

**THE EFFECTIVENESS OF COST RECOVERY AUDITS IN FOSTERING FINANCIAL
ACCOUNTABILITY IN UGANDA'S OIL AND GAS SECTOR.**

BY

JOHN ROGERS MUGAYA

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**A DISSERTATION SUBMITTED TO THE FACULTY OF BUSINESS AND
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AFFILIATION TO UCU.**

OCTOBER 2020

DECLARATION

I, John Rogers Mugaya hereby declare that this report is original and has not been published and/or submitted for any other degree award to any other university before.

Signed.....

Date.....

APPROVAL

I certify that the dissertation entitled “the effectiveness of cost recovery audits in fostering financial accountability in Uganda’s oil and gas sector was done under my supervision and is ready for submission.

Signature.....

Dr. NGOMA MUHAMAD

Academic Supervisor

Date.....

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I SAY TO ALL OF YOU, MAY GOD BLESS YOU.

DEDICATION

I heartily dedicate this work to my late Dad, Nathan and late mum Agnes (RIP) for their visionary dedication towards my education and knowledge.

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ACRONYMS/ABBREVIATIONS

CNOOC China National Offshore Oil Corporation

EITI Extractive Industries Transparency Initiative

FEED Front End Engineering Design

GoU Government of Uganda

HG Host government

IOC International Oil Companies

OAG Office of the Auditor General Uganda

PAU Petroleum Authority of Uganda

PEPD Petroleum Exploration and Production Department

PSA Production Sharing Agreement

PSC Production sharing Contract

ROR Rate of return

SAI Supreme Audit Institutions

TD Total Depth

WGEI Working Group on Extractive

ABSTRACT

This study examined the effectiveness of the cost recovery audits in fostering financial accountability in Uganda's oil and gas sector. This study was guided by three objectives: to examine whether the cost recovery audits promote financial accountability in the oil and gas sector in Uganda; to examine the level of compliance by IOCs with the national and international legal frameworks and regulatory frameworks; and, to establish the challenges facing cost recovery audits in its attempt to ensure accountability in the oil and gas sector.

The respondents of this study included OAG staff, PAU staff and oil companies' staff and legislators of the parliament of Uganda. They were on their basis of having crucial roles they play in cost audits and accountability in the petroleum sector in Uganda. A total of 45 respondents formed the sample size of the study. The study employed a cross sectional design and adopted a mixed approach. Questionnaires were used for the purpose of data collection and an interview guide was employed for qualitative data. The response rate was 100% of the targeted sample size.

The study therefore provides a crucial insight of how cost recovery audit promotes financial accountability and the challenges faced. Based on the study results, it is recommended that cost recovery audits should be undertaken on a regular basis so as to timely address merging issues in recoverable costs. Recoverable cost audits should be undertaken on a timely basis such as quarterly instead of biannually. It is also recommended that the technical capacity of the Office of the Auditor General should be augmented to undertake recoverable costs audits as recoverable cost audits are critical for effective, efficient and sustainable development of the oil and gas sector.

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Introduction

The study examined the effectiveness of the cost recovery audits in fostering financial accountability in Uganda's oil and gas sector. In this research, cost recovery audit is taken to be the independent variable while financial accountability, is regarded as the dependent variable. The moderating factors being compliance with the legal frame work.

The aim and major objective of this research is to examine the effectiveness of cost recovery audits in fostering financial accountability in Uganda's oil and gas sector. The structure of this research includes the introduction describing the background, objectives, research questions, the scope and significance of the study. The research also discusses the literature review highlighting the OAG, financial and audit processes, and best practices of cost recovery audits. The study again reviews the methodology be adopted, theoretical frameworks underpinning the study and finalise with recommendations and a conclusion.

1.2 Background of the Study

1.2.1 Historical Background

Throughout human history, energy has been a key enabler of living standards. To survive in the *agrarian* era, people burned wood for warmth and cooking. In addition to use as a building material, wood remained the chief global fuel for centuries. The invention of the first modern steam engine, at the beginning of the 18th century, signaled the transformation from an agrarian

to an industrial economy. Steam engines could be powered by either wood or coal, but coal quickly became the preferred fuel and it enabled massive growth in the scale of industrialization.

A half-ton of coal produced four times as much energy as the same amount of wood and was cheaper to produce and, despite its bulk, easier to distribute. Coal-fired steam locomotives dramatically reduced the time and cost of inland transportation, while steamships traversed oceans. Machines powered by coal enabled breakthroughs in productivity while reducing physical toil. Petroleum was much more adaptable and flexible than coal. Additionally, the kerosene that was refined originally from crude hydrocarbons provided a reliable and relatively inexpensive alternative to “coal-oils” and whale oil for fueling lamps. Most of the other products were discarded.

With the dawn of the 20th century, environmental concerns and new technologies led another energy source shift from coal to petroleum. Interestingly, although women were not yet allowed to vote, ladies’ societies in the United States were instrumental in lobbying for laws to improve air quality and reduce the dense smoke caused by burning coal. The first oil had actually been discovered by the Chinese in 600 B.C. and transported in pipelines made from bamboo. However, Colonel Drake’s heralded discovery of oil in Pennsylvania in 1859 and the Spindletop discovery in Texas in 1901 set the stage for the new oil economy.

With the technological breakthroughs of the 20th century, oil emerged as the preferred energy source. The key drivers of that transformation were the electric light bulb and the automobile. Automobile ownership and demand for electricity grew exponentially and, with them, the demand for oil. By 1919, gasoline sales exceeded those of kerosene. Oil-powered ships, trucks and tanks,

and military airplanes in World War I proved the role of oil as not only a strategic energy source, but also a critical military asset. Prior to the 1920s, the natural gas that was produced along with oil was burned (or flared) as a waste by-product. Eventually, gas began to be used as fuel for industrial and residential heating and power. As its value was realized, natural gas became a prized product in its own right.

In Uganda, the earliest reference to oil was the oil seepages near Kibiro on the shores of Lake Albert which was known to the indigenous people who lived in the area. The first contribution to the evaluation of the Uganda's hydrocarbon potential was by E. J Wayland, a government geologist, who documented numerous hydrocarbon occurrences in the Albertine Graben in the 1920's. Wayland documented petroleum potential of country in the publication "Petroleum in Uganda" in 1925. This reported of the existence of oil seepages in Uganda.

Oil exploration continued intermittently through the 1930's but came to a halt during the Second World War. Between 1936 and 1956, the first shallow stratigraphic wells were drilled by the African – European Investment Company. The first deep well Waki B-1 well was drilled in 1938 in Butiaba the current Buliisa district. Over 20 Shallow wells were drilled in Kibiro and Kibuku areas for geological correlation. Geological surveys carried out during the 1940's and 50's established the presence of sedimentary sequences of clays and silts (Memoirs of the Geological Survey, 1959).

Exploration work commenced again in early 1980's with the acquisition of aeromagnetic data across the entire Graben and the subsequent follow up of ground geophysical and geological work in the late 1980's and 1990's. This led to the first Production Sharing Agreement (PSA) between

Petrofina Exploration Uganda and Government signed for the entire Albertine Graben. For the effective supervision and management of the resource, the Petroleum Exploration and Production Department (PEPD) was established to ensure accuracy of the geological and geophysical surveys in areas identified by the aeromagnetic data. Data acquired was used to subdivide the Graben into nine (9) smaller Exploration Areas, and to promote them for investment. Seismic data was first acquired in the Graben during 1998 and several surveys have since been undertaken and to date over hundred wells have been drilled.

Earlier in 1997, Licensing of Exploration Area 3 (Semliki Basin) was granted to Heritage Oil and Gas Limited (HERITAGE). From 1998 to 2001, Heritage acquired the first 2-D seismic data in Uganda (1998) and additional data acquired in Semliki Basin. In 2001, Heritage acquires an additional 228.39-line km of 2-D seismic data in Semliki Basin with identified drillable prospects and confirmation of structures mapped by gravity and magnetic. Hardman Resources and Energy Africa (now Tullow Oil) was licensed Exploration Area 2 (Northern Lake Albert Basin).

From 2002 to 2004, drilling of Turaco-1, 2 and 3 wells by Heritage and Energy Africa and reaching Total Depth (TD) of 2,487m, 2963m and 2980m respectively. One of the horizons (zones) was tested and confirmed presence of natural gas but heavily contaminated by Carbon-dioxide. Between 2008 and 2014, 21 discoveries made; 116 wells drilled. Over 6.5 billion barrels of STOIP were confirmed. Around 499 billion cubic feet of gas was discovered. In 2013, the Petroleum (Exploration, Development and Production) Act 2013 and the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act 2013 were enacted by parliament. At the same time, the first production license was issued over the Kingfisher field. And in 2014, the Memorandum

of Understanding on Commercialization was signed between Government and Licensed oil companies.

1.2.2 Conceptual Background

Accountability is all about being answerable to those who have invested their trust, faith, and resources to you. Adegite (2010) defined accountability as the obligation to demonstrate that work has been conducted in accordance with agreed rules and standards and the officer reports fairly and accurately on performance results vis-à-vis mandated roles and or/plans. This means that public officers need to be transparent in line with due processes and the provision of feedback to adequately account for funds under their authority and control. Johnson (2004) says that public accountability is an essential component for the functioning of our political system, as accountability means that those who are charged with drafting and/or carrying out policy should be obliged to give an explanation of their actions to their electorate.

Financial accountability is an obligation of any one handling resources, public office or any other positions of trust, to report on the intended and actual use of the resources or of the designated office. Financial accountability is the prime objective for all public sectors due to the need to increase the efficacy, efficiency and transparency of the provision of public services and value for money (Pollitt, 2015). According to Schedler and Andreas (2010), financial accountability is a relationship based on obligations to demonstrate, review, and take responsibility for performance, both the results achieved in light of agreed expectations and the means used.

According to Schmidt (2007), there are five principles of effective financial accountability and these include; clear roles and responsibilities, clear performance expectations, a balance of expectations with capacities, credible reporting, and reasonable review of performance with

adjustment. These principles can be applied to a wide range of accountability relationships, but their use needs to be tailored specifically to each relationship.

There are contextual factors like historical policies, party politics and macroeconomic considerations which influence the implementation of New Public Management initiatives (Samara & Christensen, 2012). Wright (2011) argued that public participation accelerates trust in local governments which induce more accountability from public officials. (Parr & Gates, 2010) contend that the push is a response to demands from citizens for an authentic role in improving service delivery in their communities.

1.2.3 Theoretical Background

This research is guided by the principal-agent theory. The principal-agent theory assumes that principal-agent relationship exists when one entity (an 'agent') makes decisions on behalf of another entity (the 'principal'). In many situations, conflicting objectives and decentralized information are the two basic ingredients of the principal-agent problem. In this case, the principal cannot directly observe that the agent is always acting in her best interests. This is especially problematic when activities that are useful to the principal are costly to the agent, and observing the agent's activities is costly for the principal. If the agent has different preferences than the principal but his/her efforts are perfectly observable and can be monitored, the principal will propose a contract which perfectly controls the agent to act in the principal's best interest. The incentive problem disappears.

This research assumes the principal – agent relationship, whereby according to the Constitution of Uganda (As amendment), 2005, "All minerals and petroleum in, on or under any land or waters in Uganda are vested in the Government on behalf of the Republic of Uganda". This therefore renders

the republic of Uganda as the principal and the government as the agent. The agent is required to account to the principal. In the same spirit, under the PSA framework, the government of Uganda represented by the PEPD is the principal and the International Oil Companies (IOCs) are the agents.

While applications of agency theory have typically assumed outcomes to be observable with specific preference representations for the principal and agent, there are many situations in which outcomes are not easily observable. In the same way that the shareholders of a firm typically do not know the impact on their future returns of a manager's action, so too is the impact of oil and gas development's actions obfuscated by many other intervening factors. These factors can include the uncertainty around the way the actions will convert into development outcomes, also known as the theory of change, as well as the difficulties in measuring outcomes. This makes it next to impossible to write the optimal contract as a function of outcomes and contracts are instead written on inputs and surrogate measures of outcomes.

To make matters worse, the principal-agent problem is actually multi-layered in the development business. It occurs in the relationship between the development agency and the recipient (or partner) country, and in the relationship between a recipient government and the people it is purported to represent. Then there are the board of directors, management, and team leaders in the development agency, which have principal-agent relations as well. On the partner country side, there is the government, the implementing agencies, and the ultimate 'beneficiaries' which again can create principal-agent problems at various levels. Evaluation is again crucial in establishing the empirical basis for contracts that overcome principal-agent problems.

1.2.4 Contextual Background

Uganda discovered commercial reserves of oil and gas in the Albertine rift basin in 2006. High international oil prices from 2004 to 2014 brought Uganda into the world's petro-club. Enticed by expectations of high profits, international oil companies entered the landlocked East African country to seek untapped oil resources. Uganda's oil finds were the largest onshore oil discoveries in sub-Saharan Africa in over two decades, part of an oil and gas surge in East Africa and a wider energy boom on the continent.

Uganda is currently described by the World Bank as the hottest inland exploration frontier in the world and the country to watch in the oil and gas space, due to the commercial discovery of an estimated 6.5 billion barrels of oil, 1.4 billion of which are recoverable. Against this backdrop, the major players in the Oil and Gas market are Total E & P Uganda, Tullow Uganda Operations Pty Limited and China National Offshore Oil Corporation (CNOOC) who are all holders of production licences issued in respect of six (6) exploration blocks (the Blocks) in Albertine Graben (located in the western arm of the Great East African Rift, which they operate under the terms of a joint venture in accordance with a Joint Operating Agreement).

Hard bargaining from the Ugandan government on infrastructure, tax, and contract demands have been overly conflated with unwarranted political intervention. It is not uncommon in the international oil industry for governments to renegotiate contractual terms, particularly during periods of high international oil prices. The Ugandan government's dispute with international oil companies over the generous terms provided in initial exploration contracts was early in the life cycle of the industry, but it did not cause major investors to leave the country.

At the same time, the delay in industry progress cannot be solely attributed to the Ugandan government's hard bargaining. International oil companies seek better contractual terms when the pricing environment upsets their valuations. Since production can last for decades, even in small-sized oilfields, a mutual understanding of contracts between the government and international oil companies will pay off for both sides in the long term.

In 2015, the Government of Uganda (the GoU) announced the first open competitive licensing round for the Blocks. Armour Energy Limited of Australia, Walter Smith Petroman Oil Limited, Niger Delta Petroleum Resources Limited of Nigeria and Oranto Petroleum International Limited were the 4 shortlisted firms with whom the GoU will negotiate and sign other production sharing agreements. A total of nine production licenses have been issued so far in Uganda. The first one was issued to CNOOC in 2013. Tullow Uganda Operations Pty Limited and Total were issued with 5 and 3 licenses respectively in 2016.

The issuance of these production licenses was a huge milestone and is expected to fast-track the foreign investment decision of the three joint venture companies which is expected by the end of 2017. In February 2017, Technip, Fluor and Chicago Bridge and Iron Company were awarded a contract for the first phase of the Front End Engineering Design (FEED) on two of the exploration areas. This is intended to continue for a period of 6 months and aims to determine the technical aspects, cost estimates and implementation schedules for the production phase. Upon successful completion, the two successful companies will be required to compete for the Engineering, Procurement and Construction contract.

But almost immediately after the discovery of oil, a series of regulatory disputes between the Ugandan government and international oil companies delayed development and production.

Shortly after Uganda passed the commercial threshold for oil discoveries, a series of regulatory disputes between the Ugandan government and international oil companies delayed the industry's development. The regulatory issues came in three waves. First, President Museveni said he would prohibit oil exports, and instead, a large refinery would be built to process part of Uganda's oil in order to service the region. This was quickly followed by a number of capital gains tax disputes with international oil companies and the decision to construct the Hoima –Tanga 1445Kms long pipeline. Long negotiations between the Ugandan government and international oil companies on terms for production licenses constrained the industry from moving forward. Altogether, these regulatory disputes have arguably delayed first oil production by several years. However Government has since issued 9 production licenses Kingfisher, Jobi-Rii and Ngiri among others to IOCs.

Therefore, the need for financial accountability in the oil and gas sector has led to the development of autonomous organizational structures, agencies, the out-sourcing of services (structural reforms and market-related reforms), and development dialogue. It has also led to putting in place knowledge or team-based management (cultural managerial tools), performance management, targets, indicators and output objectives, increased emphasis on service quality, standard setting and customer responsiveness which vary depending on the country.

Policy makers have also been anxious to obtain the greatest benefits for the economy from the extraction of these exhaustible resources by designing appropriate policies to achieve financial accountability. The Petroleum (Exploration, Development and Production) (National Content) Regulations 2016 came into force in May 2016 and are intended to ensure participation of indigenous Ugandan entities in the oil and gas sector as to ensure financial accountability. In brief,

the regulations require any licensee, contractor and sub-contractor to give priority to goods and services that are produced and available in Uganda and which are rendered by Ugandan citizens and companies during procurement. In addition, they are required to reserve the contracts for ring fenced goods and services like security, foods and beverages, hotel accommodation for supply by Ugandan citizens and companies. All these efforts are geared towards financial accountability.

