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Master's Thesis of GSPA

Impact of SAI's Performance Audit
and Influence Factors in Korea
– Focusing on the Auditees' Perception –

August 2021

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Abstract

Keyword : SAI, performance audit, Board of Audit and Inspection, audit impact, government audit, public audit, auditee perception

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Recently, discussions for expanding performance audits have been growing in South Korea. The number of annual performance audits performed by the Board of Audit and Inspection (BAI) increased from 3 in 2015 to 15 in 2019. As the number of performance audits increases, the effectiveness of performance audits becomes more important. However, it has still not identified whether the transition to performance audit from traditional compliance audits was successful. One main difficulty in performance audit studies is distinguishing between performance audits and compliance audits. The overlapped area between them and the mixture of them in audit practice make it difficult to distinguish them.

This study aimed to distinguish performance audits between compliance audits through the auditees' perception of audit experience in three dimensions: audit purpose, criteria, and activity. This study measured how close an individual audit project is to a performance audit and whether the tendency is different depending on BAI's audit classification. The result shows that the four audit types of the BAI, financial audit, institution audit, specific project audit, and performance audit, all contain performance audit elements to some extent regardless of the formal audit classification. Among them, financial audit and performance audit were more focused on 3 Es criteria: efficiency, effectiveness, economy.

Furthermore, this study aimed to examine whether an increase in performance audit elements results in change auditees' perceived audit usefulness and what other factors affect the perception of audit usefulness. No difference was found in the perceived usefulness of auditees according to whether individual audit projects were perceived close to performance audits. Among the various factors related to audit quality, audit experience, and audit environment, the reason for the audit and the flexibility of audit recommendations, the audit-related workload, the support from high level organizations and related organizations, and the authority of the BAI affect the perception of audit usefulness.

This study shows that BAI performs performance auditing functions with audits other than formal performance audits and indicates that BAI does not need to focus on the quantitative

expansion of performance audits. In addition, the absence of a difference in perceived usefulness between performance audits and compliance audits suggests the possibility that performance audits have not yet achieved significant differentiation in compliance audits.

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Chapter 1. Introduction

1.1. Study Background

Performance audit is a type of public audit that focuses on government activities' economy, effectiveness, and efficiency (the three Es). Performance audits have been conducted in many western countries since the 1980s to reduce government operations' inefficiency; however, in South Korea, it has only recently started to be practiced regularly by the Board of Audit and Inspection (BAI), the supreme audit institution (SAI) of the state. The number of BAI's audits officially classified as a performance audit has been steadily increasing from 3 in 2015 to 8 in 2016, 9 in 2017, 13 in 2018, and 15 in 2019.

While the performance audits have been expanded, it is controversial to presume that the field of performance auditing has been established. Although SAIs around the world have officially advocated performance auditing as a separate audit type and conducted performance audits, it is difficult to thoroughly distinguish performance audits from traditional compliance audits. It is also controversial whether performance audits contribute to improving governments' 3 Es. Power (1997) raised questions about the effectiveness of performance audits, pointing out that performance auditing is being used as a ritual. On the other hand, some researchers suggested that performance audits impact policy changes (Morin, 2014; Raudla et al., 2016; Reichborn-Kjennerud & Johnsen, 2018). This group of researchers has also tried to identify factors determining the usefulness of performance audits.

Although performance audit-related research has not widely been performed in South Korea, research on performance audits' conception and content analysis has been recently conducted. A recent study pointed out that performance audit of BAI does not yet have solid characteristics. (Kim 2019).

1.2. Purpose of Research

Performance audit elements included in the BAI audits

The first purpose of this study is to explore to what extent the BAI audits include performance auditing elements. BAI divides audits into four categories: institutional audit, financial audit, specific project audit, and performance audit. Until 2016, the BAI conducted only one or two audits the officially classified as a performance audit per year. However, it does not mean that the BAI did not perform the performance auditing function. BAI carried the performance audit function to some extent through specific project audits (Cho, 2009).

Analyzing the extent to which performance auditing elements are included in the BAI audits can help diagnose the current status of performance auditing.

Performance audit elements and change in perceived audit usefulness

While the first research question is about the quantitative status of performance audits in South Korea, the second research question is about the effectiveness of performance auditing. By analyzing how the increase in performance auditing elements affects the audit usefulness, we can guess to what extent performance audits are being conducted effectively.

If performance auditing is merely a ritual, as suggested by Power (1997), the increase in performance auditing elements included in individual audit items will negatively or no effect on audit usefulness. Conversely, it is possible that performance audits have higher utility than compliance audits as administrative activities become more complex than before, and objective verification of the performance of administrative agencies and policies becomes necessary.

This study examines how the audit usefulness perceived by the auditee changes as the BAI audits become closer to the performance audit. If there is a difference in the perception of audit usefulness according to the audit type, this will suggest implications for the policy to expand performance auditing.

Factors affecting perceived audit usefulness

This study also aimed to identify the factors that influence the perceived usefulness of performance audits. this study will derive the influencing factors of the performance audit impact through a literature review. There have been studies on factors affecting audit acceptability in Korea (Moon, 2009), but only internal factors such as audit quality were analyzed, and external factors such as the influence of external agencies were never analyzed. This study will analyze the effect of influencing factors, including audit–internal and external factors, on perceived usefulness of BAI's audit.

Chapter 2. Literature Review

2.1. Definition of Performance Audit

Supreme audit institutions around the world conduct audits under the name of performance audit. A performance audit is defined as an audit of three Es (economy, efficiency, effectiveness) according to the definition of the International Organization of Supreme Audit Institutions (INTOSAI).

INTOSAI's definition of performance auditing is extensive. Because the concepts of economy, efficiency, and effectiveness are broad, and there are many ways to achieve that goal. In addition, although performance audit and compliance audit are conceptually distinguished, there are many cases where performance audit and compliance audit are mixed within a single audit project. (Guthrie and Parker, 1999; Pollitt, 2003). INTOSAI (2019) proposes that if the content has a clear impact on the performance of the policy or program, it is appropriate to deal with it in the performance audit, even if it corresponds to a compliance audit. Despite these limitations, INTOSAI and the SAIs have defined the concept of performance audit in their own way.

Official definitions

INTOSAI defines a performance audit as “an audit that independently and objectively investigates government tasks, systems, programs or organizations in terms of economics, efficiency or effectiveness, leading to improvement.” (INTOSAI, 2019) INTOSAI stipulates that the purpose of performance audit is to increase the economy, efficiency, and effectiveness of the public sector and to improve good governance and accountability and transparency of the government. In addition, the purpose of performance audit is to propose improvement measures and provide new information, analysis, and insight. The scope of the audit also includes suggesting conditions for securing economy, efficiency, and

effectiveness.

The Government Accountability Office (GAO) in the United States defines performance audit as auditing that evaluates with sufficient and appropriate evidence against the audit criteria and presents audit results based on the assessment. To increase accountability, they provide objective analysis to government officials or supervisory authorities to help improve the performance and operation of government projects, reduce costs and make decisions. (GAO, 2011: 17–18)

In South Korea, Public Audit Standards defines performance audit as "an audit conducted on a specific project or policy based on review and evaluation of economy, efficiency, and effectiveness." In addition, the BAI suggests that the purpose of performance audit is to identify wastes and inefficiencies of government policies or projects, and to identify the causes and suggest improvement options for solving problems. (BAI, 2005: 6)

Performance audit and other types of public audit

According to the definition of a performance audit by INTOSAI and SAIs, a performance audit focuses on auditing 3 Es and securing the government's accountability and transparency. Still, we can grasp the characteristics of a performance audit by comparing the differences from other audit types, such as a compliance audit and a financial audit.

INTOSAI (2019) divides public audits into three types: financial audit, compliance audit, and performance audit. A financial audit is an audit that verifies that an entity's financial information has been prepared and reported according to appropriate standards to prevent fraud and errors. A compliance audit is an audit to verify that a particular subject matter is performed according to such laws, rules, regulations, guidelines, and policies. According to INTOSAI's classification, each type of audit has differences in terms of audit purpose, audit criteria, and audit activity. A financial audit aims to verify the adequacy of financial reports, and a compliance audit aims to confirm whether government activities have been conducted in

compliance with criteria such as laws and regulations. Performance audit is aimed at improving 3 Es of government activities and enhancing accountability. The three types of audit are also different in terms of the criteria for the audit. The criteria for financial audit are financial report preparation and reporting rules, and in compliance audit, law, rules, regulations, budgetary resolutions, policy, established codes, the agreed terms, or general principles in the public sector are the criteria for the audit. In a performance audit, the principles of economy, efficiency, and effectiveness are essential audit criteria. Since the three types of audit objectives are different, auditors' audit activities also have different characteristics. In a financial audit, the auditor's activity is attestation. In compliance audits, the auditor's primary activity is to assess whether government activities meet the audit criteria. In a performance audit, the auditor's main activity is to examine whether government activities align with the 3E principles, otherwise analyze causes and remedial measures. Table 1. shows the summary.

