Key Drivers of Public Sector Audit Effectiveness in Kenya and Lessons for Developing Economies

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Abstract

This study explores the key factors influencing the effectiveness of public sector audits (PSA) within Kenya's national government and affiliated entities. Focusing on the role of institutional corporate governance, professional and technical competence, resource availability, and internal control processes, this research analyzes data from the Office of the Auditor General's 2021/2022 audit reports. Using a descriptive design and content analysis, 43 financial statements were examined to assess how these determinants impact audit outcomes. Findings indicate that professional and technical competence has the most significant positive impact on PSA effectiveness, followed by strong corporate governance and robust internal controls. Interestingly, resource availability showed a negative correlation, suggesting that merely increasing resources without strategic allocation may not enhance audit performance. These insights highlight the need for targeted training and improved governance structures to strengthen Kenya's audit capabilities and enhance public accountability.

Keywords: Audit, Auditee, Financial Management, Financial management systems, corporate governance, Competence.

1. Introduction

Over time, auditing procedures have evolved to become more focused on detecting issues and assessing the performance of government-funded projects. The Office of the Auditor General (OAG) in Kenya was established in the 2010 constitution to provide an independent opinion on entities that receive public funds. The National Treasury is responsible for budgeting at both the national and county government levels through the Public Expenditure framework, which consists of the Medium-Term Expenditure Framework (MTEF), Annual Budget, Public Financial Management System (PFM), and Monitoring and Evaluation (National Treasury, 2021).

The framework for the audit of public entities is explained in the Public Audit Act No. 34 of 2015 by stating the

functions and powers of the OAG (Public Audit Act, 2015). For instance, Article 229 explains the value of the internal controls of both county and national governments, which are used by the OAG to undertake audit activities for all state organs and public entities to ensure efficient use of the public. It also adds that the office is mandated with the responsibility of providing annual audit reports in Article 254 and performing any other duties per other legislation (The Kenyan Constitution, 2010). The Act also states that the OAG is an independent body that shall not be subject to direction by any authority. Lastly, the Act points out that the Audit Advisory Board under subsection 10 was formed to advise the OAG about the performance of their functions of review of development issues, budget estimates, remuneration, and staff appointment to the OAG.

The Public Finance Act of 2015 expanded the mandate of the OAG in Kenya to confirm the lawful and effective use of public resources, ensuring adequate funding for the office. However, the OAG faces challenges due to limited resources and a wide scope of work (Office of the Auditor General, 2023). The Act allows the OAG to determine the scope of their work and apply international audit standards. The OAG has unhindered access to all accounts upon request. The Act outlines the types of audits to be conducted by the OAG, including financial statement audits, performance or VFM audits, and forensic audits (Public Finance Act, 2015).

The Office of the Auditor General (OAG) plays a critical role in public financial management. Its main function is to provide independent oversight and assurance to the public on the proper management and use of public resources (Office of the Auditor General, 2023). This includes financial audits, performance audits, and special audits. Financial audits involve the examination of financial statements, records, and other documentation to ensure that public funds are used economically, efficiently, effectively, and in compliance with applicable laws and regulations. Performance audits, on the other hand, examine the economy, efficiency, and effectiveness of government programs, activities, and operations. Special audits are conducted on specific areas of concern that require immediate attention. Through its audits, the OAG provides information and recommendations to parliament and other stakeholders, including the public, on the management and use of public resources.

The Office of the Auditor General's work helps to promote transparency and accountability in public financial management and ensures that public resources are used effectively and efficiently for the benefit of the citizens (Public Finance Management ACT, 2012). In addition to its audit functions, the OAG also promotes good governance and best practices in public financial management. It provides technical assistance to government agencies, undertakes capacity-building programs, and conducts research and analysis on public financial management issues. Overall, the OAG's role in public financial management is to ensure that public resources are managed in a transparent, accountable, and efficient manner. Its work helps to promote good governance, prevent corruption and mismanagement of public funds, and enhance the delivery of public services to citizens.

The effectiveness of the Auditor General's oversight in public financial management in Kenya has been a major concern due to issues such as fraud, corruption, mismanagement, and misappropriation of public funds (Kamau et al., 2023). Despite the existence of regulations and oversight bodies, concerns remain about ensuring accountability and transparency in public finance management. The problem of the audit practice in Kenya is an issue of corporate governance which is supposed to ensure the implementation of OAG audit recommendations.

The key components of effective public financial management include transparency, accountability, sound financial planning, and robust financial control (Kamau et al., 2023). Corruption and unethical conduct in Kenya in the past decade have heightened and threatened the country's security, democratic gains, and economic growth (EACC 2017). The survey by EACC indicated that oversight institutions have failed to continually review systems of financial management in government entities which is affected by slow review of policies and laws due to the state of corruption. The country has lost billions through embezzlement of public funds in major grand scandals since 1998. For instance, Magnitude of Corruption 1990 lost over $200 million, Anglo Leasing 2001 $100 Million, the Maize scandal in 2009 amounted to $1.5 million, and the National Youth Service an estimated $ 14 million (Eboso, 2014). The Anglo leasing scandal involved fraudulent government contracts for security-related projects awarded to fictitious companies that lacked transparency and accountability. The maize scandal deficiencies in PFM were a lack of transparency on agricultural subsidies and improper monitoring of the project. The NYS scandal exposed a weakness in PFM systems as it involved misappropriation through weak procurement processes, insufficient oversight, and inadequate financial controls that enabled the diversion of funds through fraudulent payments (Opongo, 2022).

Alexander (2019) found that there are challenges in the implementation of budgets for the national audit office and the related performance in undertaking audits on public resources utilization. The public institutions have a poor accounting system which provides an avenue for fraudulent activities and has affected the country's

economy. Previous studies concluded that the PSA's effectiveness was affected by inadequate knowledge, resources, professionalism, and corporate governance. The research was done before the PFM Act bill of 2022 and other legislations in the constitutions. Hence, there is a need to assess the effectiveness of PSA based on the recent changes in legislation.

Despite the emphasis on the importance of PFM and support by legislation, PSA faces challenges in dealing with corruption and embezzlement of public funds, which brings the big question of value for money. This study therefore aimed at discovering the factors that influence the effectiveness of PSA in both national government and its entities. The study's main objective was to examine the determinants of the effectiveness of public sector audits in Kenya. The study aimed to achieve this by analyzing the influence of corporate governance practices on the effectiveness of public sector audits, investigating the influence of staff professional competence on the effectiveness of public sector audits, evaluating the influence of resource availability on the effectiveness of public sector audits, and analyzing the influence of the internal control process on the effectiveness of public sector audit.