1.3 Problem Statement

Exploration costs for oil and gas projects, run into hundreds or even millions of dollars for a single well and sometimes up to five times to develop the same well. Because of such costs, governments enter into agreements with wealthy and experienced IOCs to conduct the explorations, developments and production on behalf of the host governments, in exchange for a return on investment. The challenge however is that either party seeks to maximize its share of the net revenue, or the difference between gross revenue (total proceeds from oil production) and costs (Richards 2003).

Indeed there have been concerns raised by host government and civil society that the international oil companies are not efficient, tend to spend as much as they want uncontrollably, and even make profits out of cost recovery (Kimuli 2013), thus flout government financial accountability requirements. The Office of the Auditor General in Uganda in exercising its mandate conduct cost recovery audits to give assurance on the costs incurred by IOCs. Since 2008, the OAG has been performing cost recovery audits and recommending verified costs for recovery.

Whereas there are other important factors (such as price of petroleum and reserve amounts) in determining net revenue in the oil and gas sector, recoverable costs stand out as a factor worth

investigating. In the circumstances therefore, this study was intended to assess the effectiveness cost recovery audits in fostering financial accountability in the oil and gas sector.

1.4 Objectives of the Study

1.4.1 General Objective

The purpose and general objective of this study was to examine the effectiveness of cost recovery audits in fostering financial accountability in Uganda's oil and gas sector.

1.4.2 Specific Objectives

- To examine whether the cost recovery audits promotes financial accountability in the oil and gas sector in Uganda.
- To examine the level of compliance by IOCs with the national and international legal and financial frameworks.
- To establish the challenges facing cost recovery audits in its attempt to ensure accountability in the oil and gas sector.

1.5 Research Questions

- To what extent does the cost recovery audits by promote financial accountability in the oil and gas sector in Uganda?
- To what extent does international oil companies comply with the national and international legal and financial frameworks?
- What are the challenges facing cost recovery audits in its attempt to ensure financial accountability in the oil and gas sector?

1.6 Scope of the Study

1.6.1 Content Scope

This research focused on the financial accountability in relation to cost recoverable audits. Thus, the study examined the extent to which cost recoverable audits fostered financial accountability in oil and gas sector.

1.6.2 Geographical Scope

The study took place in Kampala and Entebbe from OAG headquarters and Petroleum Authority respectively. Interviews were carried out within the central region boundaries.

1.6.3 Time Scope

This study looked at the period from 2008 to-date. This was two years after the first commercial reserves were announced in 2006. It was also noted that 2008 was when the Government issued the national oil and gas policy which outlined strategic sector objectives.

1.7 Significance of the Study

The study is quite instrumental to different institutions of host government in the management of oil and gas resources specifically in the recoverable costs management and audit. This research therefore examined the effectiveness of cost recovery audits in fostering financial accountability in Uganda's oil and gas sector.

However, it should be borne in mind that this research will not stop at airing the inconsistencies, if any, but will also provide solutions and way forwards for the Government and other stakeholders to consider.

The study will also enhance the existing body of knowledge in the oil and gas sector especially in the area of recoverable costs.

This study will particularly be beneficial to the following;

- The OAG will be the main beneficiary as it can use the findings to improve its monitoring and oversight function in the oil and gas sector
- Other regulatory bodies like the Parliament of Uganda which can use the findings as a guide in their monitoring and oversight function;
- Government of Uganda especially for policy formulation
- Academicians and researchers, to contribute to a knowledge gap
- Other Supreme Audit Institutions (SAIs) around the globe since OAG is a member of International Organization of Supreme Audit Institutions (INTOSAI) and current chair of Working Group on Extractive (WGEI).

1.8 Justification of the study

Since the discovery of commercial deposits of oil and gas in Uganda in 2006, a number of legislations have been made with the aim maximising the benefits from this resource. Some of the laws include; the National Audit Act 2008, Petroleum Exploration Development and Production Act 2013, The Petroleum (Refining, Conversion, Transmission and Midstream Storage) Act, 2013 and Public Finance Management Act 2015.

Secondly, Government has generated substantial amounts of revenue in form of signature bonus, surface rentals, Capital Gains Tax among other taxes. Additionally, the International Oil Companies have invested substantial amounts of money in the exploration and development

stages. The current cost recovery investment which is US\$3 billion and an estimated US\$ 20 billion to be incurred in the next phase needs to be scrutinized for financial accountability purposes (Petroleum Authority, 2019).

The case study of Uganda is justified on the basis of the legal framework that mandates the OAG to audit and report on the expenditures and revenues, financial positions, and compliance with the relevant laws, regulation and policies by all the sector institutions. The study therefore examined the effectiveness of the cost recovery audits in fostering financial accountability in the oil and gas sector.

1.9 Research Frameworks

1.9.1 Theoretical Framework

This research assumes the principal – agent relationship, whereby according to the Constitution of Uganda (as amendment), 2005, "All minerals and petroleum in, on or under any land or waters in Uganda are vested in the Government on behalf of the Republic of Uganda". This therefore renders the republic of Uganda as the principal and the government as the agent. The agent is required to account to the principal, therefore, the government is constitutionally required to account for the oil resources entrusted to it by the people of Uganda. In the same spirit, under the PSA framework, the government of Uganda is the principal and the International Oil Companies (IOCs) are the agents.

The principal-agent roles consists of executing the terms and conditions prescribed in the contract. The principal and the agent are expected to report to the larger stakeholder which is the public. The international oil company (IOC) submits their accountabilities to the ministry responsible for oil and gas. The audit supreme institution reviews them together with the ministry records and

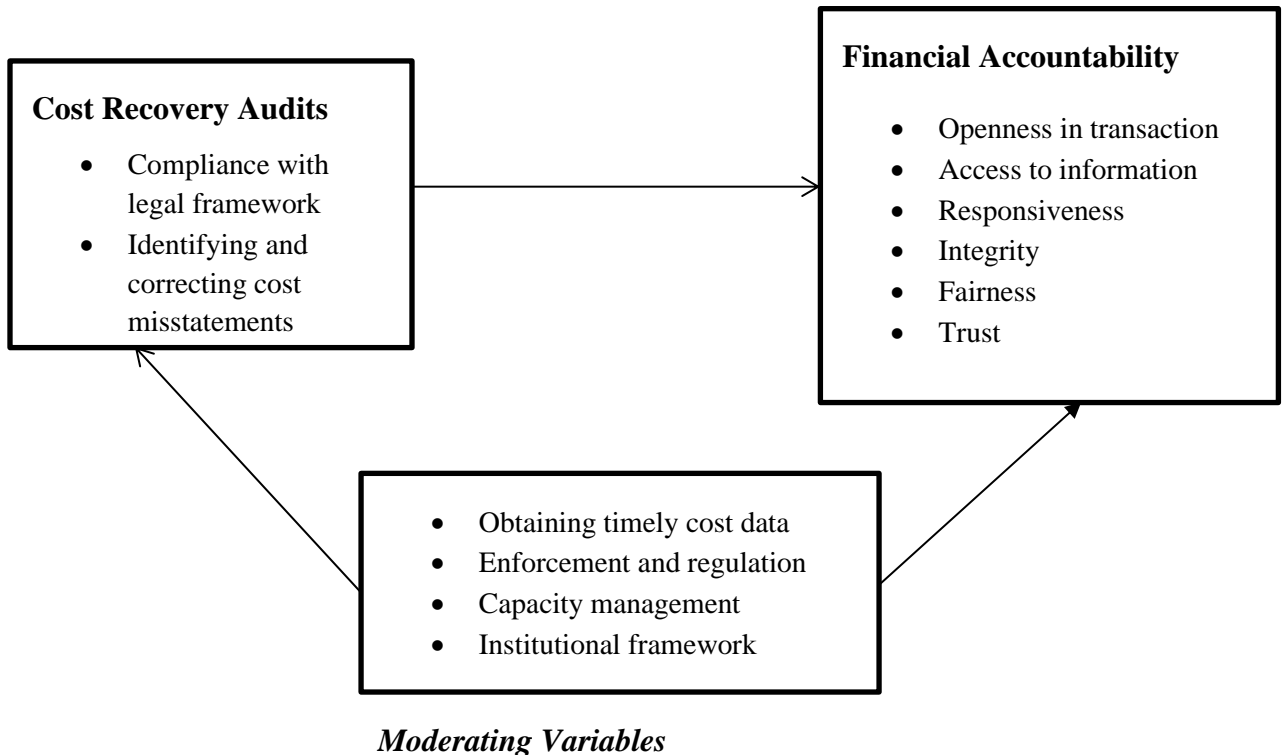
report with recommendations to parliament. After the audit process is completed, then, parliament makes these reports available to all stakeholders (the public) revealing whether the oil and gas resources are governed well or not.

This study used majorly the principal-agent theory because it was considered appropriate for examining whether the HG could capture maximum take in form of bonuses, royalties, government participation, cost recovery and profit oil share. From this perspective, the study examined whether the effectiveness of the cost recovery audits in fostering financial accountability in Uganda’s oil and gas sector.

1.9.2 Conceptual Framework

Independent Variable

Dependent Variable



Source: Adopted from the Principal-Agent Theory (Glenn, 2016)

Explanation of the conceptual framework

In the conceptual framework, the effectiveness of cost recovery costs in fostering financial accountability is operationalized. It is posited that the cost recovery audits are the independent variable while financial accountability is the dependent variable. Cost recoverable audits are conceptualized as compliance with legal framework and identifying and correcting cost misstatements. Financial accountability is perceived as openness in transaction, access to information, responsiveness, integrity, fairness and trust. It is further postulated that the two variables are moderated by factors such as obtaining timely cost data, enforcement and regulation, capacity management and institutional framework. The interrelationships between these variables and their variations are what underpin the framework of this study.

1.10 Summary of Chapter One

Chapter one discussed the background to the study, the problem statement and objectives and research questions. It also looked in detail at theoretical framework as well as justification of the study, its scope and significance.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses an overview of previous research on the mandate, role and functions of Supreme Audit Institutions (SAIs) like OAG. It also looks at how the OAG ensures efficient management of oil and gas sector in Uganda. This chapter further discusses the concepts cost management, economic rent oil and petroleum revenues in detail. It also examines the legal framework in the management of oil and gas in Uganda.

The main purpose of the literature review work and previous studies on the Office of the Auditor General in improving financial management oil and gas. The approach adopted was in line with current practice in grounded research work. It is now regarded as acceptable for researchers to familiarize themselves with existing research prior to collecting their own data (Easterby-Smith, Thorpe, & Lowe, 2002), even though this contradicts the advice of grounded theory as originally presented (Glaser & Strauss, 1967).

2.1.1 The Role of National Supreme Audit Institutions

Supreme audit institutions are national agencies responsible for auditing government revenue and spending. Their legal mandates, reporting relationships, and effectiveness vary, reflecting different governance systems and government policies. But their primary purpose is to oversee the management of public funds and the quality and credibility of governments reported financial data. Supreme audit institutions have an external controlling function over the Executive usually assisting the Legislature. In the European context, they are the most prominent external controlling bodies (National Audit Office NAO 1996). SAIs have an effective measure of independence and

play an important role of formulating the general standards against which government performance is to be evaluated. The International Organization of Supreme Audit Institutions (INTOSAI) states that the full scope of government auditing includes financial audits or regulatory or compliance audits and performance audit or value for money audits (comprehensive /integrated audits).

SAIs supervisory functions are often described as control meaning checking what is against what ought. However, in practice SAIs have broader steering consequences of holding the Executive accountable.

2.1.2 Mandate and Role of OAG in the Oil and Gas Sector

The Office of the Auditor General Uganda (OAG) also known as the Supreme Audit Institution (SAI) of Uganda is an institution which was established in accordance with the provisions of Article 163 of the Constitution of the Republic of Uganda. Its functions and powers are fully explained in the National Audit Act, 2008. The duty of the OAG is to audit and report on the Public Accounts of Uganda for all public offices to foster responsible, accountable and efficient management of resources in the petroleum sector.

To guarantee responsibility and accountability, the OAG conducts regular and special audits on how the agencies in the oil and gas sector conducted their stewardship role and reports to parliament. This audit function enhances efficient financial management of petroleum resources in Uganda for the benefit of all citizens.

The office performs a various audit in fulfilling its mandate in this sector. These include statutory audits which include; audit of the Petroleum Fund, Ministry of Energy and Mineral development, Uganda Petroleum Authority, National Oil Company, Uganda Revenue Authority, Bank of

Uganda and all other projects in the sector. The OAG also conducts annual cost recovery audits for each of the current operators, conducts performance audits (value for money audits), and special audits. Lastly, OAG performs the warranting of all withdraws from the petroleum fund (PFMA 2015). This is done after the obtaining the approval from Parliament and confirming that any withdraws are intended to finance only capital development projects as required by the law.

The OAG reports contain not only audit findings but also recommendations to management aimed at improving the management of the oil and gas sector. This promotes the efficient management and control of costs and expenditures, revenues, investments and other resources including facilities, human resources.

In incurring expenditure of public funds, the OAGU requires the accounting officers for these entities and agencies to exercise strict commitment and controls that safeguards efficiency, effectiveness and economy for the oil and gas operations. This is made possible by the OAGU examining the final accounts and financial statements prepared by the management of these organizations and entities in the oil and gas sector.

An effective and accountable audit exercise helps ensure that public funds and resources are managed in an effective and efficient manner which leads to equitable sharing of resources for the benefit of all citizens. Governance and Accountability in Uganda

2.1.3 Financial Accountability in the Oil and Gas Sector

In recent years, the efforts of various local organizations and individuals to promote greater transparency in the management of their countries' natural resource wealth have garnered

increased international attention. Financial accountability is an important element of good government. It is about the relationship between the State and its citizens, and the extent to which the State is answerable for its actions. The concept of financial accountability refers to the legal and reporting framework, organisational structure, strategy, procedures, and actions to help ensure that any organisations that use public money and make decisions that affect people's lives can be held responsible for their actions. Public financial accountability is the hallmark of modern democratic governance. Democracy remains a paper procedure if those in power can not be held accountable in public for their acts and omissions, for their decisions, their policies, and their expenditures. Public accountability, as an institution, therefore, is the complement of public management.

The 'publicness' of public accountability relates to at least two different features. First of all, 'public' relates to openness. The account giving is done in public, i.e. it is open or at least accessible to citizens. Therefore, we will only in passing take up the, often more informal, confidential, if not secret, forms of internal accountability. Secondly, 'public' refers to the public sector. We will concentrate on public managers, on officials spending public money, exercising public authority, or managing a corporate body under public law. We will therefore not discuss the public accountabilities of managers of purely private entities in great detail.

Accountability can be concisely defined as "the obligation to explain and justify conduct". This definition implies "a relationship between an actor, the accountant, and a forum, the accountholder or accountee" (Bovens, 2007: 450; Stewart, 1984). The most basic form of accountability in the public sector is the hierarchical Westminster system of government whereby: a) public servants are accountable to ministers; b) ministers are accountable to parliament; and c) parliament is

accountable to the people (Fuller and Roffey, 1993). Mulgan defines accountability as “the obligation to be called to account” (2003).

According to Day and Klein, accountability means “the responsibility of one party, the accountability holdee, to justify its actions to another, the accountability holder, according to a pre-existing set of rules, standards or expectations” (1987).

Another definition of accountability draws on result-oriented content of the term and describes it as “a relationship based on obligations to demonstrate, review, and take responsibility for performance, both the results achieved in light of agreed expectations and the means used.” In this description, accountability serves for three separate purposes: to control against the abuse or misuse of power; to provide assurance that activities were carried out as intended and with due regard for fairness, propriety, and good stewardship; and to encourage improved performance of programs and policies, through reporting on and learning from what works and what does not (Canada SAI, 2002).

Central to all definitions of accountability is the idea that one person or institution is obliged to give an account of his, her, or its activities to another (Jenkins, 2007). Accountability is further defined as a social relationship in which an actor feels an obligation to explain and to justify his conduct to some significant other (Romzek & Dubnick 1998:6; Pollit 2003:89). To qualify a social relation as a practice of public accountability, an actor should at least feel obliged to publicly explain and justify his conduct to a specific forum. This thin notion contains four elements: 1) public accessibility of the account giving – and not purely internal, discrete informing; 2) explanation and justification of conduct – and not propaganda, or the provision of information or instructions to the general public; 3) the explanation should be directed at a specific forum - and

not be given at random; and 4) the actor must feel obliged to come forward – instead of being at liberty to provide any account whatsoever.

This relatively simply defined relationship contains a number of variables. The actor, or accountant, can be either an individual or an agency. The significant other, which is called the accountability forum or the accountee, can be a specific person or agency, but can also be a more virtual entity, such as, in case of devout Christians, God or one's conscience, or, for public managers under an obligation, the general public.

The obligation that is felt by the accountant is also important. It can also be both formal and informal. Public managers will often be under a formal obligation to give accounts on a regular basis to specific forums, such as their superiors, supervisory agencies, or auditors. In case of unpleasant incidents or administrative deviance, public managers can be forced to appear in court or to testify before parliamentary committees. But the obligation can also be informal, or even self imposed, as in the case of press conferences, informal briefings, or public confessions.