Table 1. Differences between performance audit and other types of public audit

	Financial Audit	Compliance Audit	Performance Audit
Purpose	verification of a financial report	checking violation of criteria in government activity	improvement of 3Es and accountability
Criteria	financial reporting rules	law, rules, regulations, budgetary resolutions, policy, established codes, agreed terms or general principles in public sector	the principles of economy, efficiency and effectiveness
Activity	attestation	assessment against audit criteria	examination, analysis

Performance audit and policy evaluation

Performance audit has a similarity with policy evaluation in that its main activities are examination and analysis. Barzelay (1996) stated that a performance audit could not be recognized as a type of audit because a performance audit's nature is judgment and evaluation, while the essential feature of a traditional audit is to verify. However, Summa (1999) refutes that the nature of public audit is not limited to verification and includes judgment, and compliance is an essential criterion for a performance audit. Furthermore, Summa presents the difference between a policy evaluation and a performance audit. First, the subject of a performance audit is selected by an independent audit organization. Second, while a policy evaluation focuses only on 3E improvement, a performance audit aims at both 3 Es and accountability.

Performance audit and compliance audit

The boundaries between compliance audit and performance audit are blurring as performance audit uses accountability as an essential audit criterion not limited with 3 Es. Moreover, modern administrative laws stipulate the objects, procedures, and scope of government programs. These rules aim to ensure that the policy or program is implemented in compliance with 3 Es and accountability. Therefore, violation of these laws, regulations, and guidelines can affect the program's performance. In this regard, INTOSAI (2019) also suggests that it is appropriate to conduct a compliance audit in a performance audit if it has an apparent effect on the auditee's performance.

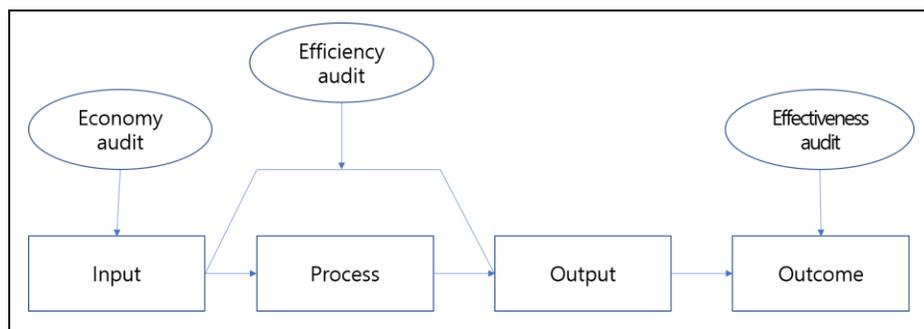
2.2. Implementation of Performance Audits

Types of performance audit

There are various ways to achieve the performance audit goals. INTOSAI and GAO stipulate that a variety of methods, including a recommendation for improvement and analysis and provision of new information, can be included to achieve the goals of performance audit.

When the audit is focused on 3 Es of the government activities, measurement and evaluation of input, output, and outcome are the major form of a performance audit. An economy audit focuses on whether the least amount of resources has been devoted to achieving a given goal. An efficiency audit focuses on checking whether the process of converting input resources into outputs is efficient. An effectiveness audit focuses on checking whether policy and program objectives have been achieved. (Pollitt et al., 1999) The quantification or measurement of inputs, outputs, and outcomes plays an important role. Therefore, audit activities focus on acquiring, analyzing, and evaluating data related to input, output, and outcome indicators. Figure 1. shows the value chain of 3 Es.

Figure 1. The 3 Es related to the value chain



Grönlund(2011)

Performance audit criteria are not confined with 3 Es and include other measures such as good management practice, good governance, quality of service, and goal attainment (Pollitt et al., 1999). Gendron et al. (2001), through historical analysis of the performance audits in the United Kingdom, found that auditors primarily use methods of comparing them to best practices or finding gaps between targets and current state for efficiency audits. In many cases, auditors cannot employ quantitative analysis due to the lack of data for quantification.

Grönlund et al. (2011) proposes four extended types of performance audit in addition to 3Es audit: system audit, administration audit, goal-related audit, policy audit.

System audits focus on whether there is a system to properly

manage or support those activities, whereas traditional performance audits focus on the agency's activities themselves.

The administration audit focuses on whether government agencies adequately report information (Bowerman et al., 1996). The administration audit is an examination of information and communication.

The goal-related audit focuses on whether the government's policy or project objective setting is clear and there are no conflicting roles between different policies, projects, or institutions (Grönlund et al., 2011). This type of audit can be helpful because it is not easy to evaluate government projects' performance itself. In many cases, the government's project goals are ambiguous, and a causal relationship is unclear or complex, making it difficult to confine performance evaluation to the scope of any one institution.

Policy audit focuses on auditing whether a politically determined project is appropriate from a financial point of view (Grönlund et al., 2011). Policy audits emphasize auditing whether specific projects have achieved targeted financial results and whether the executive agency appropriately manages large-scale policy projects.

Performance audit practice in South Korea

BAI categorizes audit types into four categories: financial audit, institutional audit, specific project audit, and performance audit. BAI defines four types of audit in The Guideline on the Processing of Audit Affairs. A financial audit is an audit conducted regularly to analyze and evaluate the adequacy of the audited institution's use of financial resources. Institution audit is an audit conducted to comprehensively and systematically analyze and evaluate the main functions of the audited institution, primary duties and organizations, personnel, and budget operation from a systemic point of view, and to check the compliance and validity of budget execution and program performance. A specific project audit is an audit conducted to identify causes of the problems and responsibilities and prepare improvement measures in response to various audit demands such as public and national assembly audit requests, such as social and economic issues.

A performance audit is an audit conducted to systematically diagnose, analyze, and inspect problems related to major policies, projects, systems, and work systems and present comprehensive and fundamental improvement measures (Gong et al., 2018). Table 2 shows the number of audits implemented by audit types.

Table 2. The number of audits implemented by BAI (by audit types)

	2014	2015	2016	2017	2018	2019
Financial audit	15	17	16	16	15	3
Institution audit	34	24	40	31	28	37
Specific project audit	85	97	72	101	123	113
Performance audit	2	2	8	9	13	16
Total	136	140	136	157	179	169

Source: BAI Yearbook(2014~2019)

BAI's classification of audit type does not parallel to INTOSAI's classification. When comparing INTOSAI's public audit classification and BAI's audit classification, there are the following commonalities and differences. INTOSAI divides public audit into three types, financial audit, compliance audit, and performance audit, whereas BAI divides into four types: financial audit, institutional audit, specific project audit, and performance audit. Financial audit and performance audit are classified into distinct audit types in common, but there are differences in their contents. According to INTOSAI's definition, a financial audit aims to ensure the accuracy of financial information and prevent fraud and errors. However, the BAI's financial audit includes an analysis of whether the audited institution's financial resources have been appropriately used, including some of the characteristics of the performance audit. INTOSAI emphasizes that the performance audit is an audit for 3 Es, but BAI emphasizes a comprehensive approach without explicitly mentioning 3Es.

Meanwhile, BAI's institutional audit, specific project audit, and INTOSAI's compliance audit are also inconsistent. The institutional audit includes not only compliance but also program performance as the focus of the audit. The specific project audit encompasses both

compliance audit and performance audit. Table 3 shows the primary characteristic of BAI's each audit type.

Table 3. The main characteristic of BAI's each audit type

	Purpose	Targeted institution	Audit subject
Financial audit	compliance & performance	single	use of financial resource
Institution audit	compliance & performance	single	organizations, personnel, and budget operation
Specific project audit	compliance & performance	single or multi	not confined
Performance audit	performance	single or multi	policy, project, system

It may be irrelevant to include only those audits officially classified as performance audits by BAI when evaluating the proportion of performance audits in Korea. The other three types of audits also have some of the characteristics of performance audits. In particular, it is reasonable to regard a specific project audit as a performance audit in a broad sense (Cho, 2009). It is also pointed out that BAI's audit classification is mixed with content-based classification and audit-management-based classification. Financial audit, institutional audit, and performance audit are classified according to the subject and content of the audit. However, specific project audits are conducted to flexibly respond to various audit demands and eliminate blind spots that the remaining audits may leave behind (Cho, 2009).