2. LITERATURE REVIEW
2.1 Institutional Corporate Governance
Organizations are expected to follow the principles of corporate governance of leadership, effectiveness, transparency, and accountability in public practice (Alqooti, 2020). The above principles are aligned with the mandate of OAG in fulfilling its oversight responsibility in public financial management. Algooti (2020) defined public governance as the amalgamation of structures and processes that have been implemented by authorities to guide organization activities and give assurance that the objectives were met in an ethical and accountable manner. The governance aspects that affected public sector audit included corporate culture, existing governance structures, the management/staff, and established methodologies and procedures (Alqooti, 2020). Observance of these principles enhances the prioritization of risk management which is one way of improving financial audit and reporting. In addition, effective enforcement of responsibility is linked to entities' commitment to the stakeholders and improved compliance.

Machinjike et al. (2021) in their study of factors that influence the effectiveness of the auditor general in enhancing public accountability in Zimbabwe emphasized that mechanisms of governance among public sector entities carried more weight than other factors. The study pointed to challenges such independence of the auditor and malpractices in the entity that impacted the opinions of auditors and could not effectively perform their duties. Governance is a factor that makes organizations function smoothly and creates a good working environment at the OAG's office.

Latchu and Singh (2022) explored and conducted a case study on the auditor general's perspective of how institutional governance challenges in the public sector affect information systems in South Africa and uncovered issues that were both micro and macro. The study employed textual data in annual reports from the office and used themes from thematic analysis. The authors' findings on macro concerns included changes in the leadership of the government, management structure in public offices, and lack of credible information to policy implementers. Micro issues included poor leadership, inadequate information on existing structures, poor project management, and delays in filling vacancies in the office. The study findings indicate that inadequacy of knowledge of corporate governance and poor structures can lead to failure in instituting effective public sector audits. The limitation of this study is that it relied on historical data which might not present the current situation and did not collect views from primary players of the institution. Overall, the lack of auditor understanding of corporate governance can hinder the entity's ability to effectively oversee corporate practices and ensure that operations promote accountability and transparency. This can help ensure that they are equipped to identify and report on governance issues and that they can effectively engage with management and boards on these issues.

2.2 Professional and Technical Competence
Competence is the knowledge, ability, and skill that an individual possesses and can develop into expertise through training and development (Kertarajasa et al., 2019). Audit practitioners must have the technical and professional prerequisites to conduct audit work per professional standards and code of conduct. The researchers revealed that an incompetent auditor depends on the opinion of others, they lack professional skepticism, experience, and limited knowledge to complete audit tasks. The impact of incompetence in carrying out audits of government entities is that the objectivity of the OAG will not be achieved in ensuring accountability in PFM. The researchers added that competence is also the view of an individual's personality and special expertise. Previous researchers had expressed their opinions as expertise in the field of specialization, however, citing (Kertarajasa et al., 2019), it is insightful to focus on personal quality to expand the study.

Obwocha and Mereipei (2021) researched factors that affected the effectiveness of government audits and found that the technical competence of government auditors improved the outcome by 83.2% at < .05 significance level. The results were interpreted to mean that a unit change in internal audit compliance by government ministries improved the effectiveness of government audits by 45.9%. Masood and Lodhi (2015) evaluated the success factors of government audits in Pakistan and discovered that the exercise was constrained by, among other factors inability of auditors to use recent technologies in audit, ineffective training institutes, weak auditing methods, lack of qualified trainers, resistance to change of using new technology, lack of power to communicate and act on malpractices, and lack of professional competence.

Machinjike et al. (2021) examined the factors that influence the effectiveness of the auditor general in enhancing public accountability in Zimbabwe. The research employed a structured questionnaire to gauge auditor's responses on their competence. The findings of the study found that auditors' lack of relevant skills hampered the reporting structure and effectiveness of the office. In addition, independence, transparency, and availability of resources came out strongly as conditions that affected accountability and tallied with previous literature. A lack of the necessary professional and technical competence hinders the auditor from conducting effective audits and identifying issues that could impact the efficiency of the organization. Auditors need to receive ongoing training and education to enhance their professional and technical competence. This can help ensure that they have the necessary expertise to identify and report on issues and that they can effectively engage with management and the board on these issues.

2.3 Resources availability

Human resources are equally critical. Experienced auditors possess the skills and knowledge required to assess complex government operations and financial transactions. A lack of qualified staff can lead to suboptimal audit outcomes and a reduced ability to uncover fraudulent activities or fiscal mismanagement (Masood & Lodhi, 2015). Furthermore, resources influence the audit office's ability to invest in training and professional development programs for auditors, ensuring they stay up-to-date with changing laws, regulations, and best practices. Overall, the availability and allocation of resources significantly impact the quality, scope, and effectiveness of public sector audits, ultimately influencing their ability to promote transparency, accountability, and the efficient use of public funds.

Hwang and Colyvas (2020) add that institutions need to have elaborate and rationalized technology as a set of resources that strengthen internal controls. The authors mentioned that resources formed an important factor in creating a social construct in an entity and further used them to empower and constrain actors differently to make them act according to prescribed rules. Financial and time constraints affected the performance of auditors in the government and this was related to interference by increased scope of review.

Statutory audits are supposed to be conducted by the end of each financial year presenting limited time to execute the audit plan. Another factor that affected government audits was information and communication infrastructure resources which delayed the conveyance of information between the auditors and auditee. The increased delays in forwarding and discussing reports to the parliament limited the efficiency of the OAG oversight in financial management. Resources present the background of each organization and a limitation in facilitation provision of adequate funds, time, access to information, and technological and physical infrastructure affect the performance of auditors in carrying out government audits. Hwang and Colyvas (2020) explained that the rise of new institutions arises when the actors are facilitated with adequate resources to realize high value in their performance. Social skills in an institution develop skillfully based on how people can use rules and resources without limited scope. Institutions experience resource dependencies and collision with other players when there are no efficient ways to mobilize resources to support their objectives.

2.4 Internal control process (ICP)

Internal control is not a standalone event or a burden added to an organization's activities; instead, it is a continuous series of actions that should be integrated into the organization's operations (Cordery, 2022). It should be an inherent part of how management runs the organization, intertwined with its infrastructure, and integrated into the essence of the organization. Building internal control into the basic management processes of planning, executing, and monitoring is more effective and cost-efficient than adding separate control procedures. Effective internal control requires active management involvement and clear communication with other personnel, as all employees have essential roles in its implementation (Serlikowska, 2022). Additionally, internal control acknowledges the influence of human nature, recognizing that people may not always communicate, understand, or perform consistently due to their unique backgrounds and abilities, which can impact and be impacted by

internal control.