In any accountability relationship, it is necessary to specify the following important matters: who is liable or accountable to whom; what they are liable to be called to account for; through what processes accountability is to be assured; by what standard the putatively accountable behavior is to be judged; and what the potential effects are of finding that those standards have been breached (Mulgan, 2008; Mashaw, 2006; Kim, 2009).

Accountable governments however face two principal challenges in determining the policy framework for the exploitation of oil and minerals in their countries (Kim, 2009). First, they must create a business climate that attracts private investment, a necessary precondition to the

development of the extractive industries. Second, they must address relevant domestic policy issues, such as the environmental impact on communities affected by extraction activities, and ensure the equitable distribution of profits from the industry.

Policy or regulatory frameworks and laws governing the exploitation and management of natural resources are often spread across different pieces of legislation and other government instruments (Mashaw, 2006). In most cases, constitutions vest natural resources in the people but grant the government the authority to manage those resources on their behalf. In some cases, constitutions specify formulae for revenue sharing between national and state or provincial levels of government.

Mining or oil codes specify procedures and parameters for the granting of concessions and other rights of access, general conditions for exploitation, royalties, taxes, and other incentives specific to the extractive industries (Mashaw, 2006). Corporate tax structures and laws governing employment, the environment, and occupational health and safety also have implications for extractive industry management.

The nature of the resource often defines the set of challenges surrounding its management. For instance, oil sector revenues typically outstrip income from solid minerals. According to a 2005 International Monetary Fund (IMF) report, revenues from oil and gas account for 52.7 percent of total fiscal revenues in oil dependent economies, on average. The average income from the mining sector in economies dependent on solid minerals is only 12.7 percent (Mashaw, 2006). Mining sector receipts are smaller and less complex than those from the oil and gas industry, whose contracts typically involve confidentiality clauses, signature bonuses and production sharing agreements.

Questions over transparency in the management of revenues paid to local and regional governments is more often, though not exclusively, an issue in the solid minerals industry than it is in the oil and gas sector. Further, a broader range of operators and investors, including large transnational companies, medium to small scale local business and individual prospectors, is engaged in the mining industry than is the case in the oil and gas sector.

The more that governments respect democratic freedoms, uphold standards of transparency and accountability, and demonstrate a commitment to building administrative capacity, the more likely that oil and mineral wealth will be used for broad development purposes that improve the lives of citizens. In many of the countries surveyed, commitment to these standards is weak, where they exist at all (Mashaw, 2006).

In countries where government capacity is weak, a commitment to reform can be tracked through participation in initiatives such as the Extractive Industries Transparency Initiative (EITI). In some of the countries that have joined the EITI, such as Nigeria, efforts are underway to enshrine the program's principles in law, thus making the disclosure of company payments and government receipts compulsory. On the other hand, in countries that have developed effective management and oversight systems over time, such as Botswana, a decision not to engage in such initiatives need not be interpreted as a lack of commitment to transparency and accountability.

Legislatures provide venues where the findings of executive oversight bodies, such as Auditors General, can be publicized, reviewed and discussed. In many cases, such as those involving state-owned enterprises, legislators can take action to resolve problems. In addition to utilizing procedures for reviewing public revenues, legislators are taking advantage of special audits or reviews conducted in response to international and local pressure for greater transparency in the

oil and mining sectors. Audits have been conducted by executive branch agencies, international development partners and independent audit companies in many of the NDI survey countries. In Nigeria, the Hart Group conducted an extensive audit of the oil sector.

Audits of Congo-Brazzaville's Société National des Pétroles du Congo (SNPC) are available on a government website. In Angola, the results of a KPMG assessment of the petroleum sector were published in 2004. Such audits can provide legislators with useful information on the strengths and weaknesses in the management of their countries' extractive industries. In most cases, audit reports provide recommendations that can help inform legislative efforts to monitor progress towards addressing problems. In many instances, however, survey teams found that legislators were unaware of the existence of such reports, or dismissed them as "too technical."

Attracting and retaining investment is an important objective for government, but it should not compromise revenue collection or the integrity of cost audits. The government of Peru, in particular, has been accused of a "neoliberal agenda." There has been a revolving door between business and government, as demonstrated by former president Pedro Pablo Kuczynski, who played a key role in securing Hunt Oil's license for the lucrative Camisea gas project before entering government. In the final hours before resigning as president in 2018, he signed five oil contracts granting Tullow Oil exploration and drilling rights, which have since been annulled by his successor, current president Martín Vizcarra.

The Comptroller General of Peru did not find significant risks in the process of granting the oil blocks to Tullow. It is therefore unsurprising that Peru's fiscal policy is deemed "investor friendly," the government having granted tax incentives worth 2 percent of GDP. More than 7.5 percent of GDP may be lost through corporate tax avoidance, but rather than tighten the laws, the

government suspended the general anti-avoidance rule (GAAR) enacted in 2012 for several years (resolved in September 2018).

The national legislature is a key actor that can potentially provide oversight of cost auditing. Its ability to play this role will depend, however, on the institutional and political constraints of the particular country context. Cost auditing is ultimately a function of agencies operating under the executive, and the legislature's power to provide oversight and hold agencies accountable for cost auditing is directly related to its ability to provide a check on the power of the executive.

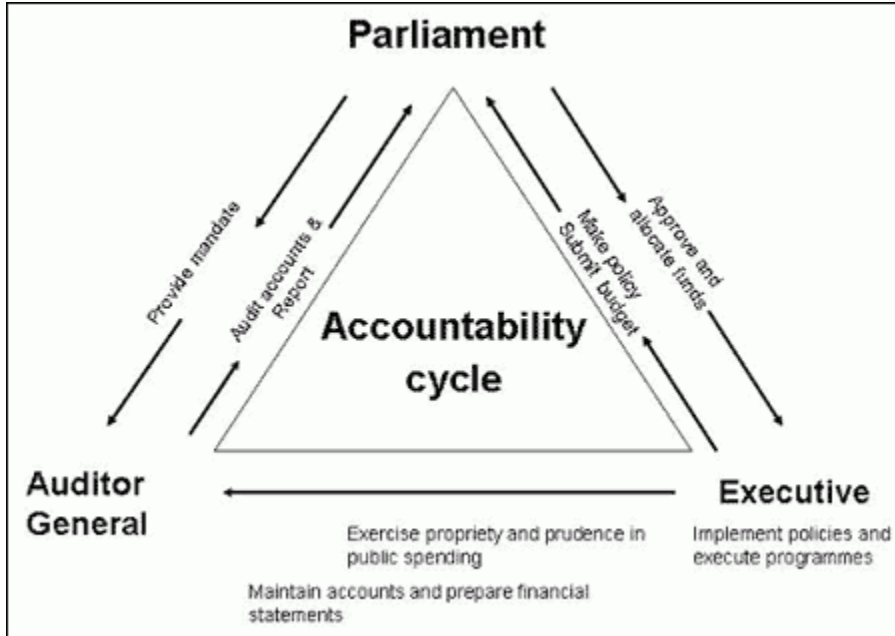
2.1.5 Accountability Cycle in Uganda

Accountability is one of the twenty-nine national objectives and directive principles of the state policy as stated in the Constitution of the Republic of Uganda, which makes all public offices in Uganda to be held in trust of the people. The directive principle also states that: "All lawful measures shall be taken to expose, combat and eradicate corruption and abuse or misuse of power by those holding political and other public offices. The President is required to ensure that the financial year estimates of revenue and expenditure are prepared, submitted and laid Article 77 of the Constitution of the Republic of Uganda before Parliament in each financial year not more than the 15th day of June, to include also fiscal and monetary programs and plans for economic and social development.

Parliament discusses the national budget and approves it by appropriating funds to the Executive. The executive then implements policies and programs while exercising propriety and prudence and it maintains proper records and prepares financial statements for audit by the AG. The AG audits the financial statements and records and reports to Parliament in accordance to Article 163 (4) of the Constitution. Parliament, through its three Accountability Committees (Public

Accountability Committee-PAC, Committee on Statutory Authorities and State Enterprises-COSASE and Local Governments Public Accounts Committee-LGPAC), discusses AG reports and makes recommendations to the Executive.

Figure 1: The Accountability Cycle



Source: OAG Website

2.2 Promotion of Financial Accountability through Cost Recovery Audits

To identify and correct cost overstatement, governments must conduct regular and rigorous audits. “Audit” is the process of verifying the accounts and records of taxpayers to determine the amount of revenue due to the government. For the purposes of this study, the term “fiscal audit” is used as a general term for government audits, including tax audits and cost-recovery audits. The terms “cost audit,” “cost auditing,” or “auditing of costs” refers to those components of fiscal audits that involve a review of costs by government.

There is no universal standard for petroleum cost auditing. There is, however, general guidance, such as the International Standards on Auditing (ISA). Government auditors can be expected to follow protocols laid out in internal audit manuals. The audit itself may cover a range of topics, including production volumes, sales, costs, and transfer-pricing issues.

It is not only governments that are interested in controlling costs; oil and gas companies have their own cost verification mechanisms. When multiple oil companies invest in one project, they usually do so in the form of a joint venture (JV). One of them is appointed operator; it carries out day-to-day operations and allocates costs to the non-operator JV partners according to their share of the investment. To protect their share of profit oil, the non-operator JV partners may call for an audit of the operator; this is called a joint-venture audit or JV audit. For roughly two-thirds of petroleum producers, the core component of their fiscal regime is the production-sharing contract (PSC), of which the defining feature has been cost recovery.

In 2017, however, the government of Indonesia - the grandfather of PSCs - abandoned the cost-recovery approach. In its place the government will apply a “gross split” method, apportioning production based on a percentage, leaving all costs to be borne by the company. This policy is virtually unknown in upstream oil and gas (Peru used it briefly in the 1970s). The government made this change for three reasons.

First, under cost recovery, all expenses had to be pre-approved by SKK Migas (the industry regulator), which led to significant delays for companies, allegedly making Indonesia a less competitive destination for investment. Second, contractors were incentivized to inflate costs to increase their share of production. In 2016, a report by the Supreme Audit Agency (BPK) revealed that several companies had inflated their operating claims by \$300 million. Third, administering cost recovery can be challenging. According to Deputy Energy Minister Arcandra Tahar, “there have been endless debates between SKK Migas and companies as to how much the production costs should be.”

Under a gross-split approach, contractors are forced to shoulder the costs themselves, which the government expects will encourage them to operate more efficiently and protect the government budget. The government will still audit costs for tax purposes, but there will be no more cost-recovery audits for new investments. The test will be whether government can get the split right so as to maintain a reasonable rate of return for investors. Provided it can, the gross-profit split approach may well be the future of PSCs and the end of cost-recovery audits.

2.2.1 Recoverable Costs in Oil and Gas

Contract disclosure and revenue transparency are important elements in petroleum governance, but not sufficient. While progress has been made in these areas, if unevenly, citizens still have little knowledge of whether their governments enforce the prevailing contracts and tax laws to

collect all the money to which they are entitled. While oversight institutions should provide some assurance, they lack the industry knowledge to effectively monitor the agencies responsible for cost audits. The lack of transparency and accountability in the audit process makes it easier for political interference and corruption to arise and for government and NOCs to escape scrutiny. Until these issues are resolved, it is impossible to know whether governments are using their audit rights effectively.

Production sharing agreements (PSAs), also referred to as production sharing contracts (PSCs), are commonly used in the oil and gas industry, particularly in developing countries. The fundamental concept underpinning PSAs is that the state owns hydrocarbons beneath the land or seabed but grants the contractor a license to search for, develop and manage the production of oil and gas. The IOC endures all risks related to exploration and production of oil and gas natural resources. Similarly, they provide capital and expertise for a percentage of hydrocarbons produced (Pongsiri 2004, Kaiser 2007, and Tordo, 2007).

Under the contractual arrangements, the government remains the owner of oil and gas natural resources and awards the IOC with a license to exploit the oil and gas. This therefore means that OAGU has a constitutional responsibility of assuring key stakeholders including government that oil and gas resources are managed in an efficient manner.

Additionally, the Production Sharing Agreements in Uganda require that the Government reviews and audits the licensee's books and records with respect to the petroleum operations conducted. The main resolution of cost recovery audits is to ensure that the amounts incurred by licensees are realistic so that the State and Investor get fair shares from petroleum resources.

Under production sharing agreements the contractor is compensated in kind for recovery of costs as well as profits (Demirmen, 2010).

Production sharing

The mechanism which allocates hydrocarbon production between the contractor and the government lies at the heart of a PSA. The contractor is first entitled to recover qualifying costs. The PSA will include an accounting procedure that will define in detail what costs qualify for cost recovery. Usually these would include exploration, development and operating costs and reserves set aside as provided in the PSA to cover future decommissioning costs (as these will be incurred in periods when there will be little or no revenue out of which to recover the costs).

The most common exclusions from recoverable costs are interest and related costs in respect of loans used to finance operations under the PSA, head office allocation costs, and any costs related to activities which are not linked to operations under the specific PSA. Other cost are not recoverable which include transport, processing and marketing beyond a defined 'delivery point' and costs related to projects under different PSAs.

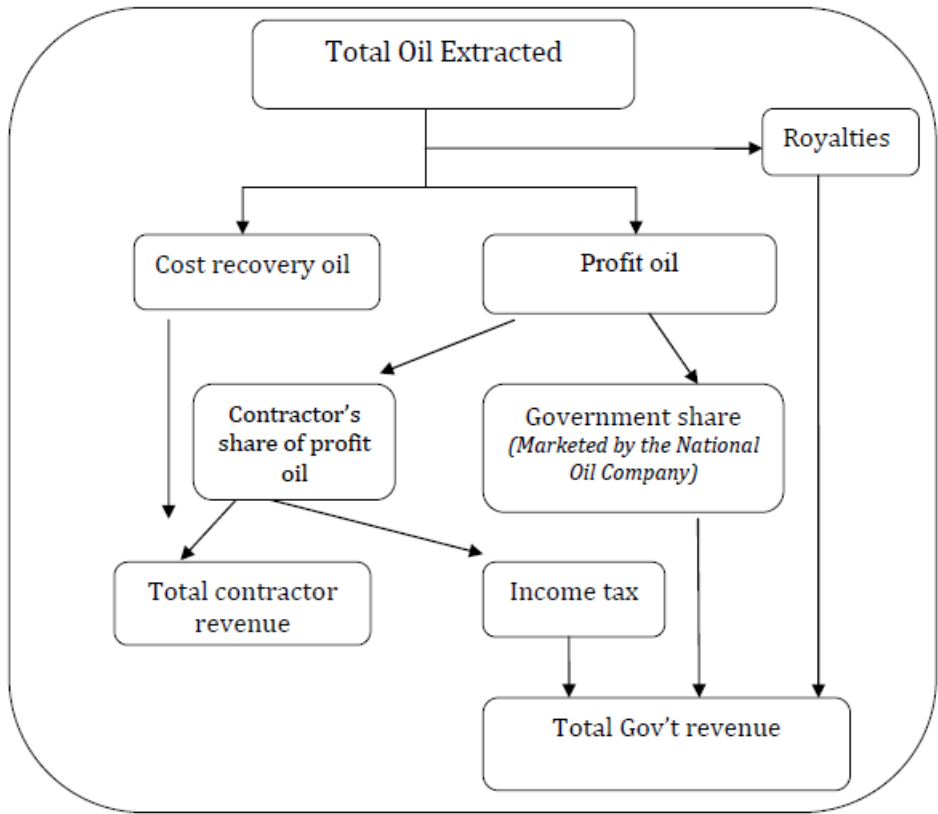


Figure 2: Revenue sharing mechanism. (Oil and Gas Revenue Management Policy, 2008)

Government institutions charged with monitoring like PAU and OAG come in handy to ensure that only eligible recoverable costs are included in the annual cost recoverable statements that are submitted to government by the IOCs. As shown in Fig.2 above, from the total oil extracted Government deducts its royalties first. Then IOCs deduct their cost recovery oil. The remaining oil forms the net revenue which is shared between Government and IOCs. However, the profits taken by IOCs are taxed by Government. The income tax, royalties and shared profits all form the Government total revenue. To ascertain such dealings, regular audits are undertaken, some of which are cost recoverable audits.

Budgets and Work programs

The IOC is obliged to avail budgets, work programs and development plans for sanctioning by the HG, for exploration, development and production operations for a period between 25 to 35 years (Kaiser and Pulsipher, 2004). The contractor would stop production when the extension is not sanctioned by HG.

Randon (2005) claimed that IOCs prepare the work programs which are murky by hiding their intentions into technical considerations. It intended to slow down projects they consider expensive and execute those they consider to be cheaper and profitable. HGs should specify the circumstances under which a task could be delayed in the contracts.

The PSA provides for minimum work programme and Budget commitment; A minimum level of exploration work guaranteed by the PSAs. The Advisory Committee composed of industry and Government reviews and approves work programs and budgets To ensure that the proposed activity and budget is acceptable; Licensees are required to submit bid evaluation reports and draft contracts to PAU prior to contract award for the latter's evaluation and approval

This is to ensure that the procurement process is transparent and that the contract offers value for money. Activities of licensees monitored throughout the entire duration of operations; To ensure that work programs are implemented as agreed and in accordance with approved budgets

Cost Oil

Regardless of the type of fiscal system, oil companies engaged in exploration, development and production will incur costs that can be identified to belong to one of the following categories:

Acquisition Costs

Costs incurred in order to acquire legal title to a working interest in the property. They include costs relating to either purchase or lease of rights to extract the oil and gas; like bonus payments, legal expenses, and title search.

