (AICPA). (2006b). Audit risk and materiality in conducting an audit. SAS No. 107. New York, NY: AICPA.

American Institute of Certified Public Accountants (AICPA). (2006c). Performing audit procedures in response to assessed risks and evaluating the audit evidence obtained. SAS No. 110. New York, NY: AICPA.

Anderson, U. L., Christ, M. H., Johnstone, K. M., & Rittenberg, L. E. (2012). A post-SOX examination of factors associated with the size of internal audit functions. Accounting Horizons, 26(2), 167-191.
https://doi.org/10.2308/acch-50115

Andiola, L. M., Bedard, J. C., & Kremin, J. (2018). On-the-job coaching quality and turnover intentions in a multiple supervisor context: Does one "bad apple" spoil the bunch? Virginia Commonwealth University, Bentley University, and Portland State University
https://doi.org/10.2139/ssrn.3449185

Arena, M., & Azzone, G. (2009). Internal audit effectiveness: Relevant drivers of auditees satisfaction. International Journal of Auditing, 13(1), 43-60.
https://doi.org/10.1111/j.1099-1123.2008.00392.x

Asadi, Morteza; Nemati, Mohammad. (2014). Professional Judgment in Audit, Quarterly of official Auditor, No.27, series, P.39. By Jenny Goodwin. (2000). Resolving Auditor-Client Conflicts Concerning Financial Statement Issues, November 2000

Asare, S. K., Davidson, R. A., & Gramling, A. A. (2008). Internal auditors' evaluation of fraud factors in planning an audit: The importance of audit committee quality and management incentives. International Journal of Auditing, 12(3), 181-203 https://doi.org/10.1111/j.1099-1123.2008.00379.x

B. Aceski, B. Trajkoski. Internal and External Audit (in Macedonian). Prilep: Faculty of economics, 2004.

Bell, T. B., M. E. Peecher, & I. Solomon. (2005). The 21st-century public company audit. Conceptual elements of KPMG's global audit methodology. The University of Illinois at Urbana-Champaign, IL: KPMG.

Carcello, J. V., Hermanson, D. R., & Raghunandan, K. (2005a). Changes in internal auditing during the time of the major US accounting scandals. International Journal of Auditing, 9(2), 117-127. https://doi.org/10.1111/j.1099-1123.2005.00273.x

Castanheira, Nuno., Rodrigues L. Lima., & Craig., Russell. (2010). Factors associated with the adoption of risk-based internal auditing. Managerial Auditing Journal, 25 (1), 79-98. https://doi.org/10.1108/02686901011007315

Chambers, R. (2014). We can audit anything - But not everything. Internal Auditor. IIA

Christopher, J., Sarens, G., & Leung, P. (2009). A critical analysis of the independence of the internal audit function: Evidence from Australia. Accounting, Auditing & Accountability Journal, 22(2), 200-220. https://doi.org/10.1108/09513570910933942

Cobb, B. R., & P. P. (2006). On the plausibility transformation method for translating belief function models to probability models. International Journal of Approximate Reasoning, 41 (3), 314-330. https://doi.org/10.1016/j.ijar.2005.06.008

Cobb, B. R., & P. P. Shenoy. (2003a). A comparison of Bayesian and belief function reasoning. Information Systems Frontiers, 5 (December), 345-358. https://doi.org/10.1023/B:ISFI.0000005650.63806.03

Cobb, B. R., & P. P. Shenoy. (2003b). A comparison of methods for transforming belief function models to probability models. In symbolic and quantitative approaches to reasoning with uncertainty, lecture notes in artificial intelligence No. 2711, edited by Nielsen, T. D., and N. L. Zhang, 255-266. Berlin: SpringerVerlag. https://doi.org/10.1007/978-3-540-45062-7_21

Colbert, J.L. (1995). 'Risk' internal auditor. October 36-40.

Connolly, Terry., Arkes, Hal. R. & Hammond, Kenneth. R. (Eds.). (2000). Cambridge series on judgment and decision making. Judgment and decision making: An interdisciplinary reader (2nd ed.). Cambridge University Press.

Dale, P., McLaughlin, J., 2000. Land Administration (Spatial Information Systems and Geostatics Series). Oxford University Press.

Environmental Resources Management. Environmental audit and assessment: concepts, measures, practices, and initiatives, SNH, Battleby: SNH Review No 46, 1996.

Felix, J. W. L., Gramling, A. A., & Maletta, M. j. (2001). The contribution of internal audit as a determinant of external audit fees and factors influencing this contribution. Journal of Accounting Research, 39(3), 513-534.
https://doi.org/10.1111/1475-679X.00026

Fellingham, John C., & Newman, D. Paul. (1985). Strategic considerations in auditing. The Accounting Review, 60, (4), 634-650.