Since the control processes are meant to effectively achieve the entity's objectives, ensure execution of operations, fulfill accountability obligations, and promote compliance with laws and regulations; the INTOSAI framework requires all Supreme Audit Institutions (SAI) to have efficient processes for examining auditee accounts and reports (Hay & Cordery, 2018). The INTOSAI Guidance (GUID) is a resource designed to assist Supreme Audit Institutions (SAIs) and auditors in comprehending a particular topic and implementing the applicable International Standards of Supreme Audit Institutions (ISSAIs) effectively. It guides the practical application of ISSAIs throughout various audit procedures and engagements, although it is not obligatory to follow (Serlikowska, 2022).

Chan et al. (2021) asserted that an effective internal control system can offer reasonable assurance to management regarding an organization's objectives and survival but not absolute certainty. It can provide information on progress toward these objectives, but it cannot transform an ineffective manager into a proficient one. External factors like government policy changes or economic conditions may necessitate adjustments to controls or risk tolerance. Human factors and resource constraints contribute to the risk of internal control failures, making it subject to design flaws, errors, misunderstandings, and other challenges. It is unrealistic and costly to eliminate all risks through controls, so the likelihood of risk occurrence, potential impact, and control costs must be considered when establishing them. Organizational changes and management's commitment play a significant role in the effectiveness of internal control, requiring ongoing review, updates, communication, and leadership by example.

According to Fraser et al. (2022), ICP contains five components namely control environment, risk assessment, control activities, information, and communication and monitoring. The components are dynamic and they present a package of challenges, which if not monitored result in weakness in financial management systems. First, clear objectives are a prerequisite, and the control environment sets the foundation, influencing how strategies, objectives, and control activities are structured. Risk assessment helps in developing appropriate responses, with internal control activities serving as the primary strategy for risk mitigation. These activities, which include preventive, detective, and corrective measures, should be cost-effective. Effective information and communication are vital, and continuous monitoring is necessary to adapt to changing risks and objectives. These components provide a recommended framework for internal control in government, applicable to all aspects of an organization's operations. However, it's the responsibility of management to develop detailed policies, procedures, and practices tailored to their organization's needs and integrated into its operations. The components of the control environment include personal and professional integrity, competence, tone at the top, organizational structure, and human resources (Karunathilake et al., 2020).

3. RESEARCH METHODOLOGY

The study adopted a descriptive research design. Mayring (2019), described descriptive research as a design that focuses on understanding or describing phenomena of the subject of study. The study used content analysis to describe the characteristics of OAG and discover the relationship among different variables. Content analysis is a method that is used to conduct research for a specific context or situation using deductive reasoning for the practice of a problem of the study (Pieterse, 2020). The research design was selected because the model does not involve manipulating any variables but will aim at describing the existing condition of the features that affect the effective performance of OAG.

The unit of analysis was national government funds and its ministries, departments, and agencies (MDAs) that are audited annually by the auditor general. The audit scope for the auditor general comprises all ministries, departments, and agencies (MDAs) and donor-funded projects of both the national and county governments. The universe of the entity, as of June 2022, comprised a review of 109 financial statements of the national government and 326 accounts of MDAs, donor funds, revenue statements, and other funds under the national government. The total population of the study was 435 audit opinions for the national government as reported by the auditor general (Office of the Auditor General, 2022). The data of the above-mentioned scope is contained in comprehensive reports for the financial year 2022 under the annual corporate report, report on national government funds, report on county government executives and assemblies, and report on national government.

The sample of the study was 43 audit opinions obtained from OAG comprehensive reports for the financial year 2022 to the national government and its entities. Jones and Baran (2016) explained that sample size is a representation or estimation of the target population that is selected for the study. The study found all five comprehensive reports relevant to the study as used in literature development. The assertion was based on

Wiersema and Bowen (2009) who asserted that for a population of less than 30, all of them were to be chosen. According to Jones and Baran (2016), the sample size for a finite population can be calculated by using the formula below;

$$n = n_0 / [1 + \{(n_0 - 1) / N\}]$$

Where n is the sample size and N is the population size.

The sampling model was also supported by Mugenda and Mugenda (2003), advised that a desirable sample size for a population of less than 10000 requires 10% to 30% representation. Therefore, the study adopted a representation of 10% which was used to analyze the contexts as they appear in opinions of the reports. The method was chosen because it eliminates bias by increasing the chances of selecting each opinion and getting reliable results with fewer errors as compared to the sampling method.

Table 1: Distribution of Audit Entities

Entity	Opinions in Annual Reports.	Sample selected (15%)
National Government	109	10
National Government Entities		
MDAs - Voted Entities	71	7
Revenue Statements	13	2
Donor Funded Projects	217	21
Other funds (The national Treasury, State Department for Planning & State Department for Co-operatives	25	3
Sub-Total	*326*	*33*
Total	**435**	**43**

The research used secondary data obtained from Annual reports by OAG for the financial year 2021/2022. The research instrument used was a coding scheme, which is commonly applied in descriptive research for content analysis. According to McKibben et al. (2020), content analysis involves the systematic reading of the unit of study context and involves reading, interpreting, understanding, defining parameters, coding information contexts, and classifying information using a defined procedure. The parameters in coding were built using existing theoretical and contextual frameworks and the researchers used deductive elements of hypothesis/research questions, reliability, generalizability, and reliability.

The study intended to determine the frequency of disclosure of repeating contexts or themes in the study that will provide indicators of both dependent and independent variables. To determine the level of disclosure, the coding scheme was used to allow for planning, execution, reporting, reproducing, and evaluating the contexts (Krippendorff, 2018). According to Pieterse (2020), coding is a process of carefully reading transcribed data and singling out analytical units that can be coded. Hence, coding involved the use of descriptive words or symbols that were labeled to signify meaningful units in the context. Categorizing segments were created and short words were used to capture the relevance of the content which is later applied to the whole document that is being reviewed (Pieterse, 2020).

The categorized segments were scored in the coding sheet using 2 levels of coding where a value of "0" will indicate not-mentioned and "1" for "mentioned. McKibben (2020) revealed that a common way of operationalizing variable segments is through priori assignment of codes with binary or dichotomous models using zero (categories absent from context) and one (categories present in contexts). The model allows the application of statistical measures in analyzing data and can identify "other" units that do not fall within the segment of the study, hence aiding with measuring the normality of data (McKibben et al., 2020).

Table 2: Binary score model

Score	Guide
0	Categories absent from context
1	Categories are present in contexts; short phrases, descriptive words, and meaningful units.

According to Zhang and Wildemuth (2009), the development of categories and coding schemes requires the researcher to obtain themes from three sources which included data, previous related studies, and theories. The constant comparative method allows for systematic comparison of each text in various categories and interpreting their properties throughout the development of the coding scheme. The coding model can be modified within the course of analysis, to account for new emerging categories. The review of the literature used Google Scholar and EBSCOhost using search terms like Efficiency of office of OAG, factors for PFM, supreme audit challenges, and governance structure of audit institutions. The literature search was completed between February and June 2023. In total, 15 articles of relevance in the literature review were included and used to identify recurring categories of both the independent and dependent variables.