Exploration Costs

Costs incurred to resolve doubt as to whether or not proved reserves actually exist on the property (Koester 1982). They relate to collection and analysis of geophysical and seismic data. Also include costs associated with drilling exploratory wells which are further subdivided into intangible or tangible. Intangibles are those incurred to ready the site prior to the installation of drilling equipment whereas tangible costs are those incurred to install and operate the equipment.

Development Costs

Costs incurred after proved reserves are determined to exist on the property, up to the point where property is capable of producing reserves. Development costs involve the preparation of discovered reserves for production e.g. access roads construction or improvement, additional drilling or well completion (casting, cementing or perforating), installation of infrastructure like extraction pumps, gathering pipelines and storage tanks.

Production Costs

These are costs incurred in lifting (extracting) of oil or gas from the reserves. They include treatment costs, wages for workers and electricity for operating equipment. Production costs are considered part of periodic operating expenses.

Abandonment costs

Also known as decommissioning costs, they relate to costs incurred to implement the removal, disposal or reuse of installation when it is no longer needed for its current purpose (Jahn et al, 1998) quoted by Gudmestad et al, 2010). It involves plugging wells, dismantling wellhead, production and transport facilities and restoring sites to approximately their pre-exploration condition.

2.2.2 Need for Cost Efficiency

Cost efficiency comes through well designed cost control processes and institutional monitoring. All costs when incurred in the process of searching, exploration, development and production of oil and gas are recoverable through the cost oil component of the fiscal regime.

OAGU has the responsibility under the laws of providing an independent assurance on cost oil. This is not very common in most of the Supreme Audit Institutions around the globe. Kenya, India and Indonesia are some of the few SAIs with the mandate to provide assurance on the cost oil. Most SAIs put their energies in revenue management and leaves cost management and monitoring to other bodies similar to URA and Petroleum Authority.

There are documented cases where cost audits by SAIs have unearthed loopholes and losses to governments worth billions. In India, for example the Comptroller & Auditor General observed loopholes in the PSC regime which encouraged contractors to show higher investment, so that it could take longer to recover the cost and delay government's revenue maximization. OAGU has disallowed substantial amounts during the cost audits.

The office therefore ensures that cost efficiency is achieved through well designed cost control processes and institutional monitoring.

2.2.3 Types of inefficiencies

- a) **Gold Plating-** the practice of making unreasonably large expenditures due to lack of cost-cutting incentives (Johnston and Johnston. 2010; Svetlana et al, 2003). ‘Gold plating’ is a situation in which the fiscal regime creates an incentive to spend more than is necessary and profitable, or bring forward investment.
- b) **Inflating of costs/budgets** - Is the artificial inflation of reported costs. This affects government take by reducing the reported profits to be split between government and industry.
- c) **Transfer pricing** – The transfer price is the price of a transaction between two entities that are part of the same group of companies. Transfer pricing is a key issue from revenue and a cost perspective as it affects the calculation of the various elements of government take. PSAs usually will contain detailed rules for valuing non-arm’s length sales and hydrocarbons on hand, although these may not address more complex issues, such as hedging. There also usually will be a requirement for all related party charges to reflect arm’s length amounts. Under some PSAs, cost recovery for the contractor’s overhead may be fixed as a percentage of total expenditure, rather linked to actual amounts expended.
- d) **Gaming of entitlements:** Overstating the cost recovery budget or estimates will of course end up with higher contractor’s entitlement nomination, justifying more share of crude liftings. At the end of the period, when actual entitlement based on actual volumes, actual prices, and actual cost recovery has been calculated, the contractor will then be found to be in an over-lift position. Although eventually the over-lift will be settled, the contractor will at least have gained with regards to getting the cash earlier (time value of money). This is

equivalent to getting an interest free loan. The effect is even more pronounced if lifting is done in periods of high oil prices and the over-lift is settled in periods of lower prices.

Although this study does not aim to prove the existence of such inefficiencies by companies, it will aim to justify how the OAGU plays a role in minimizing wastage and inefficiencies in the oil and gas sector.

2.2.4 Benefits beyond revenues

Petroleum contracts may also contain local content requirements to promote local participation in project activities through employment or procurement; these requirements are seen as a way of maximizing local economic benefits. Also, oil companies are typically required to adhere to standards for the protection of the environment or human health. Monitoring compliance with these provisions can be as important to civil society as those obligations relating solely to tax liability and rent distribution.

As mentioned earlier, social investment projects may be contractual or voluntary. Contractual social investment projects can be stipulated in the hydrocarbon agreement itself (the PSA, for example), or in a separate agreement with local groups. Where social investment requirements are included in a PSA contract, IOC expenditures relating to social investment (for example, construction of public buildings such as hospitals and schools) may be considered as part of the company's cost recovery. In other words, the government effectively then reimburses the company for these expenses. In contrast, voluntary initiatives are not contractually stipulated, but are often initiated by IOCs as part of their corporate social responsibility policy or to build relations with local stakeholders

2.3 Level of Compliance of Cost Audits with the National and International Legal and Regulatory Frameworks

Management in its general sense refers to a process of creating an environment to enable the attainment of agreed upon organizational goals and objectives (Koontz and Wiehrich, 1990). It comprises planning, organizing, decision making, and leading and controlling organizational/country resources to efficiently and effectively attain the intended objectives (Griffin, 2002). Oil revenue management is geared at creating an environment that will ensure that oil revenues are properly utilized for sustainable economic growth and development of a country (Grynspan, 2012; Enisan, 2012; and Schilling and Chiang, 2011). Oil revenue management requires an understanding of the oil revenue characteristics, management mechanisms, and management environment, as well as drawing experience from other.

The aforementioned revenue management mechanisms require strong institutions with adequate capacity in terms of personnel-numbers and skill competencies, equipment and logistical support (Adeniyi and Ushie, 2013; Kenneth et al., 2008). In addition, the institutions should be backed by the relevant operational and legal frameworks to enable them formulate, implement, and review strategies, policies and procedures and hold institutions accountable to the public (Adeniyi and Ushie, 2013; Kenneth et al., 2008).

Ross (2012) urges that 'sick' government institutions are like a sick doctor - weakened by a disease, who cannot treat his/her patients. He urges that the oil revenue makes institutions ineffective, thus impairing their ability to positively think a head and they suffer from 'short-termism'. Many scholars, have ambitiously urged that oil wealth creates 'administrative chaos' and 'bad institutions' which are corrupt, inefficient, less competent and weak to implement sound

economic policies (Chaudhry, 1989 and World Bank reports, 2008, as cited in Ross, 2012 and Ploeg, 2011b).

According to Karl (1997), in his famous book *'the paradox of plenty'*, revenue from oil diminishes state's authority and creates a situation where both public authorities and private interests are all centered at 'rent seeking'.

Good governance is about being accountable, allow participatory approach and be transparent to ensure that political, social and economic priorities are based on broad consensus in society and that the voices of the poorest and vulnerable are considered in decision making and in resources allocation (Kenneth et al., 2008).

The World Bank Group (WBG), has introduced a voluntary multi-stakeholder approach, the Extractive Industries Transparency Initiative (EITI) as its key governance promotion program (Caspary, 2012). Under EITI countries are urged to improve on the sector reforms to ensure capacity building and private sector participation, thus: (1) triangulating the cooperation between governments, business and civil society; (2) promote transparency in revenue streams; (3) acquire capacity to manage revenues responsibly; (4) taking into account social and environment concerns; and (5) support governments to develop modern policies and legal framework.

2.3.1 Compliance audits

Compliance audits comprise a wide range of externally and internally driven examinations of an organization's fulfilment of legal or regulatory requirements, industry standards, licensing terms, contractual commitments, or other formal obligations. Compliance audits overlap conceptually with financial, operational, and certification audits in the sense that those types of audits often address standards, practices, or legal provisions that constitute mandatory requirements for organizations.

As a category, compliance auditing applies more broadly than other types in terms of who performs such audits, the purpose for conducting compliance audits, and the organizational elements or subject areas that provide the scope for audits. Compliance audits driven by needs to demonstrate adherence to legal provisions or regulations (including those conducted as part of formal investigations) are most commonly performed by external auditors.

Audits of organizational fulfilment of licensing terms, service level agreements, or other contractual obligations are usually conducted by the legal or contracting functions of one or both parties bound by the contract. Audits that verify compliance with organizationally specified policies, procedures, standards, and guidelines typically fall within the purview of internal auditing programs. The standards and methodologies used in compliance auditing vary according to the context of the audit and the organization or legal entity that has the responsibility to verify compliance. As is the case with many other types of external auditing, the audit criteria used to determine compliance with externally defined requirements are often available to organizations, facilitating their preparation for external audits and enabling organizations to conduct internal self-assessments if they choose to do so.

The organizational requirements underlying compliance audits come from many different external sources, in addition to internal policies and governance objectives. Organizations in many industries are subject to both government regulations and commercial standards, each corresponding to different sets of audit criteria. In the United States and many other countries, organizations that operate in regulated industries or that participate in government-sponsored programs must undergo compliance audits.

Unlike the securities and financial management laws and regulations that apply to all publicly traded companies and result in all such organizations performing mandatory audits, other types of legal requirements obligate covered organizations to comply but may only formally audit compliance of a small proportion of organizations, selected at random or in response to suspicions, complaints, or prior noncompliant behaviour. Examples include audits of small businesses, federal grant recipients, and health care providers. Similar approaches to compliance auditing apply to many industry and commercial requirements, including audits of IT and security standards for organizations in financial services, insurance, energy, and retail.

Compliance audits conducted on an ad hoc or one-time basis rather than as a routine or recurring process can sometimes identify serious deficiencies or systemic problems within an organization. For example, for its services acquisition program U.S. Department of Veterans Affairs (VA) has in place small business contracting rules that give preference to veteran-owned businesses.

A 2010 audit by the VA's Office of Inspector General of the Department's small business programs found that as many as three-quarters of the small businesses registered with the VA for participation in the program were in fact ineligible, due to what the Inspector General cited as deficient oversight and verification practices. The contracting rules favouring veteran-owned businesses implemented legislative provisions enacted in 2006 and first examined by

the Government Accountability Office(GAO) in 2009, but the 2010 Inspector General audit was the first the Department conducted on its own veteran-preference contracting programs.

Legal compliance audit

Legislation and legislatively mandated rules and regulations are significant sources of compliance requirements. Organizations falling under the jurisdiction of various national, state or provincial, or local laws are obligated to comply with the mandatory provisions in the laws and may be subject to audit to verify their compliance. Not all laws include audits as a mechanism for checking compliance, but audit procedures are often found where legal provisions include penalties for noncompliance.

Few laws and regulations apply to all organizations. Organizations in different industries, markets, and geographic areas need to be aware of what laws and regulations apply to them, which requirements may be subject to validation through compliance auditing, and what criteria need to be satisfied if and when the organization is audited.

Compliance activities in many organizations extend beyond formal audits, as even in the absence of financial or other penalties for noncompliance some organizations need to perform self-assessments of compliance and report the results to external oversight bodies. Organizations also may focus internal audit program resources on maintaining and reviewing evidence of compliance that might need to be provided if the organization is chosen for a random audit or becomes the subject of civil or criminal litigation.

The need to maintain awareness of legal audit requirements applicable to each organization includes keeping abreast of changes in compliance or enforcement policies related to legal

requirements. For several years after those requirements went into effect, each covered organization was obligated to satisfy applicable security and privacy requirements but did not undergo auditing or any formal evaluation of its compliance unless someone filed a complaint with the government claiming the organization violated the law. This change, coupled with a provision requiring organizations to self-report breaches of protected information, gives covered organizations an added incentive to ensure their compliance with the law, in addition to any internal goals and objectives to operate in compliance with applicable rules and regulations.

Compliance with industry standards

Organizations operating in specific industries may be subject to standards developed, implemented, and maintained by government authorities, industry groups or associations, or standards development organizations. Organizations obligated to comply with these requirements often incorporate them in their internal policies, procedures, and standards and validate compliance through internal compliance audits, alone or in addition to external audits performed by appropriately qualified and authorized auditors. Organizations may also adopt voluntary technical standards developed with specific industry applicability in mind, such as point of sale (POS) standards in retail, or the industry-specific subsets of standards.

As with commercial standards, verifying or demonstrating compliance with voluntary industry standards may help organizations achieve greater levels of technical interoperability with peer organizations. In many countries, multiple government and industry oversight organizations have responsibility for standards applicable to financial services institutions. With the intent of ensuring consistency in regulatory compliance and oversight, the agencies issue standards—including IT

audit standards - for use by different U.S. government entities with responsibility for supervising financial institutions. In many industries organizations are subject to multiple regulations administered and overseen by different types of organizations, potentially presenting a challenge in terms of evaluating compliance with all applicable requirements in a single audit.

Compliance with Commercial standards

Distinct from industry-specific compliance requirements, commercial standards apply to many organizations based on the types of business functions or transactions they perform or the way in which they perform those functions. Organizations also often choose to implement voluntary standards, particularly in IT domains, to help ensure interoperability with customers or business partners or to enable use of different vendor products or technologies in their environments.

Voluntary standards are typically not subject to required compliance audits, but organizations may perform their own compliance verification activities to be able to publicize their use of or support for standards. For instance, the Open Source Initiative encourages the adoption of open source technologies and facilitates interoperability among such technologies with two designated levels of compliance, one self-attested and the other based on a review of conformance to explicit open standards requirements.

A well-known example of mandatory commercial standards is the Payment Card Industry Data Security Standards (PCI DSS), which prescribe requirements for organizations that accept payment cards (such as credit, debit, or prepaid cards) and handle cardholder information in the course of doing business. The standards are sponsored by major commercial electronic payment

processors including VISA, MasterCard, and American Express and are mandatory for all organizations that process, store, or transmit cardholder data. Large merchants are subject to mandatory PCI compliance audits and can, in cases of repeated noncompliance, face significant fines and potentially lose their ability to process transactions using cards branded by the sponsors.

Review of cost recovery statements from oil companies

The Production sharing Agreements signed between Government of Uganda and Oil Exploration and production companies provide that the government auditor will review the cost recovery statements submitted by the companies to ascertain compliance with the provisions of the agreement before confirming recoveries if any.

Accordingly, cost recovery audits by OAGU relating to the period 2004-2011 revealed that a sum of USD.39,094,724 was unrecoverable due to non-compliance with the provisions of the PSAs. Furthermore, a sum of USD 41,585,800 was un-claimable because commercial Oil and Gas reserves were not discovered in the licensed exploration areas.

2.4 Challenges facing Cost Recovery Audits in its attempt to ensure financial accountability in the oil and gas sector

Several challenges persist in auditing costs incurred by the oil companies. When conducting the cost recovery audits, OAGU is guided by the entire regulatory framework governing the petroleum activities. This helps to ensure that both government and the IOCs comply with the PSA provisions, any deviations by either party attracts penalties. Where non compliance by the IOC results into a cost reported, such a cost would be disallowed by OAGU. It is important to note that any cost disallowed by OAGU during the audits becomes a saving to the HG. These revenues can

be spent to support government programs or to reduce public debt, or they can be saved for future generations.

- There are many situations that can result in a government not receiving all the revenues it should from oil and gas extraction. For example, this can happen in the following situations;
- Companies' declarations of production volumes are understated.
- Companies' declarations of production value are understated.
- Claims for allowable expenditures (which reduce amounts payable) are overstated.
- Producers use tax avoidance practices to reduce amounts otherwise owed to governments.
- Companies resort to fraud or corruption of officials.
- Unclear or misunderstood legislation and regulations result in incomplete payments.
- Audits of royalty payments are not completed within the time allowed by regulation, making adjustments to royalty payments and additional revenue collection impossible.
- Royalty rates are out of date and do not reflect changing market values of extracted resources or changing government policy objectives.

To ensure that they receive all the oil and gas revenues they are entitled to, governments need to establish clear rules for industry and put in place controls to ensure that the rules are being followed. These controls including mandates to institutions are of particular importance in the natural resource sector because governments tend to rely heavily on data provided by industry to determine what sums are to be paid for the extraction of public resources.

2.4.2 Revenue Sources specific to Oil and Gas (Petroleum Revenue Economic Rent)

Economic rent is the surplus between the revenue generated from production of oil and gas resources and the corresponding extraction costs. These costs are composed of exploration, development, operating costs and the contractors' share of profits. HGs always attempt to record maximum possible economic rent under the PSA through; bonuses, royalties, cost recovery, government share of profit oil or gas and taxation (Johnston 2003).

Johnston (2004) reported that there were other benefits in addition to economic rent, for example provision of employment and associated benefits, transfer of skills, good governance practices introduced by the IOCs and Corporate Social Responsibilities (CSR) made with in communities around the exploitation areas.