Cho (2009) analyzed the contents of BAI's performance audit (including specific project audits) in three aspects: audit purpose, audit focus, and audit criteria. In the dimension of audit purpose, management support, system improvement, and identification of responsibility accounted for a high proportion, and performance review occupied a relatively small proportion. At the dimension of audit focus, the adequacy of execution, the adequacy of the implementation system, compliance with regulations, and the

appropriateness of performance management were in order. The proportion of the adequacy of performance management was relatively small. In terms of audit criteria, compliance with laws was high, and 3 Es was relatively low (Cho, 2009). Kim (2019) presented similar results, criticizing that BAI's performance audit focused only on finding problems with policies or programs rather than improving 3 Es.

2.3. Performance Audit's Impact and Influencing Factors

Measuring the impact of performance audits

As a number of SAIs conduct performance audits, research on the impact of performance audits is increasing in numbers. Studies on a performance audit are being conducted mainly in Canada and northern European countries. Studies that analyze the influence of performance audits in Korea are rare.

The impact of performance audit can be measured through the degree of changes in policies and programs before and after the audit. Still, this approach has limits due to the difficulty of determining the contribution of performance audit among changes in policies and programs.

In many studies, the perceived usefulness by auditees about the performance audits and the perceived extent of changes as consequences of the performance audit is used to measure the impact of many performance audits (Ryu, 2005; Moon, 2009; Sim & Cho, 2001; Raudla et al., 2016; Morin, 2001, 2004, 2014; Desmedt, 2017; Reichborn-Kjennerud & Johnsen, 2018, Johnsen et al., 2019).

Morin (2001) divided the measurement items into three categories:

- The auditee's perceptions and reactions about auditors' influence attempts. It includes the auditee's feelings toward the auditor, the degree of dissatisfaction with the audit process, the attitude of acceptance of the auditor, the

auditee's level of cooperation with the auditor, and the intention of the auditor to raise a problem.

- The auditee's perception of the performance audit itself. It was measured whether the auditee thinks that performance audit is helpful, whether the auditee agrees with the audit findings, the auditee's willingness to accept the audit recommendation, the auditee's evaluation of the audit performance, and auditee's perception of the degree of change due to the performance audit.
- The impact of performance audits was measured on how much the audit report resulted in social debate. Suppose the audit results are discussed as an issue in the parliament or the media. In that case, the parliament may take measures to solve the problems with its power, or the audited organization may attempt to change policies considering external pressures.

Moon (2009; as cited in Lee, 2010) suggests that the audit acceptance of auditee is determined by the degree of satisfaction with the audit process and results, the perceived effect of the audit results on the future work of the audited organization, the level of awareness of the necessity of the audit recommendation, validity of the audit result, and the deadline for processing the recommendations, and auditee's experience of appealing to the audit result.

In some studies, the impact of the performance audit is sometimes measured with a more straightforward indicator. Reichborn-Kjennerud (2018) set the "tendency of audited organizations to change policies according to the results of performance audits" as a dependent variable to measure the impact of performance audits, and measured it by questioning "to what extent of policy changes due to the results of performance audits was done?"

Raudla et al. (2016) identified perceived usefulness of the performance audit by auditee and changes in the audited

organizations adopted in response to performance audit as a dependent variable to measure the impact of performance audit.

These studies suggest that it is necessary to consider how much the audited organization agrees with the audit results, how much the audit results are reflected in actual policy changes, and how sensitively the audited organization responds to the parliament and the media when measuring a performance audit's impact.

The influence factors on the performance audit's impact

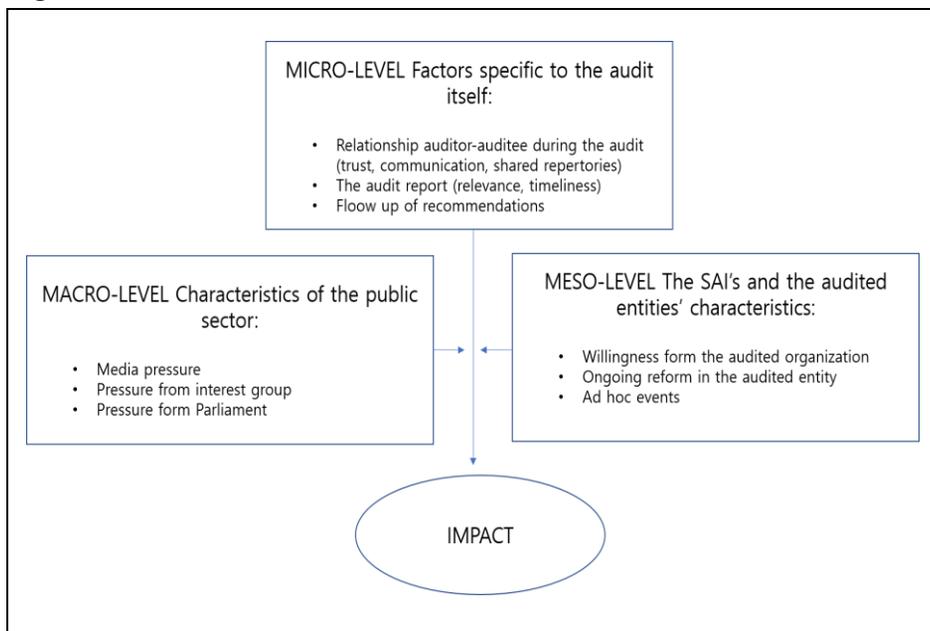
Raudla et al. (2016) classified the influence factors into internal and external factors. The internal influence factors include the auditee's perception of the auditor (auditor's competitiveness and expertise), the audit process (exchange of opinions), and the quality of the audit report. The more the auditee appreciates the professionalism and competitiveness of the auditor and recognizes that the audit is helpful, the more likely the policy change will be made. The higher the quality of the audit report and the more useful it is, the more likely it is that the audit organization will accept the audit recommendations. The faithfulness of the discussion in the audit process is often considered an important variable. In the course of the audit, if the auditee accepts the auditor's opinion or reflects on the problems of the policy, policy changes could be greater. Also, good communication helps to understand the audit subject better and improves the quality of the audit, contributing to the implementation of audit recommendations more faithfully. Lastly, the stronger the audit organization agrees with the audit criteria and conclusion, the more faithfully the policy changes according to the audit recommendation.

As external factors, the level of interest in parliament and the media is mainly mentioned. If the parliament or the media are highly interested in the audit results, it is expected that the audit results will be more likely to affect policy changes.

Desmedt et al. (2017) classify the factors that affect the impact of performance audit into three categories: micro, macro, and meso. Micro-factors are related to audit quality itself. The relationship

between the auditor and the auditee (trust level, communication, mutual respect), the appropriateness and timeliness of the audit report, and follow-up management on the audit are included as microscopic factors. The meso-level is related to auditing bodies and audited bodies, including acceptance of audits and willingness to improve the institution. The macro-level includes the level of interest and pressure from the parliament, the media, and civic groups. Figure 2 shows the influence factor in micro, macro and meso-level.

Figure 2. Influence factor in micro, macro and meso level



Source: Desmedt et al. (2017)

Moon (2009) approaches the influence factors of audit acceptancy by classifying it into recognition factors, actor factors, operating factors, and environmental factors. The recognition factor refers to the general level of recognition of the audited organization for the SAIs. The recognition factor includes competency of the auditors, the level of trust in the audit results, the positive perception of audit functions, and the perception of the SAI's independence.

The operational factors include audit quality, adequacy of audit results, timeliness, adequacy of the process, sufficiency in collecting

opinions.

The actor factors include the auditor's capability, audit expertise, analytical ability, good communication between the auditor and the auditee.

Environmental factors include the economic situation, the impact of the President, the Interests of National Assembly. the executive branch, civic groups, the media, academia, and the public interest.

Precedent empirical studies

Empirical studies have been conducted to determine whether audits affect actual policy changes and what factors determine their size of impact. Morin (2014) analyzed the impact of performance audits in the Canadian situation. Although the impact on policy change is not clear, Morin suggested performance audits influence auditees. Studies in Belgium, Norway, and Estonia have also shown that performance audits impact policy change (Desmedt et al, 2017; Raudla et al, 2016; Johnsen et al, 2019).

The studies about the influence factors on the impact of the performance audit do not present consistent results. Only a few factors (e.g., the quality of the audit report, the interests of the political sphere, and the media) have been suggested as a relatively common influence factor. In contrast, the level of the audited organization's consent on the audit results shows the inconsistent effects on the performance audit's impact.