The research adopted secondary data that was obtained from the 2021/2022 annual reports of the Office of the Auditor General (OAG). The reports gave cross-sectional data since they involved audit opinions observed from one financial year. The reports disclosed items related to the determinants of the effectiveness of Public sector audits and were used to populate the coding scheme (Pieterse, 2020). The disclosed items related to both independent and independent variables from the 43 sampled opinions. The frequency of disclosures gave rise to the trend of each variable of the study. The coding sheet used a percentage to determine the disclosure level by dividing the number of each occurrence by the total number of opinions observed in each report category.

Data for the analysis was collected using a coding scheme after reviewing the opinions of the OAG from annual corporate reports. A researcher should understand the sampling methods used for a study and apply the right methods of data analysis while using statistical packages (Heeringa et al., 2017). The researchers described the applicability of various methods of analysis and emphasized that descriptive statistics were used to summarize characteristics of a sample population by use of measures such as mean, median, mode, and standard deviation. The authors also added that inferential statistics was applied in research for the generalization of findings about a population based on a sample using techniques such as hypothesis testing, confidence intervals, and regression analysis. The characteristics of the sample like mean, totals, and percentage of occurrence were obtained using formulas. STATA program was used to analyze the significance of the variables of the study. The following regression model was used for this study:

$$EPSA = \beta_0 + \beta_1 ICG + \beta_2 PC + \beta_3 R + \beta_4 ICP + \varepsilon$$
Where;
EPSA= Effectiveness of Public sector audit
ICG= Institutional corporate governance
PC= Professional and technical competence
R = Resources availability
ICP= Internal Control Process
β_0 = is the constant/ intercept
$\beta_1, \beta_2, \beta_3, \beta_4$ = coefficients of the independent variable
ε = is the residual of the model

The test of basic regression model assumptions was tested using the Multicollinearity Test and Normality Test (Schmidt & Finan, 2018). The model used the normality test of the residuals to test the goodness of fit test and was backed by visual inspection of data to improve the outcome.

Multicollinearity test was used to show the degree of correlation between variables which are determinants of the effectiveness of public sector audits. According to Schmidt and Finan (2018), it is important to test for multicollinearity before interpreting the results of a regression analysis so that a high correlation can be removed and minimize the effect of having unreliable and unstable estimates. Schmidt and Finan (2018) clarified that when the coefficient correlation ranges from -1 to +1, the interpretation means perfect negative correlation and perfect positive correlation between the variables. On the other hand, a correlation of 0 indicates no correlation

between variables and the study will support the null hypothesis. Additionally, figures below 5 were interpreted to prove the absence of multicollinearity. The method was applied because it allowed the incorporation of prior information relating to parameters of limited data. The method allowed the estimation of uncertainties which enhanced decision-making and analyzing the robustness of the results. The residuals of the model were tested to check if they are normally distributed because the test will give the difference between the actual values of the dependent variable and the predicted values (Schmidt & Finan 2018). Kurtosis and skewness were used to test the assumption for normal distribution. For data to be normally distributed, skewness should range between +1 and -1 and kurtosis should range from +3 and -3 (Hanusz & Tarasińska, 2015).

4. DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.1 Results of Descriptive Analysis

Weighted descriptive statistics for the cross-sectional sample are presented in Table 4.2 for the National Government, Ministries, Departments and Agencies (MDAs), Revenue statements, Donor Funded Projects, and other funds which included the national Treasury, State Department for Planning and state Department for Co-operatives. A total of 43 audit opinions were reviewed from the annual reports of the OAG. The ideas of standard deviation, skewness, and kurtosis were founded in the 19th century to devise a systematic way of discussing distributions. The average frequency rates in the content analysis are 1 and 2 for indicators that came up during the study. As shown in the below figures.

```
                              EPSA

          Percentiles      Smallest
 1%            0               0
 5%            0               0
10%            0               0          Obs                    43
25%            0               0          Sum of Wgt.            43

50%            1                          Mean             1.255814
                            Largest       Std. Dev.        1.310998
75%            2               3
90%            3               4          Variance         1.718715
95%            4               4          Skewness          1.50629
99%            6               6          Kurtosis         5.630495
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Figure 1: Descriptive Summary Effectiveness of Public Sector Audit (EPSA)

As shown in Figure 1, the total number of observations is 43, as earlier stated in the sampling framework since 43 audit opinions were reviewed during content analysis. EPSA has a mean of 1.255814, whereby the observations were coded as 1 or 0 to indicate the existence or non-existence of an indicator/theme in the reports. The standard deviation of the variable is 1.310998 which means that the values are close to the mean and there are minimal outliers in the data because of the higher standard deviation. The data has less variation. Additionally, the output shows that the 1% and 25% start at 0, the 50% percentile is at 1, the 75% quartile has the lowest value of 2 while highest is at 3 and the last quartile is at 6. The smallest value is 0, which in the study indicates the non-existence/non-disclosure of an indicator to a variable. The largest values are 3, 4, and 6 which indicate the number of disclosures for EPSA indicators in the reports. The sum of weights is equal to the number of observations which shows that the default data was used for analysis. The skewness of the variable is a positive number of 1.50629, hence there is asymmetry. Lastly, the kurtosis is at 5.63095 which indicates a heavy-tailed distribution.

			ICG		
	Percentiles	Smallest			
1%	0	0			
5%	0	0			
10%	0	0	Obs	43	
25%	0	0	Sum of Wgt.	43	
50%	1		Mean	1.116279	
		Largest	Std. Dev.	1.179372	
75%	2	3			
90%	3	4	Variance	1.390919	
95%	4	4	Skewness	1.094907	
99%	4	4	Kurtosis	3.421832	

Figure 2: Descriptive Summary Institutional Corporate Governance (ICG)

Figure 2, shows the descriptive statistics of the ICG variable and the total number of observations is 43, which aligns with the sampling framework to review 43 audit opinions during content analysis. The mean value for the variable is 1.116279, whereby the observations were coded as 1 or 0 to indicate the existence or non-existence of an indicator/theme in the reports. The standard deviation of the variable is 1.179372 which means that the values are close to the mean and there are no outliers in the data. The data has less variation. Additionally, the output shows that the first quartile starts at 0, the 50% percentile is at 1, the 75% quartile has a lowest value of 2 while the highest is at 3 and the last quartile is at ranges between 3 and 4 observations. The smallest value is 0, which in the study indicates the non-existence/non-disclosure of an indicator to a variable. The largest values are 3 and 4 which indicates the number of disclosures for ICG themes in the reports. The sum of weights is equal to the number of observations which shows that the default data was used for analysis. The skewness of the variable is a positive number of 1.094907, hence there is asymmetry. The kurtosis is at 3.421832 which provides a good convenient benchmark.

			PC		
	Percentiles	Smallest			
1%	0	0			
5%	0	0			
10%	0	0	Obs	43	
25%	0	0	Sum of Wgt.	43	
50%	1		Mean	.744186	
		Largest	Std. Dev.	.6207915	
75%	1	2			
90%	1	2	Variance	.3853821	
95%	2	2	Skewness	.2156658	
99%	2	2	Kurtosis	2.404826	

Figure 3: Descriptive Summary Professional and Technical Competence (PC)

Figure 3, shows the descriptive statistics of the PC variable and the total number of observations is 43, which aligns with the sampling framework to review 43 audit opinions during content analysis. The mean value for the variable is 0.744186, whereby the observations were coded as 1 or 0 to indicate the existence or non-existence of an indicator/theme in the reports. The standard deviation of the variable is 0.2156658 which is less than the means and shows a normal distribution and there are no outliers in the data. The data has less variation Additionally, the output shows that the first quartile starts at 0, the 50% percentile is at 1, the 75% quartile has the lowest value of 0 while the highest is at 2 and the last quartile has 2 observations. The smallest value is 0, which in the study indicates the non-existence/non-disclosure of an indicator to a variable. The largest value is 2 which indicates the number of disclosures for PC themes in the reports. The sum of weights is equal to the number of observations which shows that the default data was used for analysis. The skewness of the variable is a positive number of 0.2156658, hence there is symmetry. The kurtosis is at 2.404826 which provides a good convenient benchmark to show normal distribution. The value for kurtosis means that the data points are close to the mean and indicate normality.

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                                       R

          Percentiles        Smallest
  1%           0                 0
  5%           0                 0
 10%           0                 0        Obs                    43
 25%           0                 0        Sum of Wgt.            43

 50%           1                          Mean              .5813953
                        Largest           Std. Dev.         .5868624
 75%           1                 1
 90%           1                 1        Variance          .3444075
 95%           1                 2        Skewness          .3956775
 99%           2                 2        Kurtosis           2.26669
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Figure 4: Descriptive Summary Resources (R)

Figure 4, shows the descriptive statistics of the R variable and the total number of observations is 43, which aligns with the sampling framework to review 43 audit opinions during content analysis. The mean value for the variable is 0.5813953, whereby the observations were coded as 1 or 0 to indicate the existence or non-existence of an indicator/theme in the reports. The standard deviation of the variable is 0.5868624 which means that the values are close to the mean and there is less variation in the dataset. Additionally, the output shows that the first quartile starts at 0, the 50% percentile is at 1, the 75% quartile has the lowest value of 0 while highest is at 1 and the last quartile is at ranges between 1 and 2 observations. The smallest value is 0, which in the study indicates the non-existence/non-disclosure of an indicator to a variable. The largest value is 2 which indicates the number of disclosures for R themes in the reports. The sum of weights is equal to the number of observations which shows that the default data was used for analysis. The skewness of the variable is a positive number of 0.3956775, hence there is Symmetry and kurtosis is at 2.26669 which provides a good convenient benchmark for the normality test.