Signature, Production and Discovery Bonuses

Signature bonuses are normally paid by the contractor to the HG at the signing of the contract before making any investment (Maazel 2010). Most HGs in developing economies require signature bonuses because they guarantee early economic rent with minimal management controls (Zahidi 2010). On the other hand, they increase operational costs for the contractor and as a result, contractors may be discouraged from further investments in that country (Tissot 2010). Production bonuses are paid to the HG when agreed production levels are achieved by the contractor. There may be other key milestones like new commercial discovery and this may necessitate a discovery bonus (Wadood 2006).

Royalties

Royalties are the price that the owner of a natural resource charges a private company or consortium for the right to develop this resource. The right of governments to levy royalties and production taxes from oil and gas companies derives from their ownership of natural resources. Through royalty and tax payments, governments are compensated by oil and gas companies for the extraction of public natural resources.

Royalties apply once production has begun at a new site. There are different types of royalties, the main ones being:

- ***Volume-based (or specific) royalties***: a regulated price per unit of production. This type of royalty requires controls to monitor production and to ensure there is no illegal (unrecorded) extraction.
- ***Value-based (ad valorem) royalties***: based on the value of the extracted commodities. The value is volume multiplied by price (set by the market), so the difficulty of establishing price (which varies day to day) is added to the difficulty of establishing volume.
- ***Profit-based royalties (or taxes)***: based on a company's profits. While this is in many ways similar to an income tax, it is an additional tax charged for the extraction of public natural resources. Like an income tax, this type of royalty requires government departments with strong financial, technical, and administrative capacity to regulate and collect the royalties while minimizing the risk of tax avoidance. (An example of tax avoidance is transfer pricing, a practice by which profits are transferred abroad by manipulating the price of goods and services sold between legally connected parties, such as the subsidiaries of a transnational corporation.) The challenge is substantial because many extractive companies are global market players that are not regulated by any single government.

Oil and gas companies pay royalties (and/or production taxes) in addition to their regular income taxes. However, royalty payments are deductible for income tax purposes in many jurisdictions.

Surface Rentals

PSAs normally include an exclusive right to explore and eventually develop and produce hydrocarbons in a specific geographical area. It is usual for the contractor to be required to pay the government a fixed amount by reference to the area of the block. The rate per unit of area normally will increase in the development and production phase of a project, although the contractor often will be required to surrender its rights over areas of the block not associated with field development.

Taxation of employees and subcontractors

Oil and gas companies participating in a PSA usually are required to act as the withholding agent for taxes imposed on employees and subcontractors/suppliers, and these obligations start with the commencement of activities, creating tax revenues even if there is no commercial discovery. Occasionally, a PSA may provide exemptions or specific rules, but it is more normal for general tax law to apply.

A contractor also may be subject to additional payroll taxes and social security levies. Other taxes that may be applicable include transaction taxes and stamp duties.

An exemption from import taxes, such as customs duties and VAT, often may be available, though sometimes the relief is available only for a limited period, rather than the life of the project.

Government share of production (Profit Oil)

The gross revenue remaining after deducting royalties, taxes and cost oil is termed as Profit oil and is shared between the IOC, the national oil company and the government as specified in the terms and conditions in the PSA.

Most jurisdictions apply CIT to upstream operations, although the specifics of the industry may mean that the applicable rules differ in significant respects from the rules applying to other types of activity. The mechanics of the CIT calculation often will operate independently of the production sharing mechanism. So, the starting point will be financial statements showing revenues arising from sales of the contractor's cost recovery and profit oil/gas and with adjustments based on general tax rules, such as the disallowance of book depreciation and the deduction of tax depreciation. In some jurisdictions, the rules for calculating CIT may be set out in the PSA itself, or the PSA may simply refer to the relevant CIT law. In other jurisdictions, the base for CIT may be more closely linked to the production sharing formula, with CIT.

Acquisitions and disposals

Transfers of interests in PSAs is a matter of great interest to the government and most PSAs will require government consent prior to a transfer in cases of direct and even indirect sales (e.g., via a sale of shares in a contractor). Though such transfers do not create additional economic rent, governments may seek to impose tax and the consent requirement will give them a significant lever to apply tax even where the application of tax legislation may not be completely clear. In Uganda for example Capital Gains Tax is imposed on the proceeds of disposals and transfers.

Other forms of government take

Transfers of interests in PSAs is a matter of great interest to the government and most PSAs will require government consent prior to a transfer in cases of direct and even indirect sales. Though such transfers do not create additional economic rent, governments may seek to impose tax and the consent requirement will give them a significant lever to apply tax even where the application of tax legislation may not be completely clear.

From the perspective of production sharing, the usual approach is for the transferee to step into the transferor's shoes, inheriting any pools of unrecovered costs, and usually there is no direct impact on the profit oil/gas sharing formula.

Table 1; Showing the different taxes levied on Oil and Gas Contractors in a 20 years

Tax Head	Oil and gas revenues (1997-2016)
PAYE	276,225,434,460
WHT	259,931,993,796
VAT	28,505,833,868
Corp Tax	1,363,310,279,281
Stamp Duty	108,341,841,411
Import Duties	92,454,241,987
Total	2,128,769,624,803

Source: URA

2.5 Summary of literature Review

The literature reviewed above shows that the effectiveness of cost recovery audits in fostering financial accountability in Uganda's oil and gas sector is widespread. However, cost recovery audits emerge as a key component in fostering financial accountability and they contribute to government cost recovery. Although some scholars found that cost recovery audits are in some cases done erroneously, reality nevertheless points to o cost recovery audits capacity to generate benefits for governments.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter examines the research design and methodology used for the study. It aims at describing the techniques and methods employed to gather and evaluate information and data relevant to this study and related literature. The chapter begins with detailed examination of the philosophy on which the research/study was based. It continues to discuss the methods used in the evaluation and analysis of the role of the office of the auditor general in the efficient management of oil and gas industry in Uganda. The method and methodology adopted was informed by the gap and research questions the study intended to bridge and answer respectively.

3.2 Research design

The study adopted a cross sectional survey design. A cross sectional design alternatively referred to as a snapshot entails collecting data once without repeat. This design was appropriate for this study whose interest was to assess the customers view at the time in moment and also was in line with the available time set aside for results of this study (Babbie & Mouton, 2009). This was employed since the intention was to get result at a particular point in time and to know whether the cost recovery audits promoted financial accountability in the oil and gas sector.

3.3 Research Approach

The study employed a mixed approach which consisted of both qualitative and quantitative data. Quantitative approach collected data that could be analysed statistically and was appropriate to assess the strength of relationship between variables under investigation since it allowed both correlation analysis. Qualitative data entailed an in-depth rich account of respondents beliefs on

the items under investigation. In this study, qualitative data was employed to triangulate the results from the quantitative study (Creswell, 2014).

3.4 Area of Study

The research was conducted in Kampala where the Head Office of the Auditor General was located. It was also where most of the key informants like parliamentarians, audit firm and main offices for major oil and gas companies were.

3.5 Population and Sampling Techniques

The population of the study consisted of 50 staff of OAGU within the Kampala region as well as 15 key informants such as legislators, senior staff of Petroleum Authority of Uganda. The study population comprised key persons in the Auditor General's Office, some influential Legislators as well as key persons that head major oil and gas companies in Uganda that is CNOOC, Tullow and Total E&P.

3.5.1 Sampling Size

The sample size was 45 respondents (Auditor General's Office, some influential legislators and PAU senior staff as well as key persons that head major oil and gas companies in Uganda, that is, CNOOC, Tullow and Total E&P). Using the Krejcie and Morgan (1970) table of sample size determination, the sample size of 45 was the appropriate. This was the sample size that was targeted for this study.

3.5.2 Sampling Procedure

The study employed purposive sampling to select the various oil station workers like plumbers, electricians, engineers, administrators and government officials. Purposive sampling was preferred

because it was useful in identifying uniquely qualified respondents to provide needed information. The selection was based on expert knowledge of the problem of the research.

3.6 Data Sources

3.6.1 Primary Data

The primary sources of data were employed when the researcher initially gathered data by interviewing individuals, using questionnaires or surveys, experiments and observation. Alternatively, the investigator used secondary data that is already in present like policy documents, agreements, laws, regulations, text books, government journals, presentations, websites and newspapers (Hox and Boeije, 2005; Denzin and Lincoln, 2009). Using primary data was normally taken to be time consuming for the study of this nature given the scope considered. The researcher therefore, implemented the secondary sources of data gathering for this study.

3.6.2 Secondary Data

The secondary bases of data enabled the researcher to get stress-free access to petroleum audit reports, PSA agreements, peer reviewed journals, slide presentations, policies, laws, regulations for the petroleum sector in Uganda and text books. In addition, the petroleum website, the Ugandan petroleum exploration and production department (PEPD) documents, WGEI website and records. This facilitated the researcher to save time and money. Secondary sources similarly presented the researcher with a chance of getting better quality data (Bryman, 2013). Secondary data also simplified the analysis and assessment of information from the audit reports of the auditor general regarding oil and gas in Uganda (Bryman, 2013).

3.7 Data Collection Methods and Instruments

The study employed three data collection methods, namely: observation, questionnaire survey, and interview survey. The questionnaire survey is done objective by objective targeting all the selected respondents from the different oil and gas companies and sectors. The data collection tool that will be employed in this method was the method of questionnaires (structured questionnaire). The questionnaires were preferred because they were easy to administer, saved time and allowed for doubts to be clarified on spot from many respondents (Sekaran, 2003).

3.7.1 Observation

This method of data collection was used in situations where the researcher had to look at documents like the OAG's reports, and long-term strategic plans among other documents that were presented by the respondents. The use of this method aimed at ensuring the authenticity of the information given by all the various respondents within the organization.

3.7.2 Interviews

Semi-structured interviews used as part of the qualitative research method for gathering the data. In the semi-structured interview, the researcher asked a selection of open-ended questions from the respondent in order to gain specified and contextual data. This way of interviewing let the respondents to explain their views and outlooks concerning the examined subject more spontaneously and offers reasoned contextual knowledge and understanding. The researcher gained understanding of the perspective of respondents and discovered the certain skills and experiences needed.

The benefit of semi-structured interview was the opportunity to plan the interview questions before the interview. Beforehand-prepared questions guaranteed better gathering of data and results, especially when the researcher did not have much prior knowledge of interviewing.

The respondents were provided with the prearranged interview questions before the interview in order to give them time to prepare for the interview. Even though the semi-structured interview questions were prepared beforehand, the method still provided a space for potential unstructured follow-up questions and more profound discussion about the subject. By using semi-structured interviews, the researcher had correspondingly more control over the course of the conversation, and the opportunity to repeat the interviews (Fylan, 2005).

3.7.3 Questionnaires

The questionnaire was the main research instrument for this study. A questionnaire is easier to administer, less costly, and ensures greater depth of response. This study employed close ended questionnaires (structured questionnaire) – where some questions were presented, and the responses were recorded, and the respondent chose the answer from the options given him/her.

The questionnaires however were designed using a five Likert scale, where 1 = strongly disagree; 2 = disagree; not sure; 4 = agree; and 5 = strongly agree. The five Likert scale was preferred by the researcher because it captured all the ideas, views and opinions of the respondents.

These questionnaires were of two types, one type for the staff and another type for the employers. This was because both parties had contradicting views on the matter and if the right answers were to be deduced, both sides had to be analyzed.

3.8 Data Presentation and Analysis Techniques

The type and nature of the data that used in this research was descriptive and also, comparative tools will used in giving and analysing the data gathered. Descriptive statistical tools are those methods used to describe, summarise and to display data using tables, graphs and charts (Collis and Hussey 2013).

During this study, the researcher examined the OA's reports for the oil and gas sector in Uganda and how the recommendations in the reports were implemented. The examination of documents was widely employed when analysing contextual data and it was considered appropriate for the analysis of governance reports and required disclosures by HGs and IOCs (Bala, 2011).

These records and documents helped to effectively audit the government and IOC in improving their accountability obligations to the stakeholders. When the national development objectives as spelt out in the national development plans are achieved, this marks the roadmap to sustainable economic development. The overall aim of the study was reasoned from this point of view by the researcher. The context from which this analysis was conducted was based on principal-agent theory and its related interrelationships.

3.9 Validity and Reliability

3.9.1 Validity

Validity is the degree of accuracy a research instrument is in measuring the intended variables. To ensure this is achieved, the questionnaire that was used for the purpose of this study was mainly adopted from the previous scholars who have developed a validated instrument. A pre-test of the questionnaire with ten potential respondents was further done to establish the questions that may require revisions. A revision was made for the questions that the group identified as vague before the collection of data.

3.9.2 Reliability

A research tool is considered reliable if independent administration of it or a comparable instrument consistently yields similar results under comparable conditions. To test the reliability of the instrument used for this study, a Cronbach Alpha reliability coefficient test will be conducted. As can be seen in table 3.1 below all the variables recorded an above 0.5 Cronbach Alpha score and as such the research instrument was reliable (Nunnally, 1978).

Table 3.1 Reliability Analysis

Variable	N	Cronbach Alpha
Cost recovery audits	14	0.574
Accountability	11	0.558
Challenges facing cost recovery audits	12	0.541

3.10 Ethical Considerations and Resource Requirements

During the research process, the researcher anticipated some ethical issues that would arise and made plans to address them as the process went on. These issues were discussed below. The researcher filled and submitted the student research ethical review form and obtained approval to continue with the research as required the university (Lincoln, 2009).

When the research started, there was a possibility of putting participants under pressure to sign consent forms for the researcher to help in the collection of data. The researcher also explained the purpose of the study to participants and made it clear that this was a voluntary exercise, making it their choice to participate or to decline. This was mitigated by underpinning the study on secondary data sources by examining documents (Creswell, 2013).

When collecting data, the researcher could disrupt activities and physical settings at the research site. This was mitigated by informing the participants early enough when any form of disruption was anticipated during data collection. For example, appropriate preparations were made by librarians when searching for copies of PSAs and JVs which needed checking the archives (Mertens and Ginsberg 2009).

During data analysis, there was a probable ethical issue of going native whereby the researcher subscribed and embraced the HG's schools of thought. This was done by discussing only findings that impacted only positively about the participants and unfavourable findings were left out. This was managed by objective reporting (Salmons 2010). During reporting, there was a risk of falsifying evidence and findings, making the integrity of information and data doubted. The researcher subjected the findings to validity and reliability checks thus, honest reporting (Lincoln 2009).

Throughout the research process, some individuals preferred their names, positions and organisations to remain anonymised. Pseudonyms were used to safeguard the identities, organisations and individuals. The researcher adopted reviews of documents which were not included interviews (Creswell, 2013).

Furthermore, some information was regarded as confidential like agreements, minutes and some internal memos. The researcher alleviated this by keeping the information confidential and used some hypothetical figures. The researcher sought for authority in order to obtain the necessary information, used and stored data in an ethical and appropriate way required.

The major resources that were used by the researcher included a laptop, funds for scanning and printing the literature, stationery and transport fees to the research sites. These resources enabled the researcher to carry out a plausible study.

3.11 Summary of Chapter Three

Chapter three presented and discussed the research design and methodology used for the study. It also described the techniques and methods employed to gather and evaluate information and data relevant to this study and related literature. The chapter begins with detailed examination of the philosophy on which the research/study was based. It continues to discuss the methods used in the evaluation and analysis of the role of the office of the auditor general in the efficient management of oil and gas industry in Uganda.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

The chapter focuses on presentation of the analyzed data in an effort to examine the effectiveness of cost recovery audits in fostering financial accountability in Uganda's oil and gas sector. The results in this section are mainly presented using statistical tables that were generated in relation to the study objectives. The statistical tools used in the analysis and interpretation of data are descriptive in nature such as mean and standard deviations with correlation analysis. This section also comprises of the background characteristics of the respondents. Data was collected through administering questionnaires to the respondents and face to face interviews with key informants. The research study was based on the research study objectives.

4.2 Demographic Characteristics of Respondents

The results that follow show the respondents' characteristics. The mean, standard deviation analysis and frequency distributions were used to explore the interrelationship between the study variables. The characteristic included gender and period worked with the project. The findings are presented in tables below.

4.2.1 Gender of the Respondents

The results in table 4.1 below show the gender of the respondents who participated in the study.

Table 4.1: Gender of the Respondents

Gender		Frequency	Valid Percent	Cumulative Percent
Valid	Female	17	37.6	37.6
	Male	28	62.4	100.0
	Total	45	100.0	

The results in table 4.2 above show that the majority of the respondents were male (62.4%) while only 37.6% were the female. The sample shows that the study was dominantly composed of males.

4.2.2 Types of the Respondents

The results in table 4.2 below show the types of the respondents who were involved in the study.

Table 4.2: Types of the Respondents

Type		Frequency	Valid Percent	Cumulative Percent
Valid	OAGU staff	25	55.6	55.6
	PAU staff	12	26.7	82.3
	Oil companies senior staff and others (legislators etc)	8	17.7	100.0
	Total	45	100.0	

From table 4.3, results show that most respondents 25 (55.6%) were from the Office of the Auditor General (OAGU). These were followed by staff from Petroleum Authority of Uganda (PAU) at 12 (26.7%) and also oil companies senior staff 8 (17.7%). This shows that the respondents were fairly picked from the three key groups that formed the core of the cost recovery audits. This representativeness of the respondents authenticates the results.