Raudla et al. (2016) pointed out that the higher the level of internal impact factors such as audit quality of performance audits, the higher the level of usefulness of audits perceived by the audit organization, but these factors have no significant effect policy changes. The authors observed that, compared to the extent to which auditees feel the audit was helpful, the impact on policy change is relatively low. It results from the audited organization's disagreement with the audit results and lacks authority to implement the audit recommendations that need to be addressed in cooperation with other government bodies. (Raudla et al., 2016) Table 4 shows the summary of influence factors.

Table 4. Influence factor of audit impact in empirical studies (1)

Author	Dependent	Independent Variables	Correlation
Moon (2009)	Audit satisfaction	Trust on audit results	Yes
		Auditor's contribution to organization	Yes
		Communication	No
		Appropriateness of the analytical method	Yes
		Objectivity of audit results	No
		Auditor's attitude	Yes
		Fairness of Audit	Yes
		Independence of Audit	Yes
Raudla et al.(2016)	perceived usefulness of audit	Auditor's Expertise	Yes
		Quality of audit report	Yes
		Openness to dialogue	Yes
		Agreement with audit criteria	Yes
		Agreement with audit conclusion	Yes
		Sufficiently concrete recommendation	Yes
		Explanations for shortcoming found	No
		Change as a consequence of audit report	No
	Perceived changes as a consequence of audit	Auditor's Expertise	No
		Quality of audit report	No
		Openness to dialogue	No
		Agreement with audit criteria	No
		Agreement with audit conclusion	No
		Sufficiently concrete recommendation	No
		Explanations for shortcoming found	No
		Parliament's demand for improvement	Yes
		Media showed an interest	No
		Political debate resulted from media's attention	Yes
Political opponents' pressure resulted from media's attention	No		

Table 4. Influence factor of audit impact in empirical studies (2)

Author	Dependent	Independent Variables	Correlation
Reichborn-Kjennerud and Johnsen(2018)	Auditees' Propensity to make changes as a consequence of PA	Auditees think systems were improved	Yes
		The minister was held accountable	Yes
		Political leadership signaled measures	Yes
		Agencies make more changes than ministries	Yes
		Auditees would have made changes anyway	Yes
		Auditees agreed with the SAI's assessments	No
Johnsen et al. (2019)	Perceived usefulness of audit	Perceived legitimacy of SAIs	Yes
		Result-oriented audits than compliance-oriented	No
		Agencies make more changes than ministries	No
		Rigidity of audits	No
	Policy changes as a consequence of audit	Audits put less strain on auditees	No
		Audit quality	Yes
		Agencies make more changes than ministries	No
		Audit conclusion conforms to the auditees' plan	No
	Holding political accountability	Communication	Yes
		Audit quality	No
		Media's interest	No
		Different actors use audit results	Partial

Chapter 3. Research Subject and Method

3.1. Research Questions

Overview

This study addresses three research questions. The first question is to understand the performance audit tendency of the BAI's four types of audits. BAI audits are divided into four types, and performance audit characteristics and compliance audit characteristics are mixed in those audits. The first purpose of this study is to explore which type of audit is relatively closer to a performance audit. The second purpose of this study is whether differences in including performance audit characteristics lead to differences in perception of audit usefulness. The final question is to identify the factors influencing the perceived audit usefulness. Influencing factors suggested in previous studies will be divided into three aspects: audit quality, audit experience, and implementation of audit recommendations.

Auditees' perception on how BAI audits are close to a performance audit

Distinguishing between performance audits and compliance audits is one of the challenges in public audit studies. Since BAI does not divide audits into performance audits and compliance audits, it is necessary to analyze which type of audit BAI is closer to a performance audit.

As shown in Table 5, BAI audits are divided into four types: financial audit, institutional audit, specific project audit, and performance audit, but each type of audit has the characteristics of compliance audit and performance audit at the same time. In addition, the classification criteria are inconsistent because some of them are classified by audit purpose and others by audit subject. This study aims to present the status of BAI's performance auditing within these four types of audits.

Table 5. BAI's audit classification

Audit Types	Classified by	Audit purpose and characteristics
Performance Audit	Purpose	Finding and improving factors that hinder the effectiveness and efficiency of the objective audit policy/project program
Specific project Audit	Target	Audit for specific policies/projects (mainly social issues) subject to audit. The purpose of the audit may be to discover and resolve illegal matters or to improve performance.
Institutional Audit	Target	the overall personnel/operation/project of a single organization subject to audit (used to audit small projects, organization/personnel operations, budget execution, etc., which are difficult to handle with a single audit such as specific/performance audit)
Financial Audit	Target/ Purpose	Accounting and Performance Report Verification, budget execution and accounting order establishment (mainly focuses on illegal use and conversion of budget, and abnormal accounting)

Changes in perceived audit usefulness related to audit types

Since the 1980s, questions have been raised regarding whether it is appropriate for SAIs to expand performance audits concerning its negative effect. Typical side effects of performance audits include hindering innovation and flexible laws application (Bonollo, 2019). Particularly in Korea, there is criticism that performance audits are political audits, and they limit the discretion of the government ministries in the policy process. Also, as a public audit is also an administrative activity, it is necessary to measure its performance (Sim, 2010). Auditees' perception of the audit usefulness can be used to measure the 'performance' of performance audits.

Performance audits may be perceived as less useful than compliance audits because compliance audits are followed by administrative punishment and financial measures against public officials. The results or impact of compliance audits are easily visible. On the other hand, the audit recommendations of the performance

audit are not obligated to be implemented by the audited institution. They may not be implemented at the discretion of the audited institution. For the performance audit to be effective, the audited institution must recognize that the audit results are helpful, and is willing to implement the recommendations. Suppose the conclusion of the performance audit is contrary to the existing policy direction or does not provide helpful analysis and alternatives. In that case, the auditees are highly likely to perceive the usefulness of the performance audit as low. Also, if they think that performance auditing excessively infringes their discretion, they are more likely to perceive them as having low usefulness. The second question is to check whether performance auditing has a negative effect on the auditee's perceived audit usefulness.

Hypothesis 1. The more the auditees perceive an individual audit project as a performance audit, the lower the audit usefulness perception.

Influencing factors on the usefulness of performance audits

In the precedent research, various conclusions are presented on the factors that influence performance audits' impact. The influencing factors, such as the constitutional status of SAI, social perception, and the perception of the auditee, are different in each country. This study attempts to validate whether the influencing factors discussed in precedent studies affect the BAI audit's impact on the Korean environment. Based on the results, we will discuss how to increase the usefulness of the BAI audit and provide policy implications.

Hypothesis 2. The higher the perceived factor 1–13, the higher the perceived audit usefulness.

Independent variables are shown in table 6.

Table 6. Influencing factors on the audit usefulness

Category	Variables (scale 1~5)
Audit quality	Agreement on reason for audit Agreement on audit criteria Robust audit evidence Clear recommendations Audit flexibility (Whether the audit result was made flexibly in consideration of individual circumstances without being obsessed with principles)
Audit experience	Opportunity to appeal and communication Audit related workload is controlled in an appropriate level Learned something from the audit
Audit recommendation implementation	Willingness to implement audit recommendations by audited organizations The capability of audited organizations to implement audit recommendations Support from higher and other organizations to implement audit recommendations Stakeholders' attitude toward the acceptance of audit recommendations The extent to which the SAI's authority helps implement the audit recommendations

3.2. Research Method

Unit of analysis and survey sample

The targets of this study were public officials of central administrative agencies who experienced BAI audits from 2017 to 2020. The survey sample were given from 9 government ministries. 226 employees were given questionnaire, and 106 employees responded (response rate 46.9%). 94 responses were valid. Respondent demographic is shown in Table 7.

Table 7. Respondent demographic

	N (%)					
Work Experience	y<5	5≤y<10	10≤y<15	15≤y<20	20≤y	Total
	16 (17.0)	15 (16.0)	33 (35.1)	16 (17.0)	14 (14.9)	94 (100)
Gender	Male			Female		
	65 (69.1)			29 (30.9)		
Job Level	Grade7~9	Grade 6	Grade 5	Grade 4		
	11 (11.7)	42 (44.7)	35 (37.2)	6 (6.4)		
Administration Type*	Contract	Management	Facilitation	Regulation	NA	
	5 (5.3)	42 (44.7)	30 (31.9)	10 (10.6)	7 (7.4)	

* Administration Type: Contract management, Administration management, Facilitation policy, Regulation policy, None of the above

Measuring BAI audit's performance audit tendency

This study used the auditee's perception of the characteristics of the BAI audit to analyze to what extent the BAI audit is close to a performance audit. Based on INTOSAI's classification of public audit types (INTOSAI, 2019), audit attributes were classified into three aspects: audit purpose, audit criteria, and audit activity. Respondents were presented with the following three questions, and the respondents were asked to evaluate the type of audit project they experienced with a five-point Likert scale (see table 8).