```
                                      ICP

          Percentiles        Smallest
  1%           0                 0
  5%           0                 0
 10%           0                 0        Obs                    43
 25%           0                 0        Sum of Wgt.            43

 50%           0                          Mean              .7906977
                        Largest           Std. Dev.         1.725966
 75%           1                 4
 90%           3                 4        Variance          2.978959
 95%           4                 6        Skewness          2.717429
 99%           8                 8        Kurtosis          10.12935
```

Figure 5: Descriptive Summary Internal control process (ICP)

Figure 5, shows the descriptive statistics of the R variable and the total number of observations is 43, which aligns with the sampling framework to review 43 audit opinions during content analysis. The mean value for the variable is 0.7906977, whereby the observations were coded as 1 or 0 to indicate the existence or non-existence of an indicator/theme in the reports. The standard deviation of the variable is 1.725966 which means that the values are close to the mean and there is less variation in the dataset. Additionally, the output shows that the first quartile starts at 0, the 50% percentile is at 0, the 75% quartile has the lowest value of 1 while the highest is at 4 and the last quartile has the largest value of 8 observations for the indicators. The smallest value is 0, which in the study indicates the non-existence/non-disclosure of an indicator to a variable. The largest values are 4, 6, and 8, which indicates the number of disclosures for R themes in the reports. The sum of weights is equal to the number of observations which shows that the default data was used for analysis. The skewness of the variable is a positive number of 2.717429, which is greater than +1 hence there is asymmetry. The value for kurtosis is at 10.12935 which indicates high non-variability of data set that contains outliers. The positive value shows that the distribution is peaked and possesses thick tails hence more numbers are located far from the mean.

4.2 Correlation Analysis Findings

Schmidt and Finan (2018) supported that the relevance of correlation analysis was to check how variables related to each other, and eliminate any multicollinearity before regression was performed. When the coefficient correlation ranges from -1 to +1, the interpretation means perfect negative correlation and perfect positive correlation between the variables. On the other hand, a correlation of 0 indicates no correlation between variables and the study will support the null hypothesis. Additionally, figures below 5 were interpreted to prove the absence of multicollinearity. Correlation analysis provides a perfect measure of linear relationships which can be positive, negative, or have no relation. A positive correlation is interpreted to mean that two variables move in the same direction. A high value for one variable will contribute to a high value in the other variable and vice versa. Scientifically, a larger coefficient indicates a stronger relationship between variables, and a low value would mean a weak relationship. A negative correlation is interpreted to mean the opposite movement of variables if one is changed. For instance, a high variable for one variable will result in a low value for the other. Variables that do not have any linear relationship are termed to be independent and have a zero correlation.

Correlation analysis was calculated to measure the strength and direction of the relationship between the variables. The pairwise correlation was used to test the level of relationship between variables at a 5% significance level. Table 4.3 describes the correlation between the dependent variable Effectiveness of Public Sector Audit (EPSA) and independent variables (determinants) such as institutional corporate governance (ICG), professional and technical competence (PC), resources availability (R), and internal control process (ICP). It can be seen from the results of Table 4.3 that independent variables ICG, PC, and ICP have a positive relationship with dependent variables EPSA, however, R is negatively correlated. This means that a high value in one of the independent variables will result in a high value for EPSA. On the other hand, a high value for R will result in a reduction in EPSA.

The output below shows that the correlation between EPSA and ICG is 0.3191, which is a fairly weak positive linear relationship. What the results mean is that we cannot tell whether a high value for EPSA causes ICG to improve or ICG causes EPSA to improve. However, the results support the theory that governance structures will impact the outcome of public sector audits. The correlation between EPSA and PC is essentially positively weak at 0.3749 raises a possibility that PC will result in improvement in EPSA and vice versa. On the other hand, EPSA and R have a weak negative correlation of -0.1670, to means that resources are not likely going to hurt EPSA. Lastly, EPSA and ICP have a fairly weak positive correlation of 0.3399 to means that both variables will move in a similar direction. It is worth noting that PC and ICP are negatively correlated with a coefficient of -0.0067 which means that professional and technical competence is likely to result in insufficient internal control processes which will affect the outcome of public sector audit. Each variable has a perfect positive correlation with itself as shown in the output figure 6.

	epsa	icg	pc	r	icp
epsa	1.0000				
icg	0.3191	1.0000			
pc	0.3749	0.1392	1.0000		
r	-0.1670	0.0032	0.2219	1.0000	
icp	0.3399	0.0122	-0.0067	0.0290	1.0000

Figure 6: Correlation between variables

Correlation analysis was also done between the independent variables to measure linear relationships. The tables below show linear relations.

	icg	icp
icg	1.0000	
icp	0.0122	1.0000
	0.9379	

Figure 7: Pairwise correlation between ICG and ICP