4.2.3 Interpretation of Statistical Data presented using Likert Scale

The response continuum for each statement is a linear scale indicating the extent respondents agree or disagree with each statement. For example, a generic response continuum is 1 represents Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree and 5-Strongly Agree for statements favorable to the construct.

For statements unfavorable to the construct – negatively worded statements – the numerical values for the response options are reversed when the summated score for the construct is calculated. Likert's (1932) monograph specifies that the quantification of the construct is a summated score for each individual calculated by summing an individual's responses for each item comprising the scale.

Kerlinger (1986) described a Likert scale as a summated rating scale whereby an individual's score on the scale is a sum, or average, of the individual's responses to the multiple items on the instrument. Likert scale emphasizes that the score an individual receives on this scale is the sum of an individual's responses to all items comprising the scale or subscale. A principle basic to Likert scale measurement methodology is that scores yielded by a Likert scale are composite (summated) scores derived from an individual's responses to the multiple items on the scale.

4.3 Objective One: Cost Recovery Audits by the Office of the Auditor General (OAG) and promotion of financial accountability in the oil and gas sector in Uganda.

This objective studied whether cost recovery audits by the Office of the Auditor General (OAG) promoted financial accountability in the oil and gas sector in Uganda. Thus a thorough examination of the cost recovery audits by the Office of the Auditor General (OAG) is made. Respondents were asked to rate the cost recovery audits by the Office of the Auditor General (OAG) and the table below shows their mean ratings. Thereafter an examination of whether cost recovery audits by the Office of the Auditor General (OAG) promoted financial accountability in the oil and gas sector in Uganda is also made.

The above two issues were assessed using the questionnaire which was anchored such that 1 represents Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree and 5-Strongly Agree. Means that are close to 1 or 2 signify Disagreement while those that are close to 4 or 5 show Agreement with the issue being raised.

Table 4.3: Cost recovery audits by the Office of the Auditor General (OAG)

Cost Recovery Audits	Min	Max	Mean	Std. Deviation
The Office of the Auditor General (OAG) has the mandate to audit compliance according to the current regulatory regime	1.00	5.00	2.72	1.03
Cost recovery audits are based and regulated by different fiscal and regulatory instruments such as product sharing agreements (PSAs), contracts, and licenses and various regulations	1.00	4.00	2.65	1.09
Cost recovery audits are done in accordance with the legal framework	1.00	5.00	2.88	1.07
During the process of costs recovery, interviews are undertaken both from the government and the oil companies	1.00	5.00	2.86	1.11
Cost recovery audit reports recommend the costs to be recovered	1.00	5.00	2.68	1.10
Cost recovery audit reports recommend the costs not to be recovered	1.00	5.00	2.70	1.06
Cost recovery audits reports are discussed by management and audit recommendations implemented	1.00	5.00	2.67	0.98
Cost recovery audits reports are discussed by Parliament	1.00	4.00	2.75	0.98
Following the discussion of cost recovery report, parliamentary recommendations are adhered to	1.00	4.00	2.96	0.97
Following the issuance of a cost recoverable audit report, a certificate is issued and this is not subject to any further negotiation.	1.00	4.00	2.97	1.02
A company will only recover the exploration and development costs after a commercial discovery is made and commercial production is undertaken.	1.00	5.00	2.87	1.00

Cost recovery begins when production starts	1.00	4.00	2.78	0.92
Host government and contractor share in production	1.00	5.00	3.14	0.98
Provision for sharing of oil profit is carried out	1.00	5.00	2.59	1.14
costs incurred in one contract area cannot be recovered from production from another contract area	1.00	5.00	2.93	1.02
Companies recover their costs over a period of time and the amount to be recovered is capped for each year at a certain percentage (say 60%) of revenues.	1.00	4.00	2.78	1.01
Before the amount to be recovered each year is calculated, the gross revenues are subject to a royalty payment to Government which ranges from 5.5% to 18%.	1.00	5.00	3.50	1.20
Government will therefore receive a royalty payment each year before the recovery of any investments costs by the companies	2.00	5.00	3.63	1.16
Government will also earn its share of profit oil and taxes during the time the company will be recovering its investment costs.	2.00	5.00	3.64	1.03
The contractor's share of oil profit is taxed.	2.00	5.00	3.63	1.16
The type of costs that are recoverable include all approved capital investment in exploration, development, production and operating expenditure as approved by the Petroleum Authority of Uganda and audited by the Office of the Auditor General	2.00	5.00	3.30	1.12

Results in the table 4.3 above shows that the Office of the Auditor General (OAG) has the mandate to audit compliance according to the current regulatory regime (Mean= 2.72). Cost recovery audits are based and regulated by different fiscal and regulatory instruments such as product sharing agreements (PSAs), contracts, and licenses and various regulations (Mean= 2.65). Cost recovery audits are done in accordance with the legal framework (Mean= 2.88). During the process of costs recovery, interviews are undertaken both from the government and the oil companies (Mean=

2.86). Cost recovery audit reports recommend the costs to be recovered (Mean= 2.68). Cost recovery audit reports recommend the costs not to be recovered (Mean= 2.70). Cost recovery audits reports are discussed by management and audit recommendations implemented (Mean=2.67). Cost recovery audits reports are discussed by Parliament (Mean= 2.67). Following the discussion of cost recovery report, parliamentary recommendations are adhered to (Mean= 2.96).

Following the issuance of a cost recoverable audit report, a certificate is issued and this is not subject to any further negotiation (Mean= 2.97). A company will only recover the exploration and development costs after a commercial discovery is made and commercial production is undertaken (Mean= 2.87). Cost recovery begins when production starts (Mean= 2.78). Host government and contractor share in production (Mean= 3.14). Provision for sharing of oil profit is carried out (Mean= 2.59). Costs incurred in one contract area cannot be recovered from production from another contract area (Mean= 2.93). Companies recover their costs over a period of time and the amount to be recovered is capped for each year at a certain percentage (say 60%) of revenues (Mean= 2.78).

Before the amount to be recovered each year is calculated, the gross revenues are subject to a royalty payment to Government which ranges from 5.5% to 18% (Mean= 3.50). Government will therefore receive a royalty payment each year before the recovery of any investments costs by the companies (Mean= 3.63). Government will also earn its share of profit oil and taxes during the time the company will be recovering its investment costs (Mean= 3.63). The contractor's share of oil profit is taxed (Mean= 3.63). The type of costs that are recoverable include all approved capital

investment in exploration, development, production and operating expenditure as approved by the Petroleum Authority of Uganda and audited by the Office of the Auditor General (Mean= 3.30).

Table 4.4: Cost recovery audits by the Office of the Auditor General (OAG) and promotion of financial accountability in the oil and gas sector in Uganda.

Cost Recovery Audits by the Office of the Auditor General (OAG) and Promotion of Financial Accountability in the oil and gas sector in Uganda.	Min	Max	Mean	Std. Deviation
Oil companies make disclosure of financial information in accordance to adoption of International (IFRS) and Public Sector Accounting Standards (IPSASs).	1.00	5.00	3.23	1.20
For ease of reporting, the government has put in place a uniform reporting framework for the oil companies	1.00	5.00	3.08	1.25
Oil companies adopt government framework.	2.00	5.00	3.56	1.12
Oil companies make medium term and annual budgets.	2.00	5.00	3.63	1.16
Oil companies submit their budgets for review and approval to the government	1.00	5.00	3.49	1.14
Any costs not budgeted for is not considered recoverable under the current legal regime	2.00	5.00	3.64	1.03
Oil companies submit cost recoverable statements using a standard format.	1.00	5.00	3.34	1.09
There is a standard chart of accounts	1.00	5.00	3.50	1.20
Oil companies adopted the standard chart of accounts	1.00	5.00	3.46	1.07
Oil companies have improved on the budgeting systems	1.00	5.00	3.30	1.12
Oil companies make frequent preparation of financial reports.	1.00	5.00	3.43	1.06
Oil companies have now strong internal controls than before.	1.00	5.00	3.20	1.07
Oil companies employ an arm's length approach in business transactions.	2.00	5.00	3.37	1.06
During the audit exercise, government examines the oil companies internal controls to determine that they suit international standards	1.00	5.00	3.28	1.08

Oil companies have proper personnel management systems.	1.00	5.00	3.35	1.12
Oil companies prioritize local content in business transactions.	1.00	5.00	3.32	1.09

The results in the table 4.4 above show that oil companies make disclosure of financial information in accordance to adoption of International (IFRS) and Public Sector Accounting Standards (IPSASs) (Mean= 3.23). They also indicate that for ease of reporting, the government has put in place a uniform reporting framework for the oil companies (Mean= 3.08). Oil companies adopt government framework (Mean= 3.56). Oil companies make medium term and annual budgets (Mean= 3.63).

Furthermore, oil companies submit their budgets for review and approval to the government (Mean= 3.49). Any costs not budgeted for is not considered recoverable under the current legal regime (Mean= 3.64). Oil companies submit cost recoverable statements using a standard format (Mean= 3.34). There is a standard chart of accounts (Mean= 3.50). Oil companies adopted the standard chart of accounts (Mean=3.46). Oil companies have improved on the budgeting systems (Mean=3.30).

In addition, oil companies make frequent preparation of financial reports (Mean=3.43). Oil companies have now strong internal controls than before (Mean=3.20). Oil companies employ an arm's length approach in business transactions (Mean=3.37). During the audit exercise, government examines the oil companies internal controls to determine that they suit international standards (Mean=3.28). Oil companies have proper personnel management systems (Mean= 3.35). Oil companies prioritize local content in business transactions (Mean=3.32).

4.4 Objective Two: Level of compliance with the national and international legal and financial frameworks.

The second objective focused on the level of compliance with the national and international legal and financial frameworks. Respondents were asked to rate the level of compliance with the national and international and financial frameworks. The tables below show the results.

The level of compliance with the national and international legal and financial frameworks as given by the respondents are presented in table below. These were assessed using the questionnaire which was anchored such that 1 represents Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree and 5-Strongly Agree. Means that are close to 1 or 2 signify Disagreement while those that are close to 4 or 5 show Agreement with the issue being raised.

Table 4.5: Level of compliance with the national and international legal and financial frameworks

Level of compliance with the national and international legal and financial frameworks	Min	Max	Mean	Std. deviation
Use of Local content frameworks	2.00	5.00	3.63	1.16
Cooperate social responsibility	2.00	5.00	3.64	1.03
Complying the tax regulations of Uganda	1.00	5.00	3.50	1.20
Comply with Environmental legal and regulatory provisions	2.00	5.00	3.63	1.16
Human resource management regulations	2.00	5.00	3.64	1.03
Health safety and the environment	2.00	5.00	3.64	1.03
Compliance with Uganda Labor, Immigration Laws. In many cases where the International Oil Companies bring in expatriates, they acquire work permits for them as required by the Law.	1.00	5.00	3.50	1.20
The Oil Companies also sign Petroleum Sharing Agreements which they have to abide by. This is to a great extent done as evidenced by the audits performed by OAG so far done.	2.00	5.00	3.63	1.16
Submission of Cost statements to Government for audit	2.00	5.00	3.64	1.03
Submission of annual cost Budgets to Governments for review and approval	2.00	5.00	3.63	1.16

The table 4.5 above shows the level of compliance with the national and international legal and financial frameworks. The results in this table show that oil companies comply with use of local content frameworks (Mean= 3.63). Cooperate social responsibility (Mean=3.64). Complying the tax regulations of Uganda (Mean= 3.50). Oil companies also comply with environmental legal and regulatory provisions (Mean=3.63). They also comply with human resource management regulations (Mean= 3.64).

Health safety and the environment are somewhat complied with (Mean= 3.64). They essentially have compliance with Uganda Labor, Immigration Laws. In many cases where the International Oil Companies bring in expatriates, they acquire work permits for them as required by the Law (Mean= 3.50). The oil companies also sign Petroleum Sharing Agreements which they have to abide by. This is to a great extent done as evidenced by the audits performed by OAG so far done (Mean= 3.63). Submission of Cost statements to Government for audit (Mean= 3.64). Submission of annual cost budgets to Governments for review and approval (Mean=3.63).

Table 4.6: Pearson’s Correlation Coefficient Index between Cost Recovery Audits and Compliance with the national and international legal and financial frameworks

		Compliance with the Legal Framework	Cost Recovery Audits
Compliance with the national and international legal and financial frameworks	Pearson correlation Sig. (2 tailed) N	1 108	0.053 0.589 108
Cost Recovery Audits	Pearson correlation Sig. (2 tailed) N	0.053 0.589 45	1 43

The table 4.6 shows Pearson’s correlation coefficient index between cost recovery audits and compliance with the national and international legal and financial frameworks; $r = 0.053$ and $\text{sig.} = 0.589$ greater than 0.05. This meant that cost recovery audits financial sources significantly related with compliance with the national and international legal and financial frameworks in the study. These results showed that cost recovery audits would ensure that oil companies comply with the national and international legal and financial frameworks.

4.5 Objective Three: To establish the challenges facing cost recovery audits in its attempt to ensure financial accountability in the Oil and Gas sector

This objective established the challenges facing cost recovery audits in its attempt to ensure financial accountability in the oil and gas sector in Uganda. Respondents were asked to rate the challenges facing cost recovery audits in its attempt to ensure financial accountability in the oil and gas sector. The table below shows their mean ratings.

Results in the table below indicated the challenges facing cost recovery audits in its attempt to ensure financial accountability in the oil and gas sector. These were assessed using the questionnaire which was anchored such that 1 represents Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree and 5-Strongly Agree. Means that are close to 1 or 2 signify Disagreement while those that are close to 4 or 5 show Agreement with the issue being raised.

Table 4.7: Challenges facing Cost Recovery Audits in its attempt to ensure financial accountability in the Oil and Gas Sector

Challenges facing Cost Recovery Audits in its attempt to ensure financial accountability in the Oil and Gas Sector	Min	Max	Mean	Std. Deviation
There is adequate legal frame work guiding compliance by oil companies in the area of costs recovery.	1.00	5.00	3.12	1.18
There is a shortage of cost recovery auditing standards	1.00	5.00	3.12	1.17
There is adequate legal audit obligation on International Oil Companies	1.00	5.00	2.88	0.96
There is adequate legal audit obligation on industry regulators	1.00	5.00	2.65	1.03
The audit environment ensures high compliance with the legal framework	1.00	5.00	2.71	0.95

The oil company in consultation with the government should establish appropriate procedures, including tender procedures, for the acquisition of goods and services	1.00	5.00	2.61	1.02
The government reviews and approves all procurements above USD 500,000	1.00	5.00	3.00	1.10
Oil companies advertise jobs in the print and electronic media	1.00	5.00	2.88	1.02
Expatriate costs are incurred in accordance with the applicable legislation	1.00	5.00	2.86	1.08
Licensees submit to government a report on procurements (utilization of Ugandan goods and services) and training and employment of Ugandans within 60 days and 30 days, respectively, after the end of each calendar year.	1.00	5.00	2.81	1.08
Companies keep a record of persons on board (POB) and every day.	1.00	5.00	2.69	1.11

The results in the table 4.7 above show that there is adequate legal frame work guiding compliance by international oil companies in the area of costs recovery as a challenge (Mean=3.12). The results also show that there is a challenge of shortage of cost recovery auditing standards (Mean=3.12). In addition, there is adequate legal audit obligation on International Oil Companies (Mean=2.88). There is also a challenge of adequate legal audit obligation on industry regulators (Mean= 2.65).

The results further indicate that the audit environment ensures high compliance with the national and international legal and financial frameworks (Mean= 2.71). The oil company in consultation with the government should establish appropriate procedures, including tender procedures, for the acquisition of goods and services (Mean=2.61). There is a challenge of government reviews and approvals of all procurements above USD 500,000 (Mean= 3.00).

Oil companies advertise jobs in the print and electronic media (Mean=2.88). Expatriate costs are incurred in accordance with the applicable legislation (Mean= 2.86). Licensees submit to government a report on procurements (utilization of Ugandan goods and services) and training and employment of Ugandans within 60 days and 30 days, respectively, after the end of each calendar year (Mean= 2.81). Companies keep a record of persons on board (POB) and every day (Mean= 2.69).

4.6 Summary of Chapter Four

The preceding chapter presented the findings as presented in their statistical form. The chapter systematically presented the findings based on the objectives of the study. In this chapter, statistical presentations were interpreted. The chapter also presented the demographical characteristics so as to give a full picture of the respondents that participated in the study.

CHAPTER FIVE

DISCUSSION OF THE RESULTS AND FINDINGS

5.1 Introduction

In this chapter, a discussion of the findings with an aim of drawing conclusions and making recommendations with regard to examining the effectiveness of cost recovery audits in fostering accountability in Uganda's Oil and Gas sector, with case study of the Office of the Auditor General. This was done in line with the objectives of the study.

5.2 Discussion

5.2.1 Cost recovery audits by the Office of the Auditor General (OAG) and promotion of financial accountability in the Oil and Gas sector in Uganda

This objective studied whether cost recovery audits by the Office of the Auditor General (OAG) promoted financial accountability in the oil and gas sector in Uganda. A thorough examination of whether cost recovery audits by the Office of the Auditor General (OAG) promoted financial accountability in the petroleum sector in Uganda is also made.