- In case that the audit criteria are close to the stated regulations such as laws and codes of conduct, we can consider that the audit project is more comparable to compliance audit than performance audit, and if the audit criteria are 3 Es and equity, vice versa.
- If the audit's activity is close to identifying responsibility and immediate administrative action, the nature of the compliance audit is considered relatively high.
- If the purpose of the audit is close to legality and compliance improvement, the nature of the compliance audit is

considered to be relatively high. If it is close to achieving the goal, performance improvement, or improvement of 3 Es, we can consider the audit project as a performance audit.

Table 8. Measuring BAI audit's performance audit likeness

Variables	Question	Answer options
Perceived audit criteria	If the audit criteria of the BAI audit you have experienced are classified as shown in the following example, which one do you think is close?	Stated regulations such as laws, guidelines, codes of conduct (1) ... Administrative values such as goal-achievements, efficiency, economics, effectiveness, and equity (5)
Perceived audit activity	If the focus (activity) of the BAI audit you have experienced is broken down into the following example, which do you think you are close to?	Detection and resolution of the illegal situation, identification of responsibilities, implementation of necessary administrative measures (1) ... Policy effect analysis, cause analysis, the recommendation of improvement measures (5)
Perceived audit purpose	If the purpose of the BAI audit you have experienced is classified as shown in the following example, which one do you think is close?	Compliance with laws and accounting standard, and transparency improvement (1) ... Institutional and policy goal achievement, performance improvement, efficiency, economy, effectiveness, equity (5)

Measuring perceived audit usefulness

Respondents were asked to evaluate the usefulness of the audit items experienced by the respondents in a five–point Likert scale. Table 9 shows the survey question and answer options.

Table 9. Measuring BAI audit's perceived usefulness

Variables	Question	Answer options
Perceived audit usefulness	If you are evaluating the usefulness of the BAI audit you have experienced, how would you rate it?	Not at all(1) ... Very much(5)

Measuring influencing factors on the audit usefulness

The influencing factors suggested in precedent studies can be divided into three categories: audit quality, audit experience, and audit recommendation implementation, as shown in Table 6 above. Each item was evaluated on a 5–point Likert scale for the audit project experienced by the respondents.

Control variables

In order to control the effect of respondents' personal and work characteristics on the perception of usefulness, work experience, gender, job level, and administration type were set as control variables. The measure of each variable is shown in table 10.

Table 10. Control variables

Variable	Attributes
Work experience	Under 5 year, , 5~10 year, 10~15 year, 15~20 year , over 20 years
Gender	Male, Female
Job level	Grade 4, Grade 5, Grade 6, Grade 7 (and under)
Administration type	Contract management, Administration management, Facilitation policy, Regulation policy, None of the above

Chapter 4. Result

4.1. Auditees' perception on to what extent BAI audits are close to a performance audit

Respondent characteristics

Among the total 94 respondents, 35.1% of respondents had experienced a specific project audit (SPA), and 34% of them experienced an institutional audit (IA). The percentage that experienced a financial audit (FA) was 11.7%, and the percentage for a performance audit (PA) was 6.4%. The remaining 12.8% answered that they did not know what type of audit they experienced. Table 11 shows the summary of the response results.

Table 11. Types of audit respondents experienced during 2017~2020

	FA	IA	SPA	PA	N/A	Total
N	11	32	33	6	12	94
%	11.7%	34.0%	35.1%	6.4%	12.8%	100.0%

The composition of audits the respondents experienced does not match that of audits performed by the BAI from 2017 to 2019 (see Table 12). Financial audits accounted for 6.7%, institution audits 19.0%, specific project audits 66.7%, and performance audits 6.7%. The characteristics of the respondents can explain the difference in the composition. The sample was selected from central government agencies. BAI's financial audit includes only central government agencies, not local governments, public institutions, and public corporations. Besides, BAI conducts institutional audits of local governments and public institutions irregularly, while the central government's ministry is taking BAI institution audits every two or three years. The response rate of financial audit and institution audit can appear high in the survey of public officials of central government agencies.

Table 12. Types of audit implemented by BAI during 2017~2019

	FA	IA	SPA	PA	Total
N	34	96	135	240	505
%	6.7%	19.0%	66.7%	6.7%	100.0%

Differences in performance auditing elements by audit type

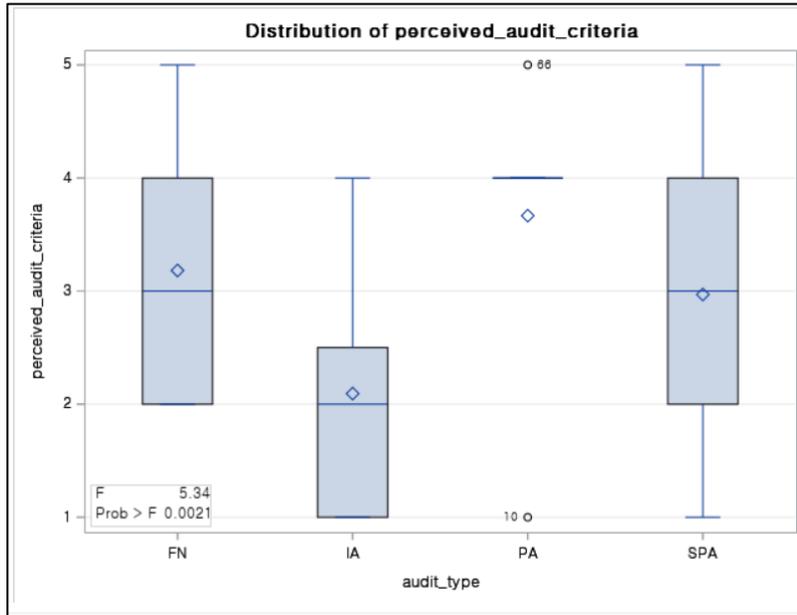
All four types of audit contain performance audit elements. It supports that compliance audit and performance audit are mixed in one audit project. Still, there was a difference in how including performance audit elements depending on audit type.

In terms of audit criteria, as shown in figure 3, financial audit (FN) and specific project audit (SPA) use the stated regulations and 3E in a similar proportion, and institution audits (IA) appear to use more stated rules. Although the number of samples for performance audit is small (6), using 3E is relatively high compared to the other three types.

In terms of audit activities, there were the following differences. As shown in figure 4, specific project audits and institutional audits are closer to detecting violations and identifying responsibilities. In contrast, financial audits and performance audits appear to focus more on audit activities to analyze the cause of problems and suggest improvement plans.

In terms of audit purpose, it appears that specific project audits and financial audits put a similar weight on securing compliance and improving performance. Institution audits are more focused on compliance. Performance audit places a relatively large weight on performance improvement. Figure 5 shows the result.

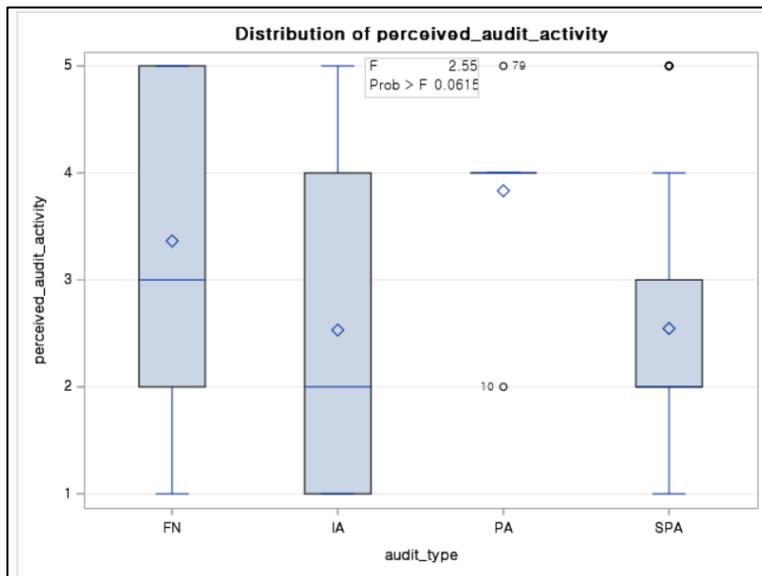
Figure 3. Perceived audit criteria



* Mean: FA 3.381, IA 2.093, SPA 2.969, PA 3.667

(1=close to stated regulations such as laws, guidelines, and code of conduct, 5=performance values such as goal achievements, efficiency, economy, effectiveness, and equity)