The pairwise correlation between these two variables is 0.0122 and the P-value is 0.9379 which is above the significance level α =0.05. The above result indicates that the correlation between ICG and ICP is not statistically significant hence there is a non-linear relationship between the variables. However, the correlation coefficient says that there is a weak positive correlation hence an increase in the value of ICG increases ICP and vice versa.

	icg	pc
icg	1.0000	
pc	0.1392	1.0000
	0.3735	

Figure 8: Pairwise correlation between ICG and PC

The pairwise correlation between these two variables is 0.1392 and the P-value is 0.3735 which is above the significance level α =0.05. The above result indicates that the correlation between ICG and PC is not statistically significant hence there is a non-linear relationship between the variables. However, the correlation coefficient says that there is a weak positive correlation hence an increase in the value of ICG increases PC and vice versa.
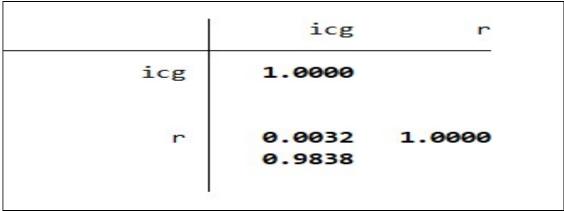
	icg	r
icg	1.0000	
r	0.0032	1.0000
	0.9838	

Figure 9: Pairwise correlation between ICG and R

The pairwise correlation between these two variables is 0.0032 and the P-value is 0.9838 which is above the significance level α =0.05. The above result indicates that the correlation between ICG and R is not statistically significant hence there is a non-linear relationship between the variables. However, the correlation coefficient says that there is a weak positive correlation hence an increase in the value of ICG increases PC and vice versa.
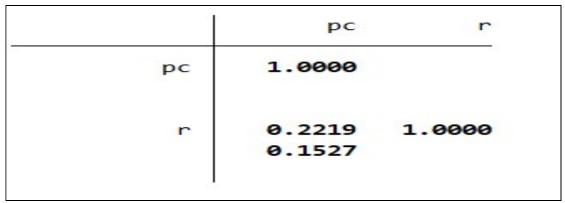
	pc	r
pc	1.0000	
r	0.2219	1.0000
	0.1527	

Figure 1: Pairwise correlation between PC and R

The pairwise correlation between these two variables is 0.2219 and the P-value is 0.1527 which is above the significance level α =0.05. The above result indicates that the correlation between PC and R is not statistically significant hence there is a non-linear relationship between the variables. However, the correlation coefficient says that there is a weak positive correlation. Professional and technical competence emanates from the educational background, skills, and experience level of the staff which is not impacted by the resources of the organization. However, the research supports the literature by finding a positive coefficient between the variables which suggests that the availability of resources can support training and development of employees to further their competence.

	pc	icp
pc	1.0000	
icp	-0.0067	1.0000
	0.9659	

Figure 2: Pairwise correlation between PC and ICP

The pairwise correlation between these two variables is -0.0067 and the P-value is 0.9659 which is above the

significance level α =0.05. The above result indicates that there is a negative correlation between PC and ICP. The P-value indicates that the variables are not statistically significant hence there is a non-linear relationship. Governance structures focus on the management of the whole organization while the level of competence in the research relates to the presentation of financial information. The non-linear relationship can be explained by the possibilities of weaknesses in accounting, and incompetence levels at preparation and presentation which do not relate to the style of management adopted at different ministries.
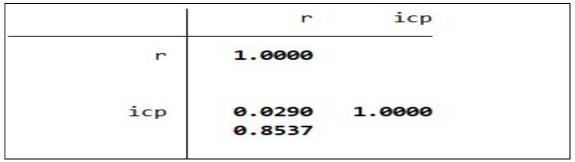

Figure 3: Pairwise correlation between R and ICP

The pairwise correlation between these two variables is 0.0290 and the P-value is 0.8537 which is above the significance level α =0.05. The above result indicates that the correlation between R and ICP is not statistically significant hence there is a non-linear relationship between the variables. However, the correlation coefficient says that there is a weak positive correlation. Internal control process weaknesses and risk management are some of the themes that came up during the research. Weaknesses in financial process controls have been attributed to the failure to train staff to identify and mitigate control weaknesses which is an independent factor not in the research. The output suggests that resource availability has a weak positive coefficient and ICP is affected by other factors other than resources.

4.3 Findings on Diagnostic Tests
4.3.1 Multicollinearity Test
Multicollinearity is explained by close linear relations between independent variables and can cause bias if it exists. The test was performed using the variance inflation factor (VIF). The benchmark for the test would be if VIF equal to 1 variable are not correlated, VIF between 1 and 5, will indicate moderate correlation, and beyond 5 variables are highly correlated. The results agreed with the findings of Schmidt and Finan (2018) because it returned a score of 1.04 indicating the absence of multicollinearity as shown in figure 13 below:

Figure 4: Variance Inflation Factor

4.3.2 Normality Test
The study used skewness and kurtosis to test the assumption of normal distribution. Hanusz & Tarasińska (2015) test for normality set parameters for skewness at +1 and -1 and Kurtosis at +3 and -3. The output of the model fit in the described ranges, hence, the data were assumed to be normally distributed as shown in figure 14.

```
               Skewness/Kurtosis tests for Normality

                                              ────── joint ──────
    Variable  │  Obs  Pr(Skewness)  Pr(Kurtosis) adj chi2(2)   Prob>chi2

        epsa  │   43     0.0003         0.0075       15.68        0.0004
        epsa  │   43     0.0003         0.0075       15.68        0.0004
         icg  │   43     0.0040         0.3078        8.09        0.0175
          pc  │   43     0.5173         0.4614        1.01        0.6048
           r  │   43     0.2425         0.2633        2.79        0.2478
         icp  │   43     0.0000         0.0001       30.95        0.0000
```

Figure 14: Normality Test

4.4 Regression Analysis and Findings

In this study, the research tried to scrutinize how institutional corporate governance (ICG), professional and technical competence (PC), Resource availability, and internal control process (ICP) impact the effectiveness of PSA.