Results on the issue of cost recovery audits by the Office of the Auditor General (OAG) and promotion of financial accountability shows that the Office of the Auditor General (OAG) has the mandate to audit compliance according to the current regulatory regime. Cost recovery audits are based and regulated by different fiscal and regulatory instruments such as product sharing agreements (PSAs), contracts, and licenses and various regulations. Cost recovery audits are done in accordance with the legal framework. During the process of costs recovery, interviews are undertaken both from the government and the oil companies. Cost recovery audit reports

recommend the costs to be recovered. Cost recovery audits reports are discussed by management and audit recommendations implemented.

According to Sekatawa (2018), the cost management framework for Uganda's oil and gas sector is based on the Production Sharing Agreement (PSAs) between International Oil Companies and Host Governments. In Uganda's PSA regime, a company will only recover the exploration and development costs after a commercial discovery is made and production is undertaken. If no discovery is made (as was the case in EA 5 and EA 4b whose licenses expired before discoveries were made), no recoverable costs are due to the company.

However, cost recovery audits must be carried out by the office of the Auditor General of Uganda (OAG) to ascertain such costs. Article 163 (30) of the Constitution of the Republic of Uganda 1995 (as amended) and Sections 13 and 19 of the National Audit Act, 2008 mandate the OAG to audit and report on the public accounts of Uganda and all public offices or where the Government of Uganda is involved. Section 73 of the Public Management Act 2015 further requires the OAG to specifically audit the account of the Petroleum Fund of Uganda which is responsible for all PSAs.

The overall purpose of cost recovery audits as Statutory Audits is to ensure that the costs of investments incurred by licensees are realistic so that the State and Investor get fair shares from petroleum resources (Rubondo, 2018). According to the IMF (2017), extractive industry revenues are vulnerable to failure to audit during exploration and development phases. Neglect in auditing exploration and development expenses cost the tax base dearly when a project starts to generate income. Yet, multinational oil and gas companies behave differently in different parts of the world. The petroleum industry is typically characterized by excessive project costs in the forms of "Gold-

plating” and “Cheating on Actual Cost” (Morris, 2016). Audits therefore also need to assess the reasonableness of capital and operating expenditures of the companies.

For Kaiser and Pulsipher (2004), companies recover their costs over a period of time and the amount to be recovered is capped for each year at a certain percentage (say 60%) of revenues. Therefore, a company cannot recover all its costs in one year and this enables government to receive revenue from the onset of production.

Kasekende (2018) argues that approval for expenditure does not amount to approval of costs for recovery since the expenditures have to be audited. The licensees submit their annual statements of expenditure to the PAU and these are examined by the Auditor General who gives final approval of which expenditures are recoverable. This means that any cost overruns that were not approved by the PAU cannot be recoverable. For example from the cost recovery Audits for petroleum operations for 2001 to 2011 undertaken by the Auditor General, close to USD 40 million was determined unrecoverable due to non-compliance with the provisions of the PSAs (OAG, 2015). The PAU works closely with the oil companies and the Office of the Auditor General to achieve cost efficient operations so that Uganda’s oil and gas resources create lasting value to society.

The results ascertained that OAG conducted annual cost recovery audits for each of the current operators, conducts performance audits (value for money audits), and special audits. OAG also performed the warranting of all withdraws from the Petroleum Fund (PFMA, 2015). This is done after the obtaining the approval from Parliament and confirming that any withdraws are intended to finance only capital development projects as required by the law.

The results further show that following the issuance of a cost recoverable audit report a certificate is issued and this is not subject to any further negotiation. They also show that a company only recovers the exploration and development costs after a commercial discovery is made and commercial production is undertaken. The results indicated that cost recovery begun when production starts). Costs incurred in one contract area cannot be recovered from production from another contract area. Companies recover their costs over a period of time and the amount to be recovered is capped for each year at a certain percentage (say 60%) of revenues.

The results on the matter whether cost recovery audits by the Office of the Auditor General (OAG) promoted financial accountability in the petroleum sector in Uganda shows show that oil companies make disclosure of financial information in accordance to adoption of International (IFRS) and Public Sector Accounting Standards (IPSASs). They also indicate that for ease of reporting, the government has put in place a uniform reporting framework for the oil companies. Oil companies adopt government framework. Oil companies make medium term and annual budgets.

Furthermore, it was ascertained that oil companies submit their budgets for review and approval to the government. The results indicated that any costs not budgeted for is not considered recoverable under the current legal regime. The results also showed that oil companies submit cost recoverable statements using a standard format. There is a standard chart of accounts and oil companies adopted the standard chart of accounts. Oil companies have also improved on the budgeting systems.

In addition, oil companies make frequent preparation of financial reports. Oil companies have now strong internal controls than before. Oil companies employ an arm's length approach in

business transactions. During the audit exercise, government examines the oil companies' internal controls to determine that they suit international standards. Oil companies have proper personnel management systems. Oil companies prioritize local content in business transactions.

In line with the above results, Bhattacharya and Hodler (2010) argues that to guarantee responsibility and accountability, the OAG ought to conduct regular and special audits on how the agencies in the oil and gas sector conducted their stewardship role and reports to parliament. This audit function enhances efficient financial management of petroleum resources in Uganda for the benefit of all citizens. Haber and Menaldo (2011) concurs with Bhattacharya and Hodler (2010) that it is the role of the Government to undertake audits to ensure that all the amounts that are to be recovered were necessary, appropriate and incurred in accordance to the applicable laws and regulations.

According to Emelu (2005) openness and access to information are fundamental rights in activities that may positively or negatively impact individuals, communities and states. Emelu adds that it is important that information that will enable stakeholders to assess how their interests are being affected is disclosed. There is thus a continuous need to recognize the important roles that different stakeholders have to play in order to guarantee transparency and proper accountability in the oil and gas dealings as the sector starts being productive (Garcia, 2002).

Although the role of undertaking the above audits is a responsibility of the Office of the Auditor General as mandated by the 1995 Constitutions of Uganda (as amended) and the National Audit Act 2008, the ultimate goal is to ensure financial accountability for all resources involved in cost recoveries by oil companies. Ross (2012) reiterates that the cost recovery audit provides government with the assurance that the costs incurred were necessary appropriate and in

accordance to the applicable regulations. There should be robust fiscal data and reporting on financial information, which ensures resources are allocated as intended.

In affirming whether cost recovery audits ensures financial accountability, Rajkumar and Swaroop (2008) argues that sometimes disclosure requirements are incomplete, in which case governments may lack the legal basis to request certain information from oil companies. In line with above results and affirming financial accountability through cost recovery audits, Wadood (2006) cites an example of Ghana where the Petroleum Commission was not entitled to receive subcontracting agreements from oil and gas companies. The commission in Ghana was thus unable to verify the subcontracting expenses subsequently claimed by companies. This means that if the subcontractor and company are not related, the risk of cost overstatement is low. However, unless governments know the terms and conditions of the agreement, companies may claim costs that have already been reimbursed.

Therefore, the above study results and the discussion thereof confirm that cost recovery audits by the Office of the Auditor General (OAG) promoted financial accountability in the oil and gas sector in Uganda.

5.2.2 Level of compliance with the national and international legal and financial frameworks.

This objective focused on the level of compliance with the national and international legal and financial frameworks. Respondents were asked to rate the level of compliance with the national and international legal and financial frameworks. The results show the level of compliance with the national and international legal and financial frameworks. The results in this table show that

oil companies comply with use of local content frameworks. Cooperate social responsibility (Mean=3.64). the results show that companies are complying the tax regulations of Uganda. Oil companies also comply with environmental legal and regulatory provisions. They also comply with human resource management regulations.

Health safety and the environment are somewhat complied with by oil companies. Companies essentially have compliance with Uganda Labor and Immigration Laws. In many cases where the International Oil Companies bring in expatriates, they acquire work permits for them as required by the Law. The oil companies also sign Petroleum Sharing Agreements which they have to abide by. This is to a great extent done as evidenced by the audits performed by OAG so far done. Companies make submission of cost statements to Government for audit. Submission of annual cost Budgets to Governments for review and approval is also made.

It should be noted there are several laws and regulations pertaining to the oil and gas sector. These include: The Petroleum (Exploration, Development and Production) Act, 2013; Petroleum (Refining, Conversion, Storage and Transportation) Act, 2013; Public Finance Management (Amendment) Act 2015 that handles petroleum revenue management; The Petroleum (Exploration, Development and Production) Regulations 2015; The Petroleum (Exploration, Development and Production) (Health, Safety and Environment) Regulations 2015; The Petroleum (Exploration, Development and Production) (National Content) Regulations 201; The Petroleum (Exploration, Development and Production) (Metering) Regulations 2015; and, the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Regulations 2015.

The Petroleum Act 2013 and related Regulations clearly define the role of the state institutions. The Minister is mandated with strategic issues of policy, legislation and licensing. It provides for Contract awards through transparent and competitive licensing rounds to attract investors, and the fiscal terms in the MPSA for sharing benefits between Government and investor is based on progressive R-Factor to cope with changes in prices and different conditions throughout the project life. It defines local content obligations, including the use of local labor, goods and services.

Under the Petroleum Act 2013 and related Regulations, the Petroleum Authority is mandated to regulate operations and monitor compliance of the investors. The Act comprehensively addresses technical, costs, auditing and health, safety and environment requirements of operations. It incorporates internationally recognized standards. It provide for regulation of production, export volumes and regular audits of these including cost of operations. It also provides for establishment of National Oil and Gas Resource Databank to facilitate better knowledge of the resource base and hence, reliability of government revenue estimates.

In support of compliance with legal framework in the oil and gas sector and confirming the results, Moss (2009) proposed that the compliance to postulated guidelines and laws or policies governing the oil and gas industry should ensure high standards of transparency and accountability in licensing, procurement, exploration, development and production operations as well as management of revenues from oil and gas. Likewise, Shepherd (2013) in connection with the Regulatory Best Practice that has been in practice in the country for over 15 years and based on the principle that a regulatory agency should be separate and independent from the entities being regulated, in this case oil companies advise that a policy-making body should be separate from the

regulatory agency and the competing producers and suppliers of the goods and services. And as such the National Oil and Gas policy was formulated based on this model (Odyek, 2016).

It is also worth mentioning that strict observance of clauses that support disclosure of payments and revenues from oil and gas using simple and easily understood principles in line with accepted national and international financial reporting standards will largely contribute to the sustainability of gains anticipated from the oil industry (MEMD, 2008; Odyek, 2016).

However, there is a fundamental conflict between oil and gas companies and the government over the division of risk and reward from a petroleum project (Shepherd, 2013). This is a point of contention regarding compliance with laws and regulations, and this where cost recovery audits are vital. Both oil companies and government want to maximize rewards and shift as much risk as possible to the other party.

Nevertheless, the right choice of fiscal regime can improve the trade-off between each party's interests - a small sacrifice from one side may be a big gain for the other. Oil and gas agreements and the associated fiscal rules establish the "price" of the resource in terms of the bonuses, royalties, taxes or other payments the investor will make to the government over the life of the project. Designing fiscal arrangements that encourage a stable fiscal environment and efficient resource development maximizes the magnitude of the revenues to be divided.

5.2.3 Challenges facing Cost Recovery Audits in its attempt to ensure financial accountability in the Oil and Gas Sector

This objective established the challenges facing cost recovery audits in its attempt to ensure financial accountability in the oil and gas sector in Uganda. Respondents were asked to rate the

challenges facing cost recovery audits in its attempt to ensure financial accountability in the petroleum sector. The results showed that there is a challenge of adequate legal framework guiding compliance by oil companies in the area of costs recovery. The results also show that there is a challenge of shortage of cost recovery auditing standards. In addition, there is adequate legal audit obligation on International Oil Companies. There is adequate legal audit obligation on industry regulators.

The results further indicate that the audit environment ensures high compliance with the national and international legal and financial frameworks. The oil company in consultation with the government should establish appropriate procedures, including tender procedures, for the acquisition of goods and services. The government reviews and approves all procurements above USD 500,000. Oil companies advertise jobs in the print and electronic media. Expatriate costs are incurred in accordance with the applicable legislation. Licensees submit to government a report on procurements (utilization of Ugandan goods and services) and training and employment of Ugandans within 60 days and 30 days, respectively, after the end of each calendar year. Companies keep a record of persons on board (POB) and every day.

Cost recovery audits have a secondary role of ensuring compliance with the legal framework in Uganda. Cost recovery audits enforce compliance with the legal framework in order to curb over-invoicing, transfer pricing and other forms of cheating on actual costs (Brautigam, 2008). Companies cheat to claim larger deduction for avoiding tax. These are often confronted by tax officials when assessing corporate income tax.

The results showed that a number of fiscal regimes are applied in the oil and gas sector by different countries. It is difficult to evaluate one system over another as countries have specific conditions within them that favor one over another (MEMD, 2009). Uganda as a country employs Production Sharing Agreements. Under these agreements, a company is licensed to undertake all risks involved in petroleum exploration. Should the company be successful, it is entitled to a share of the profit after recovering the costs incurred in the search for petroleum (Longlong and Yifei, 2012). This regime is good for Uganda as the country does not carry any exploration risk.

As shown in the results, the petroleum legislation in Uganda allows the government to undertake a cost recovery audit of all the company's costs to ensure that only necessary and economical costs involved in the search for petroleum are paid to the company under the cost recovery regime. It should be noted that the role of undertaking cost recovery audits is mandated to different institutions in different countries (Moss and Young, 2009). This follows that in Uganda OAG undertakes the cost recovery audits as the Supreme Audit Institution.

The results also showed that irrespective of who undertakes the audit or review, the purpose of cost recovery audits is to ensure that only necessary and economical costs are recovered by the oil companies (Odyek, 2016). However like all audits, the cost recovery audits are undertaken after an activity has been done or after the close of the year. Because of this, the audit serves to assist future operations and does not necessarily improve past or current operations.

Additionally, the results showed that exploration activities can happen over more than one year or across two calendar years especially for activities undertaken towards year end for example drilling deep wells, setting up central processing facilities and some surveys (Shepherd, 2013). As a result, cost recovery audits have to ensure that the issue of cutoff for activities that occur across two or

more years occurs is properly covered. It is important that an effective and efficient criteria is applied for reporting costs cutting across different periods. These particular incidences make the need for regular monitoring of all activities under the PSA very important.

Monitoring can take on many different forms for example field monitors deployed at all times in the fields, regular sharing of oil and gas sector data in the form of daily drilling and activity reports, or installing smart meters. For any form of data sharing, it is important to determine who actually owns the data from petroleum activities. The company collects the data but it is important that this information is shared with the Government at no extra charge. Occasionally, oil companies have proprietary information and in many instances involving data exchange, the issue of confidentiality between the two parties is important and should be addressed beforehand.

It was established in the results that the Petroleum legislation allows the Government free access to any data it requires. Part nine of the Petroleum Exploration Development and Production Regulations 2016 detail the reports that should be submitted to the regulator by the licensed companies. These include daily, weekly, and monthly reports. Additionally activity reports should be submitted at the end of each activity. Examples of reports that should be submitted included; a daily drilling report, a casing and cementing report, a daily mud report, a health, safety and environment report, a daily geology report, a daily cost estimate report, a choke manifold and blow-out preventer test report, a daily operations report, and a kick sheet.

The results also showed that real time monitoring through cost recovery audits is important for both the company and the Government. For example if a well is drilled and it was expected to use 100 casings but it uses only 80 casings, both the Government and the drilling team will immediately be aware of the amount of casings used rather than waiting for a stock taking exercise.

This improves inventory movement on the company's part. It also ensures that by the time the final cost audit is undertaken, most of the costs have been reviewed through this mechanism. This enables quick remedial action both at budget level and at the point of work in the field.

The results rightly indicate that since all costs to be incurred should have undergone the approval process, should they rise to a point at which they may exceed the budget, all parties involved will be aware. A company notifies the Regulator about such occurrences. This limits incidences of costs exceeding budgets.

The results show that review of all this information through cost recovery audits is important in order to undertake a comprehensive audit of the sector. The results further indicate that a review can be initiated as early as when quarterly cost statements are submitted to the Regulator. The value of work done can be audited and redundancies put in place for any delayed invoicing. They furthermore reduce the work to be undertaken at the end of the year. As a result, the audits will take a shorter time to be completed.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

In this chapter, conclusions are made together with the recommendation thereof. Similar to the preceding chapters, conclusions and recommendation are based on the objectives of the study that were intended to examine the effectiveness of cost recovery audits in fostering financial accountability in Uganda's Oil and Gas sector, a case study of the Office of the Auditor General.

6.2 Conclusions

6.2.1 Cost recovery audits by the Office of the Auditor General (OAG) and promotion of financial accountability in the Oil and Gas sector in Uganda

- a) Oil companies make disclosure of financial information in accordance to adoption of International (IFRS) and Public Sector Accounting Standards (IPSASs). For ease of reporting, the government has put in place a uniform reporting framework for the oil companies Oil companies adopt government framework and oil companies make medium term and annual budgets.