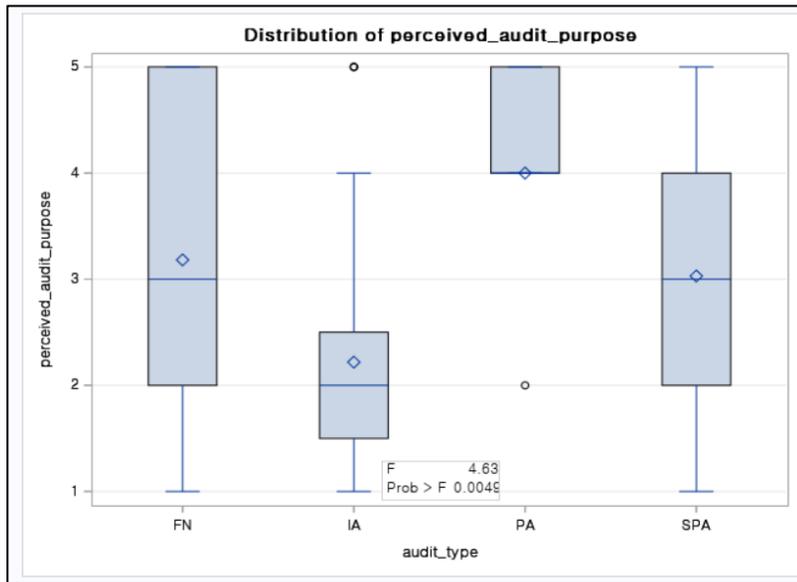
Figure 4. Perceived audit activity



* Mean: FA 3.367, IA 2.531, SPA 2.545, PA 3.833

(1=detection and resolution of the illegal situation, identification of responsibilities, implementation of necessary administrative measures, 5=policy effect analysis, cause analysis, the recommendation of improvement measures)

Figure 5. Perceived audit purpose



* Mean: FA 3.182, IA 2.219, SPA 3.030, PA 4.000

(1 = close to the improvement of compliance with laws and accounting standards and transparency, 5= close to the improvement of institution and policy goals, performance improvement, efficiency, economy, effectiveness, equity)

Differentiating factors

The auditees perceived the performance audit tendency differently depending on the type of audit they experienced. The inherent features of each audit type explain the difference.

Performance audits are performed primarily to improve the performance of policy or project programs, so they should be close to a conceptual performance audit.

It turns out financial audits are more like a performance audit than institution audits and specific project audits. It may result from the fact that BAI reviews the performance reports of central government agencies through financial audits. According to the National Finance Act, central government agencies must prepare a performance plan and report every year. BAI is responsible for the adequacy of the performance report as part of the inspection process of the financial statement.

Institution audits are perceived as relatively closer to a compliance audit than a performance audit. Institution audits may

function as a compliance audit to increase audit management efficiency. The auditing time for institution audits is shorter than that of performance audits or specific project audits. A performance audit may need more time than a compliance audit because it includes gathering data or suggesting alternatives. A compliance audit is more acceptable to practice with institution audits. In addition, big-scale projects or policies will be handled through separate performance audits or specific project audits. In institution audits, there is little benefit of conducting a performance audit for small-size programs. Also, compliance with organization operation and personnel guidelines, which is difficult to handle in other types of audits, should be dealt with in institution audits.

In the case of specific audits, it has a two-faced characteristic between performance audit and compliance audit. Still, in terms of audit activities, it appears that the focus is on detecting violations and accountability. It can be explained by the fact that a specific audit mainly targets policy projects that are social issues. Accordingly, the audit focus is also focused on identifying illegalities or responsibilities.

The overlapped area between performance audits and compliance audits

Despite the conceptual difference between a performance audit and a compliance audit, they are mixed in the audit practice. One of the reasons that cause the complexity is that modern administrative laws have procedural restrictions to secure 3Es. Administrative statutes and regulations do not simply define the limit of powers and duties of the administration but also regulate procedures to ensure transparency and economic efficiency.

"Act On Contracts To Which The State Is a Party" is one example that shows how the value of 3Es is embedded in administrative laws. Article 1 stipulates, "The purpose of this Act is to promote smooth administration of contracts by prescribing basic matters regarding contracts to which the State is a party." Selecting the contracting

party, estimating contract price, and other procedural statutes are prescribed within the Act. In other words, the national contract law stipulates that contract activities, which are an essential part of national financial activities, are to be performed economically and efficiently.

Such statutes blur the distinction between performance audits and compliance audits. For example, if an overpaid contract causes financial loss, it can be subject to a performance audit or a compliance audit. Suppose the overpaid contract resulted from a public official's negligence in investigating the market. In that case, it is a violation of laws. It is subject to a compliance audit as the Act regulates the method of determining the expected price. Still, this is a waste of tax in violation of economic principles and thus may be subject to performance audits. If we classify this example as a compliance audit, what remains in the field of performance audits related to contract activities becomes very narrow. The trend that administrative laws are gradually strengthening procedural regulations makes it difficult to distinguish between performance audits and compliance audits.

This study used the auditee's perception to differentiate between a performance audit and a compliance audit. Respondents may have different perceptions of the audit items placed on performance audits and compliance audits. Nevertheless, the results of this study explain to some extent the difference in performance audit level according to the audit type as shown below.

4.2. Perceived usefulness and perceived audit type

Descriptive statistics

Auditees' perception of the usefulness of the BAI audit was generally positive (3.266). By the work experience, the perceived usefulness was relatively low in the group with less work experience, but there was no significant difference after five years of work experience. By gender, male employees perceived the usefulness of

audit higher than female employees. Female employees perceived that the audit they experienced was closer to performance audits than male employees do. By job position, level 5 employees perceived the usefulness of audit relatively low and perceived that the audit they experienced was closer to a performance audit. By administration type, auditees in contract and construction management were recognized as having received audits close to the compliance audit, with low recognition of the usefulness of the audit. The other types of work do not show much difference from each other. Table 12 shows the descriptive statistics.

Table 12. Descriptive statistics of perceived audit usefulness

		N	Mean			
			Perceived usefulness	Perceived audit criteria	Perceived audit activity	Perceived audit purpose
Total		94	3.266	2.723	2.691	2.755
Work experience	y<5	16	2.750	2.688	2.813	3.063
	5≤y<10	15	3.533	2.066	2.200	2.200
	10≤y<15	33	3.393	2.878	2.606	2.515
	15≤y<20	16	3.250	2.875	2.265	3.063
	20≤y	14	3.286	2.293	3.357	3.214
Gender	Female	29	3.034	2.931	3.069	3.069
	Male	65	3.369	2.631	2.523	2.615
Job level	G4	6	3.167	2.333	2.500	3.167
	G5	35	2.943	3.286	3.114	3.286
	G6	42	3.476	2.381	2.452	2.333
	G7	11	3.545	2.455	2.364	2.455
Administrat ion type	Management	42	3.500	2.595	2.571	2.476
	Facilitation	30	2.933	3.033	2.800	2.967
	Regulation	10	3.300	2.700	3.100	3.200
	Contract	5	2.600	1.800	1.400	2.200
	N/A	7	3.714	2.857	3.286	3.286

Regression analysis

In a regression analysis model, which contains the following variables, whether the audit is close to performance or compliance audit does not affect auditees' perceived audit usefulness (Pr > F = 0.1678).

$$Y = \beta_0 + \beta_i X_i + \varepsilon$$

Y = perceived audit usefulness

X₁ = perceived audit criteria

X₂ = perceived audit activity

X₃ = perceived audit purpose

X₄₋₇ = control variables (work experience, gender, job level and administration type)

The result shows no difference in the perceived usefulness of performance audit and compliance audit. The hypothesis that performance audits would be perceived less useful than compliance audits is rejected.

Limitation of this regression analysis

Since this study has a limited number of samples, it is difficult to conclude that there is no difference in perception of the usefulness of performance audits and compliance audits.

The analysis may not include significant control or mediating variables. In this study, job level, gender, work experience, and administrative type were set as control variables, but no significant effect of the control variables was observed. Various factors are influencing the perception of the usefulness of performance audits and compliance audits. Auditees can obtain new information through performance audits or a new driving force as social interest in policies or programs subject to performance audit increases. Conversely, if the performance audit does not match the existing policy direction or excessively limits the discretion of the audited body, the auditees will perceive the performance audit as less valuable. This analysis does not include the pathway through which the effectiveness of performance audits is transmitted. Due to these limitations, the difference in perception of usefulness between the two audit types may not have been revealed.