Fukukawa, Hironori., & Mock, Theodore J. (2011). Audit risk assessment using belief versus probability. Auditing: A Journal of Practice & Theory, 30 (1), 75-99.
https://doi.org/10.2308/aud.2011.30.1.75

Ghaneirad, Mohammad Amin. (2013). Higher education in the midst of new conflicts and career-oriented, job-oriented, and people-oriented civil. Journal of Higher Education.

Gil-Garcia, J.R., Pardo, T.A., Nam, T., 2015. What makes a city smart? Identifying core components and proposing an integrative and comprehensive conceptualization. Inf. Polity 20 (1), 61-87.
https://doi.org/10.3233/IP-150354

Graham, J., Amos, B., Plumptre, T.W., 2003. Governance Principles for Protected Areas in the 21st century. Ottawa: Institute on Governance, Governance Principles for Protected Areas, pp. 1-2.

Grıffiths, David. (2006). Risk-Based Internal Auditing. An Introduction. Creative Commons Attribution-NonCommercial 3.0 Unported License. March.

Gross, M., Źróbek, R., 2015. Good governance in some public real estate management systems. Land Use Policy 49, 352-364.
https://doi.org/10.1016/j.landusepol.2015.08.017

Harrison, C., Donnelly, I.A., 2011. A theory of smart cities. Proceedings of the 55th Annual Meeting of the ISSS 55. pp. 1-15.

Hoos, F., Kochetova-Kozloski, N., & D'Arcy, A. C. (2015). 'Serving two Masters' and the chief audit Executive's communication: Experimental evidence about internal Auditors'

judgments
https://doi.org/10.1111/ijau.12046

IAASB Handbook. Glossary of Terms, 2009.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. Journal of Financial Economics, 3(4), 305-360. https://doi.org/10.1016/0304-405X(76)90026-X

Joshi, S., Saxena, S., Godbole, T., Shreya, 2016. Developing smart cities: an integrated framework. Procedia Comput. Sci. 93, 902-909. https://doi.org/10.1016/j.procs.2016.07.258

K. H. Spencer Pickett. Audit Planning: A Risk-Based Approach, New Jersey: Wiley, 2006.

K. M. Johnstone, A. A. Gramling, L. E. Rittenberg. A Risk-Based Approach to Conducting a Quality Audit, 9th Edition, South-Western / Cengage Learning, 2014.

Kachelmeier, J. Steven., Majors, Tracie., & Williamson G. Michael. (2014). Does intent modify risk-based auditing?. The Accounting Review, 89 (6), 2181-2201. https://doi.org/10.2308/accr-50835

Kadeh, Maryam; Salari, Ali. (2011). The Effects of Qualitative Characteristics of Judgment on the Auditors' Professional Judgments, The Auditor, no.54, August 2011.

Kiyan, Maham. (2004). A Framework for Making Professional Judgment in the workplace of Audit, Magazine of Official Accountant, summer 2004, no.1, PP.40, and 41.

Klimach, A., Dawidowicz, A., Źróbek, R., 2018. The Polish land administration system supporting good governance. Land Use Policy 79, 547-555. https://doi.org/10.1016/j.landusepol.2018.09.003

Knechel, W. R. (2007). The business risk audit: Origins, obstacles, and opportunities. Accounting, Organizations, and Society, 32 (4-5), 383-408. https://doi.org/10.1016/j.aos.2006.09.005

Lin, Q., Kalantari, M., Rajabifard, A., Li, J., 2015. A path dependence perspective on the Chinese cadastral system. Land Use Policy 45, 8-17. https://doi.org/10.1016/j.landusepol.2015.01.017

McNamee, D. (1996). Assessing risk. Internal Audit Tool Kit, Institute of Internal Auditors, Altamonte Springs, FL.

Meijer, A., Bolívar, M.P.R., 2016. Governing the smart city: a review of the literature on smart urban governance. Int. Rev. Adm. Sci. 82 (2), 392-408. https://doi.org/10.1177/0020852314564308

Messier, J. W. F., Reynolds, J. K., Simon, C. A., & Wood, D. A. (2011). The effect of using the internal audit function as a management training ground on the external auditor's reliance decision. The Accounting Review, 86(6), 2131-2154
https://doi.org/10.2308/accr-10136

Mock, T. J., & I. Vertinsky. 1985. Risk assessment in accounting and auditing. Research Monograph No. 10. Vancouver, B.C. The Canadian Certified General Accountants' Research Foundation.