- b) Oil companies submit their budgets for review and approval to the government. Any costs not budgeted for is not considered recoverable under the current legal regime. Oil companies submit cost recoverable statements using a standard format. There is a standard chart of accounts as oil companies adopted the standard chart of accounts. This means that oil companies have improved on the budgeting systems.

- c) Oil companies make frequent preparation of financial reports. They have now strong internal controls than before. During the audit exercise, government examines the oil companies' internal controls to determine that they suit international standards.
- d) Oil companies have proper personnel management systems as they prioritize local content in business transactions.

6.2.2 Level of compliance with the national and international legal and financial frameworks

- a) Oil companies strongly comply with use of local content frameworks. They complied with the tax regulations of Uganda as well as with human resource management regulations.
- b) Companies essentially have compliance with Uganda labour and immigration laws. They acquire work permits for them as required by the Law, although health safety and the environment are somewhat complied with by oil companies.
- c) The oil companies also sign Petroleum Sharing Agreements which they have to abide by. This is to a great extent done as evidenced by the audits performed by OAG so far done. Companies make submission of cost statements to Government for audit and they make Submission of annual cost budgets to Governments for review and approval is also made.

6.2.3 Challenges facing Cost Recovery Audits in its attempt to ensure financial accountability in the Oil and Gas Sector

- a) There is inadequate legal frame work guiding compliance by oil companies in the area of costs recovery although there is a shortage of cost recovery auditing standards. There is

adequate legal audit obligation on International Oil Companies with adequate legal audit obligation on industry regulators.

- b) The audit environment does not ensure high compliance with the national and international legal and financial frameworks. The government reviews and approves all procurements above USD 500,000. Oil companies advertise jobs in the print and electronic media.
- c) Expatriate costs are incurred in accordance with the applicable legislation as licensees submit to government a report on procurements (utilization of Ugandan goods and services) and training and employment of Ugandans within 60 days and 30 days, respectively, after the end of each calendar year. Companies keep a record of persons on board (POB) and every day.

6.3 Recommendations

- a) Cost recovery audits should be undertaken on a regular basis so as to timely address merging issues in recoverable costs. Recoverable cost audits should be undertaken on a timely basis such as quarterly instead of biannually.
- b) The technical capacity of the Office of the Auditor should be augmented to undertake recoverable costs audits as recoverable cost audits are critical for effective, efficient and sustainable development of the petroleum industry.
- c) There should be coordinated procedures and collaboration between the regulator and Office of the Auditor General which are key to achieving realistic cost of investment and fair share of petroleum revenue to Government.

- d) There should be increased collaboration between OAG, the Petroleum Authority and the National Oil Company to support establishment of recoverable costs and ensuring effective financial accountability.
- e) Better ways of regulating and auditing Head office and other operating centers cost allocation to the country should be explored to ensure financial accountability by both cost recoverable auditors and oil companies.

6.3 Areas for Further Research

1. Management of recoverable costs by the Petroleum Authority of Uganda.
2. Local stakeholders' participation in the cost recovery audits
3. Impact of observance of cost recovery obligations on development of oil and gas affected local areas

References

- Amaratunga, D., Baldry, D., Sarshar, M., & Newton, R. (2002). Quantitative and qualitative research in the built environment: application of “mixed” research approach. *Work study*, 51(1), 17-31.
- Amin, M. A., Khaled, K. F., & Fadi-Allah, S. A. (2010). Testing validity of the Tafel extrapolation method for monitoring corrosion of cold rolled steel in HCl solutions—experimental and theoretical studies. *Corrosion Science*, 52(1), 140-151.
- Bala, V., Duesterwald, E., & Banerjia, S. (2011). Dynamo: a transparent dynamic optimization system. *ACM SIGPLAN Notices*, 46(4), 41-52.
- Blaikie, N. (2009). *Designing social research*. Polity.
- Bryman, A. (2012). Sampling in qualitative research. *Social research methods*, 4, 415-429.
- Bryman, A., & Bell, E. (2015). *Business research methods*. Oxford University Press, USA.
- Chaurasia, C. S., Müller, M., Bashaw, E. D., Benfeldt, E., Bolinder, J., Bullock, R., ... & Hammarlund-Udenaes, M. (2007). AAPS-FDA Workshop White Paper: Microdialysis Principles, Application, and Regulatory Perspectives. *The Journal of Clinical Pharmacology*, 47(5), 589-603.
- Collis, J., & Hussey, R. (2013). *Business research: A practical guide for undergraduate and postgraduate students*. Palgrave macmillan.
- Corbin, J., Strauss, A., & Strauss, A. L. (2014). *Basics of qualitative research*. Sage.
- Creswell, J. W. (2008). Educational research. *Planning, conducting, and evaluating quantitative and qualitative research*.
- Creswell, J. W. (2013). Steps in conducting a scholarly mixed methods study.

Demirmen, F. (2010, January). Win-Win Upstream Fiscal Systems: What They Are, and How to Achieve Them. In *SPE hydrocarbon economics and evaluation symposium*. Society of Petroleum Engineers.

Denzin, N. K. (2012). Triangulation 2.0. *Journal of mixed methods research*, 6(2), 80-88.

Easterby-Smith, M., Thorpe, R., & Lowe, A. (2002). *Management research methods*. London: Sage Publications Examinership-Friel Stafford, Available from [www. liquidation. ie](http://www.liquidation.ie).

Glaser, B., & Strauss, A. (1967). The discovery of grounded theory. *London: Weidenfeld and Nicholson*, 24(25), 288-304.

Gudmestad, O. T., Zolotukhin, A. B., & Jarlsby, E. T. (2010). *Petroleum resources with emphasis on offshore fields*. WIT Press.

Hox, J. J., & Boeije, H. R. (2005). Data collection, primary versus secondary.

Kaiser, M. J., & Pulsipher, A. G. (2004). Fiscal system analysis: Concessionary and contractual systems used in offshore petroleum arrangements. *US Department of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, La. OCS Study MMS, 16*, 78.

Kimuli, A. (2013). Is Uganda's fiscal regime cost efficient? Dissertation, Robert Gordon University, Aberdeen .UK.

Koester, R. J. (1982). *Handbook on oil and gas accounting*. Institutes for Energy Development.

Lawal, B. (2009). Board dynamics and corporate performance: review of literature, and empirical challenges. *International Journal of Economics and Finance*, 4(1), 22.

Lin, A. C. (1998). Bridging positivist and interpretivist approaches to qualitative methods. *Policy studies journal*, 26(1), 162-180.

Lincoln, Y. S., & Cannella, G. S. (2009). Ethics and the broader rethinking/reconceptualization of research as construct. *Cultural Studies? Critical Methodologies*, 9(2), 273-285.

Marczyk, G., DeMatteo, D., & Festinger, D. (2005). *Essentials of research design and methodology*. John Wiley & Sons Inc.

Mas' ud, A. (2016). *Effects of petroleum fiscal regimes and tax instruments on the investment climate of marginal oil fields in Malaysia* (Doctoral dissertation, Universiti Utara Malaysia).

MEMD. (2008). National Oil and Gas Policy for Uganda. Kampala, Uganda

MEMD. (2009). *Strengthening the Management of the Oil and Gas Sector in Uganda* (Uganda, Ministry of Energy and Mineral Development, Directorate of Petroleum development).

Mertens, D. M., & Ginsberg, P. E. (2009). *The handbook of social research ethics*. Sage.

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

Miles, M. B., Huberman, A. M., & Saldana, J. (2013). *Qualitative data analysis*. Sage.

Mugenda, O. M. (1999). *Research methods: Quantitative and qualitative approaches*. African Centre for Technology Studies.

Myers, M. D. (2013). *Qualitative research in business and management*. Sage.

Patton, M. Q. (2005). *Qualitative research*. John Wiley & Sons, Ltd.

Shepherd. B. (2013). *Oil in Uganda: International Lessons for Success*. The Royal Institute of International Affairs, Latimer Trend and Co. Great Britain

Slack, N., Chambers, S., & Johnston, R. (2010). *Operations management*. Pearson education.

Spector, Bertram I., Svetlana Winbourne, Laurence D. Beck, Under Contract No AEP, I. I. Dragodan, Kosovo Pristina, and MSI Assessment Team. "Corruption in Kosovo: Observations and implications for USAID." *Washington, DC: Management Systems International* (2003).

The Petroleum (Exploration, Development and Production) Act 2013. (2013, July 1). <http://www.oecd.org>

Tissot, R. (2010). Challenges of Designing and Optimal Petroleum Fiscal Model in Latin America. *Energy Working Paper. Inter-American Dialogue. Washington, DC: Inter-American Development Bank.*

Venable, J. D., Dong, M. Q., Wohlschlegel, J., Dillin, A., & Yates III, J. R. (2004). Automated approach for quantitative analysis of complex peptide mixtures from tandem mass spectra. *Nature methods, 1*(1), 39.

Wadood, S. (2006, January). The Role of Independents in the Oil and Gas Industry. In *SPE Annual Technical Conference and Exhibition*. Society of Petroleum Engineers.

Walliman, N. (2004). *Your undergraduate dissertation: the essential guide for success*. Sage.

Yin, R. K. (2015). *Qualitative research from start to finish*. Guilford Publications.

Zahidi, S. (2010, June). Comparative analysis of upstream petroleum fiscal systems of Pakistan, Thailand and other countries with medium ranked oil reserves. In *Energy and Sustainable Development: Issues and Strategies (ESD), 2010 Proceedings of the International Conference on* (pp. 1-14). IEEE.

Appendices

QUESTIONNAIRE

Topic: THE EFFECTIVENESS OF COST RECOVERY AUDITS

Dear Respondent,

I am Mugaya John Rogers, a Master's student of Oil and Gas from the Institute of Petroleum Studies in partnership with Uganda Christian University-Mukono conducting a research on "the effectiveness of cost recovery audits by the Office of the Auditor General (OAGU) in fostering accountability in Uganda's oil and gas sector since 2008". You have been selected to participate in this study because the contribution you make to your organization is central to the kind of information required. The information you provide is not solely for academic purposes but would contribute to the effectiveness cost recovery and in fostering accountability in petroleum sector.

Please kindly spare some few minutes to respond to the following questions, this information will be treated with utmost confidentiality.

Section A: Biodata

Name of your Institution/Organization: Office of the Auditor General

The Title that you hold: **Auditor**

The role ore management level you hold:

Officer

Middle Management

Senior Manager/director

Executive/Head of Organization

Section B: Cost Recovery Audits

State the extent to which you agree with the following statements by placing a tick based on your rating; (1) Strongly disagree (SD) (2) Disagree (D) (3) Neutral (N) (4) Agree (A) (5) Strongly agree (SA)

	1	2	3	4	5
	SD	D	N	A	SA
The Office of the Auditor General (OAGU) has the mandate to audit compliance according to the current regulatory regime					
Cost recovery audits are based and regulated by different fiscal and regulatory instruments such as product sharing agreements (PSAs), contracts, and licenses and various regulations					
Cost recovery audits are done in accordance with the legal framework					
During the process of costs recovery, interviews are undertaken both from the government and the oil companies					
Cost recovery audit reports recommend (approve) the costs to be recovered					
Cost recovery audit reports recommend the costs not to be recovered					
Cost recovery audits reports are discussed by management and audit recommendations implemented					
Cost recovery audits reports are discussed by Parliament					
Following the discussion of cost recovery report, parliamentary recommendations are adhered to					
Following the issuance of a cost recoverable audit report, a certificate is issued and this is not subject to any further negotiation.					
A company will only recover the exploration and development costs after a commercial discovery is made and commercial production is undertaken.					

Cost recovery begins when production starts					
Host government and contractor share in production					
Provision for sharing of oil profit is carried out					
costs incurred in one contract area cannot be recovered from production from another contract area					
Companies recover their costs over a period of time and the amount to be recovered is capped for each year at a certain percentage (say 60%) of revenues.					
Before the amount to be recovered each year is calculated, the gross revenues are subject to a royalty payment to Government which ranges from 5.5% to 18%.					
Government will therefore receive a royalty payment each year before the recovery of any investments costs by the companies					
Government will also earn its share of profit oil and taxes during the time the company will be recovering its investment costs.					
The contractor's share of oil profit is taxed.					
The type of costs that are recoverable include all approved capital investment in exploration, development, production and operating expenditure as approved by the Petroleum Authority of Uganda and audited by the Office of the Auditor General					

Section C: The Level of Compliance with the National and International Legal and Regulatory Frameworks

State the extent to which you agree with the following statements by placing a tick based on your rating; (1) Strongly disagree (SD) (2) Disagree (D) (3) Neutral (N) (4) Agree (A) (5) Strongly agree (SA).

	1	2	3	4	5
	SD	D	N	A	SA
Use of Local content frameworks					
Cooperate social responsibility					
Complying the tax regulations of Uganda					
Comply with Environmental legal and regulatory provisions					
Human resource management regulations					
Health safety and the environment					
Compliance with Uganda Labor, Immigration Laws. In many cases where the International Oil Companies bring in expatriates, they acquire work permits for them as required by the Law.					
The Oil Companies also sign Petroleum Sharing Agreements which they have to abide by. This is to a great extent done as evidenced by the audits performed by OAG so far done.					
Submission of Cost statements to Government for audit					
Submission of annual cost Budgets to Governments for review and approval					

Section D: Financial Accountability

State the extent to which you agree with the following statements by placing a tick based on your rating; (1) Strongly disagree (SD) (2) Disagree (D) (3) Neutral (N) (4) Agree (A) (5) Strongly agree (SA)

	1	2	3	4	5
	SD	D	N	A	SA
Oil companies make disclosure of financial information in accordance to adoption of International (IFRS) Public Sector Accounting Standards (IPSASs).					
For ease of reporting, the government has put in place a uniform reporting framework for the oil companies					
Oil companies adopt government framework.					
Oil companies make medium term and annual budgets.					
Oil companies submit their budgets for review and approval to the government					
Any costs not budgeted for is not considered recoverable under the current legal regime					
Oil companies submit cost recoverable statements using a standard format.					
There is a standard chart of accounts					
Oil companies adopted the standard chart of accounts					
Oil companies have improved on the budgeting systems					

Oil companies make frequent preparation of financial reports.					
Oil companies have now strong internal controls than before.					
Oil companies employ an arm’s length approach in business transactions.					
During the audit exercise, government examines the oil companies internal controls to determine that they suit international standards					
Oil companies make have proper personnel management systems.					
Oil companies prioritize local content in business transactions.					

Section E: Challenges facing Cost Recovery Audits to ensure Accountability in the Petroleum Sector

	1	2	3	4	5
	SD	D	N	A	SA
There is adequate legal frame work guiding compliance by oil companies in the area of costs recovery.					
There is a shortage of cost recovery auditing standards					
There is adequate legal audit obligation on International Oil Companies					
There is adequate legal audit obligation on industry regulators					

The audit environment ensures high compliance with the legal framework					
The oil company in consultation with the government should establish appropriate procedures, including tender procedures, for the acquisition of goods and services					
The government reviews and approves all procurements above USD 500,000					
Oil companies advertise jobs in the print and electronic media					
Expatriate costs are incurred in accordance with the applicable legislation					
Licensees submit to government a report on procurements (utilization of Ugandan goods and services) and training and employment of Ugandans within 60 days and 30 days, respectively, after the end of each calendar year.					
Companies keep a record of persons on board (POB) and every day.					

8. How are the oil companies complying with international legal and regulatory frameworks in Uganda oil and gas sector?

1. Please list the areas where oil companies comply with international legal and regulatory frameworks in Uganda oil and gas sector?
2. Dissemination of audit findings of the petroleum Audits;

- ...is covered in the OAGU's general reports
- ...has been the topic of management letters to the executive
- ...has been the topic of specific audit reports

... (for Court model OAGU) has been the topic of judgments and sanctions

3. From your experience, what are best practices and lessons learned concerning compliance with international legal and regulatory frameworks in Uganda oil and gas sector?
4. Please provide examples of impact of cost recovery audits on fostering accountability in Uganda's oil and gas sector.
5. Please provide examples of challenges for OAGU regarding impact of cost recovery audits on fostering accountability in Uganda's oil and gas sector.

Thank You

Population Size	Confidence = 95.0%				Confidence = 99.0%			
	Degree of Accuracy/Margin of Error				Degree of Accuracy/Margin of Error			
	0.05	0.035	0.025	0.01	0.05	0.035	0.025	0.01
10	10	10	10	10	10	10	10	10
20	19	20	20	20	19	20	20	20
30	28	29	29	30	29	29	30	30
50	44	47	48	50	47	48	49	50
75	63	69	72	74	67	71	73	75
100	80	89	94	99	87	93	96	99
150	108	126	137	148	122	135	142	149
200	132	160	177	196	154	174	186	198
250	152	190	215	244	182	211	229	246
300	169	217	251	291	207	246	270	295
400	196	265	318	384	250	309	348	391
500	217	306	377	475	285	365	421	485
600	234	340	432	565	315	416	490	579
700	248	370	481	653	341	462	554	672
800	260	396	526	739	363	503	615	763
900	269	419	568	823	382	541	672	854
1,000	278	440	606	906	399	575	727	943