4.3. Influencing factors on perceived audit usefulness

The impact of variables related to audit quality

Five variables (agreement on the reason for audit need, agreement on audit criteria, robust audit evidence, clear recommendations, and audit flexibility) related to audit quality were measured. Descriptive statistics shows that among the five variables, audit flexibility was recognized to be relatively low (mean 3.085), as shown in Table 13. There is no noticeable variation according to the number of years worked and gender. It was found that the lower ranks (G7) were highly aware of audit quality. By type of administration, it appears that public officials in the contract/construction management field experienced low audit quality.

Table 13. Descriptive statistics of perceived audit quality

		N	Mean				
			need	criteria	evidence	clarity	flexible
Total		94	3.436	3.298	3.638	3.606	3.085
Work experience	y<5	16	3.375	2.875	3.563	3.438	3.125
	5≤y<10	15	3.600	3.533	3.933	3.667	3.067
	10≤y<15	33	3.394	3.424	3.636	3.606	3.121
	15≤y<20	16	3.313	3.250	3.563	3.750	3.000
	20≤y	14	3.571	3.286	3.500	3.571	3.071
Gender	Female	29	3.483	3.069	3.724	3.448	3.034
	Male	65	3.415	3.400	3.600	3.677	3.108
Job level	G4	6	3.500	3.000	3.667	3.833	3.500
	G5	35	3.200	3.143	3.371	3.457	2.943
	G6	42	3.524	3.476	3.786	3.643	3.143
	G7	11	3.818	3.273	3.909	3.818	3.545
Administration type	Management	42	3.643	3.667	3.905	3.857	3.333
	Facilitation	30	3.300	3.000	3.367	3.500	2.967
	Regulation	10	3.300	2.900	3.500	3.000	2.600
	Contract	5	3.000	2.400	2.800	3.000	2.200
	N/A	7	3.286	3.571	4.000	3.857	3.429

* Need: Agreement on reason for audit need, Criteria: Agreement on audit criteria, Evidence: Robust audit evidence, Clarity: Clear recommendations, Flexible: Audit flexibility

Regression analysis was carried out by setting agreement on the reason for audit need, agreement on audit criteria, robust audit evidence, clear recommendations, and audit flexibility as independent variables, and work experience, gender, job level, and administration type as control variables.

$$Y = \beta_0 + \beta_i X_i + \varepsilon$$

Y = perceived audit usefulness

X₁ = agreement on reason for audit

X₂ = agreement on audit criteria

X₃ = robust audit evidence

X₄ = clear recommendations

X₅₋₈ = control variables (work experience, gender, job level and administration type)

Table 14 shows the result. Agreement on audit reason and audit flexibility were the only two variables affecting the perception of audit usefulness (significance level 0.01 and 0.1, respectively). It suggests that timely selection of audit items is the most important to increase audit usefulness. The audit recommendations need to be flexible so that the audit target organization can respond according to the situation. The agreement on audit criteria or clarity of audit recommendations did not affect the perception of usefulness. It suggests that public officials of central agencies perceive the urgency of the audit matter and solutions as more important than the reasons pointed out in the audit.

Table 14. Audit quality and perceived usefulness regression analysis result

Variable/Parameter	F value	Pr > F	β	t value	Pr > t
Agreement on reason for audit	7.51	0.0076	0.3413	2.74	0.0076
Agreement on audit criteria	0.36	0.5518	0.1030	0.6	0.5518
Robust audit evidence	2.54	0.1152	0.2274	1.59	0.1152
Clear recommendations	0.11	0.7448	0.0430	0.33	0.7448
Audit flexibility	3.54	0.0639	0.2277	1.88	0.0639
Work experience	1.65	0.1694	-	-	-
Gender	1.75	0.1895	-	-	-
Job level	0.75	0.5242	-	-	-
Administration type	1.63	0.1754	-	-	-

The impact of variables related to audit experience

Three variables were measured related to audit experience, communication, audit related workload, and learning from an audit. Descriptive statistics shows that respondents rated their audit experience positively (communication 3.617, workload 3.383, learning 3.404). There was no deviation according to work experience, gender, job level, and administration type in communication. In the workload, it was found that employees of less than five years, female employees, level 5 employees, and contract/construction managers perceived them relatively negatively. Regarding the learning effect through an audit, employees with less than five years of work experience and more than 20 years of work experience, level 5 employees, and employees in contract and construction management and regulatory fields perceived relatively low (see table 15).

Table 15. Descriptive statistics of audit experience

		N	Mean		
			communication	workload	learning
Total		94	3.617	3.383	3.404
Work experience	y<5	16	3.500	3.125	3.063
	5≤y<10	15	3.933	3.467	3.533
	10≤y<15	33	3.667	3.455	3.515
	15≤y<20	16	3.500	3.438	3.625
	20≤y	14	3.429	3.357	3.143
Gender	Female	29	3.552	3.138	3.448
	Male	65	3.646	3.492	3.385
Job level	G4	6	3.667	3.500	3.500
	G5	35	3.514	3.143	3.086
	G6	42	3.714	3.571	3.619
	G7	11	3.545	3.364	3.545
Administration type	Management	42	3.833	3.714	3.762
	Facilitation	30	3.433	3.200	3.267
	Regulation	10	3.300	2.900	3.000
	Contract	5	3.000	2.200	2.000
	N/A	7	4.000	3.714	3.429

Regression analysis was carried out by setting communication, workload, learning as independent variables, and work experience, gender, job level, and administration type as control variables. Table 16 shows the result.

$$Y = \beta_0 + \beta_i X_i + \varepsilon$$

Y = perceived audit usefulness

X₁ = communication

X₂ = audit related workload

X₃ = learned from the audit

X_{4~7} = control variables (work experience, gender, job level and administration type)

Table 16. Audit experience and perceived usefulness

Variable/Parameter	F value	Pr > F	β	t value	Pr > [t]
Communication	0.33	0.5647	-0.0924	-0.58	0.5647
Audit related workload	12.88	0.0006	0.5311	3.59	0.0006
Learned from the audit	0.94	0.3353	0.1424	0.97	0.3353
Work experience	1.21	0.3118	-	-	-
Gender	0.13	0.7155	-	-	-
Job level	1.57	0.2027	-	-	-
Administration type	1.51	0.2066	-	-	-

The audit-related workload was the only variable affecting the perception of audit usefulness (significance level 0.01). The result suggests that the perception of audit usefulness is a relative concept affected by audit-related workload. The auditees may think, "Is the audit result useful as the time and effort dedicated to cooperating the audit?" It means that audit-related workloads should be managed at an appropriate level to increase the perceived audit usefulness.

The impact of variables related to implementation

Five variables were measured related to audit recommendation implementation, willingness to implement audit recommendations by audited organizations (willingness), the capability of audited organizations to implement audit recommendations (ability), support from higher and other organizations to implement audit recommendations (support), stakeholders' attitude toward the acceptance of audit recommendations (stakeholder), the extent to which the SAI's authority helps implement the audit recommendations (SAI authority).

Overall, respondents evaluated the agency's willingness and capability to implement the audit recommendations relatively high (see table 17). Respondents also rated support from higher level and other organizations to implement audit recommendations (support), stakeholders' attitude toward the acceptance of audit recommendations (stakeholder), the extent to which the SAI's

authority helps implement the audit recommendations (SAI authority). There was no apparent difference in most items by group, but among the administrative types, contract/construction management and regulatory fields perceived the support item as low. In addition, in the field of contract/construction management, the attitude of stakeholders to the audit results was negative. This seems to be because audit results in the contract/construction management field often lead to contract termination and sanctions.

Table 17. Descriptive statistics of perceived audit implementation

		N	Mean				
			willingness	ability	support	stakeholders	SAI authority
Total		94	3.840	3.734	3.213	3.489	3.670
Work experience	y<5	16	3.875	3.750	3.063	3.250	3.438
	5≤y<10	15	3.800	3.600	3.400	3.800	4.000
	10≤y<15	33	3.818	3.667	3.152	3.455	3.758
	15≤y<20	16	4.125	4.000	3.250	3.500	3.313
	20≤y	14	3.571	3.714	3.286	3.500	3.786
Gender	Female	29	3.724	3.690	3.207	3.448	3.690
	Male	65	3.892	3.754	3.215	3.508	3.662
Job level	G4	6	4.333	4.333	3.500	3.667	3.667
	G5	35	3.457	3.400	2.943	3.229	3.657
	G6	42	4.024	3.857	3.286	3.667	3.714
	G7	11	4.091	4.000	3.636	3.545	3.545
Administration type	Management	42	3.929	3.833	3.381	3.595	3.738
	Facilitation	30	3.800	3.733	3.267	3.433	3.600
	Regulation	10	3.800	3.600	2.600	3.500	3.600
	Contract	5	3.600	3.200	2.800	2.800	3.200
	N/A	7	3.714	3.714	3.143	3.571	4.000

Regression analysis includes five independent variables (audited organization's willingness to implement, audited organization's capability to implement, support for higher and other organizations, stakeholder's attitude to audit result, SAI authority) and four control variables (work experience, gender, job level, administration type).

$$Y = \beta_0 + \beta_i X_i + \varepsilon_i$$

Y = perceived audit usefulness

X_1 = willingness to implement

X_2 = capability to implement

X_3 = other organizations' support

X_4 = stakeholders' attitude

X_5 = SAI's authority

X_{6-9} = control variables (work experience, gender, job level and administration type)

Table 18 shows the result. The level of support from higher and related organizations and the BAI authority (SAI authority) significantly affected audit usefulness (at significance level 0.1).