```
. regress epsa icg pc r icp

    Source  │      SS        df      MS        Number of obs   =      43
────────────┼──────────────────────────       F(4, 38)        =    6.22
     Model  │  28.5495146     4   7.13737866   Prob > F        =  0.0006
  Residual  │  43.6365319    38   1.14832979   R-squared       =  0.3955
────────────┼──────────────────────────       Adj R-squared   =  0.3319
     Total  │  72.1860465    42   1.71871539   Root MSE        =  1.0716


       epsa  │     Coef.   Std. Err.      t    P>|t|    [95% Conf. Interval]
────────────┼────────────────────────────────────────────────────────────
        icg  │  .2890172   .1416532     2.04   0.048    .0022553    .575779
         pc  │  .8451435   .2759948     3.06   0.004    .2864212   1.403866
          r  │ -.5956939   .2892228    -2.06   0.046   -1.181195  -.0101929
        icp  │  .2636715   .095861      2.75   0.009    .069611    .4577321
      _cons  │  .4420953   .3226262     1.37   0.179   -.2110272   1.095218
```

Figure 5: Regression analysis results

As shown in figure 15 above, the R square (R^2) of the model is 0.3955. This means that 39.55% is explained by variation in the four variables in the study and 60.45% of the variance in EPSA was explained by other factors not in the study. This is a fairly moderate model. The research opens a gap for other researchers to explore the topic further on what other variables can impact public sector audit effectiveness. The model has a p-value of 0.0006 which indicates all the variables are significant at $\alpha = 0.005$. The model predicts that EPSA was 44.21% when all other variables are zero. The accuracy of the model in predicting the target value, which is represented by the average difference between the values predicted by the model and the actual values is 1.09 as shown by Root MSE. The value is close to zero, which means the model is moderately predicting the target value. The F-test for the model is 6.22, which is a test for the statistical significance of the regression equation as a whole. The output shows that since the F-value is greater than 4, the regression equation is statistically significant and helps us understand the relationship between the dependent and independent variables.

4.4.1 Institutional Corporate Governance (ICG) and EPSA

The study sought to answer the research question of how corporate governance mechanisms, such as transparency and accountability, influence the effectiveness of public sector audits. The themes that emanated during the review of reports included management change, transparency and accountability, corporate culture, documentation of policies, code of conduct, service delivery, and effectiveness of governance structures. The Beta value (β) demonstrates the degree to which the independent variable can explain the dependent variable. The output reveals that if the indicated effect ICG increases, the outcome improved EPSA by 28.90%. The

variable is statistically significant since it has a P-value of 0.048 which is less than (α= 0.05).

The results of the study show that ICG significantly accounts for EPSA. The indicators of ICG that impact EPSA according to this research include transparency and accountability levels, documentation that supports audit evidence, corporate culture, and the effectiveness of governance structures. The results are in line with the study by (Alqooti 2020), which proved that institutional corporate governance was the major factor in determining EPSA. However, the 28.90% coefficient level suggests that the effectiveness of PSA can be explained by other factors like the independence of the OAG and political malpractices (Machinjike et al., 2021).

4.4.2 Professional and Technical Competence and EPSA

The second research question wanted to find out how the level of professional and technical competence of the national government and its entity staff affect the effectiveness of public sector audits. The themes from the study that affected public sector audits surrounded the preparation and presentation of financial statements. For instance, the level of incompetence was manifested through misstatements in the financial statements, omissions, inaccuracies, use of cash accounting instead of accrual basis by some entities, non-disclosures, and lack of proper records. The coefficient value of PC is 0.8451 which means that an increase in competence level within the public sector will contribute to the effectiveness of PSA at a rate of 84.51%. The variable is statistically significant since it has a P-value of (0.004) smaller than (α= 0.05). The coefficient processes a strong significant correlation of how the level of competence impacts the outcome of public sector audits.

The results explain that indicators such as the level of training of staff within national government entities determine how well the financial statements are prepared and presented. Some of the reasons for the qualification of audit reports by the OAG were misstatements, omissions, lack of proper records, non-disclosures, and inaccuracies in the financial statements of the ministries and departments. The results of the study show that competence levels affect the effectiveness of PSA. Additionally, the results are in line with Obwocha and Mereipei (2021) whose research concluded that competence improved PSA by 45.9% within government audits. Similarly, INTOSAI (2019) emphasized the need for SAIs to hire competent staff and promote continuous training for the achievement of quality work. Machinjike et al. (2021) emphasized that the auditors' lack of relevant skills hampered the reporting structure and effectiveness of the auditing office and the apparent success of PSA.

4.4.3 Resources Availability and EPSA

The coefficient value for resource availability is -0.5957 and is interpreted to mean that as the value of resources increases, the EPSA will tend to decrease. Additionally, the variable is significant since it has a P-value of (0.046) smaller than (α= 0.05). The results of the study show that resources affect the effectiveness of PSA. OAG's (2022) summary report pointed out that the increasing scope of their work and reduced budget for the financial year 2021/2022 contributed to the failure to audit all institutions as required. Additionally, the timeliness of the audit has hampered the attainment of PSA since the increased scope contributed to inadequate coverage of the audit plan.

Another resource factor pointed out by this research was inefficient systems and access to information that impeded the effectiveness of the OAG in filling its mandate. On the other hand, the availability of resources to ministries and departments was found to have indicators such as Social, political, and institutional factors that impacted how resources are allocated within the national government entities. The study suggested that the availability of resources to both the OAG and the national government entities cumulatively resulted in an impact on the outcome of public sector auditing. The findings collaborate with research by Masood and Lodhi (2015) which found that factors that affected government audits included limited human, physical, financial, and intellectual resources.

4.4.4 Internal Control Process (ICP) and EPSA

The coefficient value for resource availability is 0.2636 which means that an improvement of control processes in finance and procurement within the public sector will contribute to the effectiveness of PSA at a rate of 26.36%. The variable is statistically significant since it has a P-value of (0.009) which is smaller than (α= 0.05). The outcome illustrates that ICP among national government entities is an important factor in determining the effectiveness of PSA. The indicators that pointed out weaknesses in control processes include inadequate risk assessment, weakness in procurement and financial reporting, integrated financial management system (IFMS) weaknesses, unsupported transactions, and non-compliance to guiding operations.

The financial control weakness in the national government and its entities is a significant factor that explains the

problem of practice in public sector auditing. The research results are in line with the problem statement which was concerned with the problem of practice in the public sector. The output also responds to the question of how ICP relates to EPSA and it can be concluded that weak control processes have a direct impact on public sector auditing. The results are in line with (Hay & Cordery, 2018) suggested that SAI should have efficient processes for examining auditee accounts and reports and provide recommendations that appropriately address the key audit matters and enable strengthening of internal controls for the auditee. This means that carrying out audit duties by the OAG requires understanding the weaknesses of national government entities and providing actionable recommendations to improve audit quality.

4.5 Empirical Results