Nam, T., Pardo, T.A., 2011. Conceptualizing smart cities with dimensions of technology, people, and institutions. Proceedings of the 12th Annual International Digital Government Research Conference 282-291.
https://doi.org/10.1145/2037556.2037602

Norman, C. S., Rose, A. M., & Rose, J. M. (2010). Internal audit reporting lines, fraud risk decomposition, and assessments of fraud risk. Accounting, Organizations, and Society, 35(5), 546-557.
https://doi.org/10.1016/j.aos.2009.12.003

O. R. Whittington, K. Pany. Principles of Auditing & Other Assurance Services, 18th Edition, McGraw Hill Education, 2012

Ojo, A., Dzhusupova, Z., Curry, E., 2016. Exploring the nature of the smart city's research landscape. Smarter As the New Urban Agenda. Springer, pp. 23-47.
https://doi.org/10.1007/978-3-319-17620-8_2

P. Griffiths. Risk-Based Auditing, Gower: New edition, 2012.

P. Nikolovski. Organization of the audit (in Macedonian). Prilep: Faculty of economics, 2004.

Pereira, G.V., Cunha, M.A., Lampoltshammer, T.J., Parycek, P., Testa, M.G., 2017. Increasing collaboration and participation in smart city governance: a cross-case analysis of smart city initiatives. Inf. Technol. Dev. 23 (3), 526-553.
https://doi.org/10.1080/02681102.2017.1353946

Pillar, B. (2005). Audit quality in the 21st century. Presentation at the University of Illinois at Urbana-Champaign.

Prawitt, D. F., Sharp, N. Y., & Wood, D. A. (2011). Reconciling archival and experimental research: Does internal audit contribution effect the external audit fee? Behavioral Research in Accounting, 23(2), 187-206.
https://doi.org/10.2308/bria-10065

Public Company Accounting and Oversight Board (PCAOB). (2007). Report on the second-year implementation of auditing standard No. 2: An audit of internal control over financial

reporting performed in conjunction with an audit of financial statements. Washington, DC: PCAOB.

Raghunandan, K., Rama, D. V., & Read, W. J. (2001). Audit committee composition," gray directors," and interaction with internal auditing. Accounting Horizons, 15(2), 105-118 https://doi.org/10.2308/acch.2001.15.2.105

Rahimiyan, Nezamoldin; Hedayati, Ali. (2013). The Effective Factors on Auditors' Professional Commenting, Official Auditor, winter 2013, new series, no.36, pp.77-96

Rittenberg, L. E., & B. J. Schwieger. (2005). Auditing: concepts for a changing environment, 5e. Mason, OH: Thomson South-Western.

Roche, S., 2014. Geographic information science I: Why does a smart city need to be spatially enabled? Prog. Hum. Geogr. 38 (5), 703-711. https://doi.org/10.1177/0309132513517365

Ross, S. A. (1973). The economic theory of agency: The Principal's problem. The American Economic Review, 63(2), 134-139

Roth, James. 2017. How to Audit Culture. Internal Auditor, page 30-37.

Royaee, RamazanAli, and Muhammadi, Mahdi. (2011). Ethics and professionalism in accounting. Culture Library publications. First Edition.

S. Stanoeski. Control and audit (in Macedonian). Skopje: Faculty of economics, 2005.

Sarens, G., Christopher, J., & Zaman, M. (2013). A study of the informal interactions between audit committees and internal auditors in Australia. Australian Accounting Review, 23(4), 307-329. https://doi.org/10.1111/auar.12024

Shakespeare, K. (1996). University risk control begins with risk assessment. Ledger, 40, (April).4-7.

Siringoringo, Alfiker. 2017. Mengembangkan Tata Kelola BLU. Lampung: Kantor Wilayah Direktorat Jenderal Perbendaharaan Provinsi Lampung.

Stewart, J., & Subramaniam, N. (2010). Internal audit independence and objectivity: Emerging research opportunities. Managerial Auditing Journal, 25(4), 328-360. https://doi.org/10.1108/02686901011034162

Tirole, J. (1986). Hierarchies and bureaucracies: On the role of collusion in organizations. Journal of Law, Economics, and Organization, 2(2), 181-214.

Townsend, A.M., 2013. Smart Cities: Big Data, Civic Hackers, and the Quest for Anew Utopia. WW Norton & Company.

Trotman, K. T. (2006). Professional judgment: Are auditors being held to a higher standard than other professionals ?. Sydney: The Institute of Chartered Accountants in Australia.

Williamson, I., Enemark, S., Wallace, J., Rajabifard, A., 2010. Land administration for sustainable development. FIG Congress 1-16.