Table 18. Perceived usefulness and audit recommendation implementation

Variable/Parameter	F value	Pr > F	β	t value	Pr > t
Willingness to implement	2.56	0.1138	0.2881	1.60	0.1138
Capability to implement	1.26	0.2646	0.2079	1.12	0.2646
Other organizations' support	3.47	0.0664	0.2952	1.86	0.0664
Stakeholders' attitude	0.00	0.9625	0.0074	0.05	0.9625
SAI's authority	4.09	0.0468	0.2246	2.02	0.0468
Work experience	1.27	0.2881	-	-	-
Gender	1.14	0.2881	-	-	-
Job level	1.13	0.3428	-	-	-
Administration type	1.79	0.1405	-	-	-

It means that the availability of support of budget and organizational levels, such as the Ministry of Strategy and Finance, and the Ministry of Public Administration and Security, is essential when implementing the audit recommendation. Most audit recommendations are accompanied by a change in budget and amendments to laws and regulations (especially in central agencies,

most changes are accompanied by budget reallocations or law amendments). The support of related agencies and higher organizations such as the President determines the effectiveness of changes. That means BAI needs to collect opinions and induce cooperation from associated organizations in the audit process to make their audit result more implementable. The result also showed that the SAI's authority has an impact in the audit recommendation implement stage. The authority of the SAI helps the audited organization persuade other agencies and stakeholders in the process of implementing the audit recommendations.

Chapter 5. Discussion and Conclusion

Discussion

This study tried to distinguish performance audits and compliance audits through auditees' perceptions. One of the difficulties in the performance audit study is defining the concept and scope of performance audit. INTOSAI and Korea's public audit standards divide public audit into performance audit and compliance audit. Still, the criteria for the distinction between those two kinds of the audit are not clear. Performance audits aim to improve administrative efficiency and accountability, and compliance audits aim to ensure that administrative activities are carried out within the accounting standards and laws. However, since the accounting standards and rules, which are the basis of the compliance audit, are also related to administrative efficiency and responsibility, there is overlapped area between the two audit types. Therefore, in developing the public audit study, various approaches to classify the types of public audits will be needed.

This study also found that, regardless of the formal classification of audit type, BAI's all four types of audit (institution audits, financial audits, specific project audits, and performance audits) included performance audit elements. This result suggests that the BAI does not need to expand performance audits formally classified as performance audits as a policy goal. For example, financial audits can function as a performance audit as far as it concerns the effectiveness of using financial resources. Also, specific audits can substitute performance audits, and BAI can reclassify them as performance audits.

BAI has been conducting many audits close to performance audits through specific audits. If BAI tries to perform a performance audit differentiated from the existing specific audits, that could result in the "expansion of performance audits in a very narrow sense." Therefore, before expanding the number of performance audits, it is necessary to redefine the functions between audit types.

The hypothesis that a performance audit would be perceived less useful than a compliance audit was rejected. The results suggest that most performance audits are being conducted within a passive range, and the positive or negative effects of performance audits are not perceptible. As performance audits develop and expand in the future, and the difference between compliance audits becomes apparent, a difference in perceived usefulness may appear.

Conclusion

This paper studied the extent to which the BAI audit has performance audit tendency, whether a performance audit is perceived as less useful than a compliance audit, and the factors affecting the perceived audit usefulness.

This study tried to distinguish performance audits and compliance audits with auditees' perception in three aspects:

- Audit purpose (process-oriented vs. performance-focused)
- Audit criteria (stated regulations vs. comprehensive administrative values)
- Audit activities (problem-centered vs. cause and alternative suggestion)

The four types of BAI audits (financial audit, institution audit, specific project audit, and performance audit) included performance audit elements. Financial audits and performance audits were relatively closer to a conceptual performance audit, and institution audits were relatively close to a compliance audit. Specific project audits also included the performance audit element, which is somewhat consistent with the results of previous studies (Cho, 2009).

The auditees of the central government ministry recognized no significant difference in perceived usefulness between performance audits and compliance audits.

This study analyzed the factors affecting the perception of audit usefulness in three categories: audit quality, audit experience, and audit recommendation implementation. Among the audit quality factors, the agreement on audit reason and audit recommendations' flexibility influenced the perceived audit usefulness. In the audit experience, the increase in audit-related workload had a negative effect on audit usefulness. In terms of audit recommendation implementation, support from higher and related organizations and the authority of BAI affect the perceived audit usefulness.

Limitation of study and future direction

This study employed a method of surveying auditees' perceptions through questionnaires to understand the characteristics of BAI's audit. The auditee's perception may help grasp the impression of an audit, but there is a limit to understanding the details of an individual audit project. A future study that analyzes the contents of audits will complement this study.

Although auditees' perception of audit usefulness is one way to measure audit influence, it has limitations in measuring concrete changes in laws or administrative practices. In a future study, a quantitative approach may be needed to measure audit-induced changes.

Despite these limitations, studies on the auditee's perception have an apparent advantage. Since audit recommendations are implemented through the interaction between the auditor and the auditee, the auditee's perception greatly influences the audit impact. Therefore, it is essential to advance research on audit traits and usefulness by analyzing the auditee's perception.

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Abstract in Korean

최근 국내에서 성과감사 활성화 논의가 활발하게 진행되고 있다. 감사원의 연간 성과감사 건수는 2015년 3회에서 2019년 15회로 증가하였다. 그러나 전통적인 합법성 감사에서 성과 감사로의 전환이 성공적인지 여부는 아직 확인되지 않았다. 성과 감사 연구의 한 가지 주요 어려움은 성과 감사와 규정 준수 감사를 구별하는 것이다. 성과감사 영역과 합법성 감사 영역의 중첩, 실무에서 나타나는 두 감사의 혼재는 둘을 구분하기 어렵게 만들고 있다.

본 연구는 감사목적, 기준, 활동의 3가지 차원에서 피감사인의 감사경험에 대한 인식을 통해 합법성감사와 성과감사를 구분하는 것을 목적으로 하였다. 본 연구는 개별 감사 프로젝트가 성과감사에 얼마나 근접하고 있는지, 감사원의 감사종류에 따라 이러한 경향에 차이가 있는지 여부를 측정하였다. 분석 결과, 감사원의 4가지 감사유형인 재무감사, 기관운영감사, 특정감사, 성과감사 모두 형식적 감사 분류와 상관없이 성과감사 요소를 어느 정도 포함하고 있는 것으로 나타났다. 그 중 재무감사와 성과감사는 효율성, 효과성, 경제성의 3가지 기준에 상대적으로 높은 비중을 두고 있었다.

더 나아가서 본 연구는 성과감사 요소의 증가가 피감사인의 감사 유용성 인식에 영향을 미치는지, 그 밖에 어떤 요인들이 감사 유용성 인식에 영향을 미치는지 여부를 탐색하였다. 개별 감사 프로젝트를 성과감사에 가깝게 인지하는지 여부에 따른 피감사인의 감사유용성 인식에는 차이가 없었다. 감사품질, 감사경험, 감사환경과 관련된 다양한 요인 중 감사이유 및 감사권고의 유연성, 감사관련 업무량, 상급기관 및 유관기관의 지원, 감사원의 권위 수준이 감사 유용성 인식에 영향을 미치는 것으로 나타났다.

본 연구는 감사원이 공식적인 성과감사 뿐만 아니라 다른 유형의 감사로도 성과감사 기능을 수행하고 있음을 보여주며, 감사원이 성과감사의 양적 확대에만 집중할 필요가 없음을 시사한다. 또한, 성과 감사와 합법성 감사 사이에 유용성 인식 차이가 없다는 것은 성과 감사가 합법성 감사에서 아직 유의미한 차별화를 달성하지 못했을 가능성을 시사한다.