The study provides empirical evidence about the positive influence the independent variables have on EPSA. According to the output of the regression, all variables have a statistically significant effect on the effectiveness of PSA at a significance level below 0.05. ICG had a coefficient of (β =0.2890) and a P-value of 0.048. The output answers the first research question by proving that institutional corporate governance is positively related to EPSA. Professional and technical competence had the highest beta value of (β = 0.8451) and 0.004 significance and answers the second research question that competence level is a determining factor in determining the effectiveness of PSA in the public sector in Kenya. Resources (R) have a significance level of 0.0.046 and (β = - 0.5957) which is negatively correlated and confirms that their availability is an important factor and responds to the third research question. There is a significant effect of internal control processes (ICP) of (0.009) and a (β = 0.2637) and responds to the fourth research question of whether ICP has an impact on the effectiveness of PSA. Therefore, the research does answer all the research questions and confirms they have a statistically significant influence on EPSA. PC has the highest Beta and is contributing a lot to EPSA as compared to other variables, followed by institutional corporate governance, internal control processes, and resource availability. Using the results of the regression model, the relationship between EPSA and the independent variables of ICG, PC R, and ICP can be summarized in the following model.

EPSA predicted = 0.4420+ 0.2890ICG+ 0.8451PC -0.5957R + 0.2637ICP

Where,

Dependent variable = EPSA (Effectiveness of public sector audit)

α = determines the level of the fitted line,

0.4420 = slope of the line

Independent variables= (Institutional corporate governance) ICG, (professional and technical competence) PC, R (resources availability) and (internal control processes) ICP

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of the findings

The study aimed to determine the factors that determine the effectiveness of Public Sector Audit in Kenya, within the National Government and its entities. The study had four independent variables namely ICG (Institutional Corporate Governance), PC (professional and technical competence), R (Resources), and ICP (Internal control processes). Data was obtained from OAG annual reports for 43 audit opinions from the national government and its entities. Data was collected using content analysis and analyzed using STATA 16 software. The research sought to answer four research questions that were aligned with four specific objectives of the study. The first objective was to analyze the impact of corporate governance practices on the effectiveness of public sector audit. The second objective was to investigate the influence of staff professional and technical competence on the effectiveness of public sector audit. The third objective was to evaluate how resource availability impacts the effectiveness of public sector audit. The last objective was to evaluate the impact of the internal control process on the effectiveness of public sector audits. The regression model answered all the research questions and provided statistical evidence that the four independent variables had a significant correlation with the dependent variable EPSA.

5.1.1 Institutional Corporate Governance and EPSA

In line with the first objective of the study, the research question of how corporate governance mechanisms affect PSA did show a statistically significant impact. The regression output gave an ICG coefficient value of 28.90% with a P-value of 0.048 was below the P-value of 0.05. The research model suggested that factors such as management change and governance structures within national government entities determine the outcome of public sector audits.

5.1.2 Professional and Technical Competence and EPSA

The subsequent objective sought to understand the influence of staff competence in ensuring the effectiveness of PSA. The findings supported the research question because the variable has a significant influence on EPSA of 0.004. The variable contributed to the research by scoring an average frequency of 84.51 %. The results of the tests indicated that the variable answered the research question.

5.1.3 Resources Availability and EPSA

The third objective tested how the availability of resources can affect the effectiveness of PSA. The output showed that the variable, with a mean of -59.57% is a negative correlation however the variable was statistically significant at 0.05. The findings answered the research question of whether resources affected EPSA or not. Thus, it was concluded that resource availability has a positive and statistically significant influence on the effectiveness of PSA in Kenya.

5.1.4 Internal Control Process and EPSA

The last objective intended to find out the impact of the internal control process on the effectiveness of public sector audit. The variable had a mean accounted for 26.37% of the whole model. The test results proved a positive and statistically significant influence of resources and EPSA. The significance level was 0.009 which was below the P-value of 0.05. The study answered the research question that there is a relationship between ICP and EPSA.

5.2 Conclusions

The broad objective of the study was to find out which determinants among ICG, PC, R, and ICP affected EPSA in Kenya. The relationship was presented in a multiple linear regression. Secondary data from annual corporate reports from the office of the Auditor General were used to identify indicators for all variables during content analysis. The research generally concluded that professional and technical competence, resource availability, and internal control process jointly had a significant influence and correlated strongly with the effectiveness of PSA. Institutional corporate governance was not statistically significant but was consistent with the literature. The study supported that investing more in enhancing the competence of staff in public sector entities and auditing entities will improve the competence levels, thereby supporting the main agenda of PSA. Additionally, both the auditee and editing entity encounter resource restraint which deters quality service delivery contributes to stalled projects among national government entities, and results in the failure of the OAG to achieve 100% audit scope. The study suggested that resource availability can result in a less detrimental failure rate in PSA. Lastly, the internal control processes strengthen government processes

5.3 Recommendations for policies and practice

The study recommends that there should be implemented transparency measures, such as regular reporting and disclosure of financial and operational information, to enhance accountability and public trust. The study recommends that the board take proactive measures to ensure there exists internal oversight of effective audit committees and internal audit functions within the MDAs.

Also, the National Treasury should establish a robust budget planning and allocation process that is transparent, efficient, and aligned with national priorities, ensuring timely disbursement of funds to government agencies. The national treasury should also enhance regular communication and coordination between government entities to help identify resource needs and address challenges promptly.

The study further recommends that the policymakers should integrate IFMS with the various processes to ensure system efficiency which will enhance the completeness of transactions and enhance PSA function. Additionally, there should be a clear distinction of duties, authorization, and approvals, and verification to ensure compliance with policies and address the issue of unsupported expenditures. The segregation of duties will prevent conflicts of interest and promote checks and balances. The OAG should recommend regular internal audits to be conducted and snap-check evaluations to assess the effectiveness of controls and identify areas for improvement.

5.5 Recommendations for further research

The research found that all the variables had a statistically significant impact on the effectiveness of public sector audits. The model R-squared was 39.55%, which meant that 60.45% was answered by other variables not

captured in the study. Thus, more studies need to be conducted on which other factors impact EPSA such as political interference, communication and leadership challenges, management support, and the existence of an effective internal audit function. Further research can focus on integrating the independence of the office of the Auditor General (OAG) and consider control variables like the political environment. Further research can be conducted using similar variables by way of quantitative methods and collecting primary data to prove the results of this study since the study used a qualitative approach.

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